The Science Fiction and Fantasy Writers of America

THE NEBULA AWARDS 2002

The Nominated Stories

Compiled for #bookz by Ted
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THE NEBULA AWARDS

The Nebula Awards Awards are voted on, and presented by, active members of the Science Fiction and Fantasy Writers of America, Inc. Founded as the Science Fiction Writers of America in 1965 by Damon Knight, the organization began with a charter membership of 78 writers; it now has over 1,000 members, among them most of the leading writers of science fiction and fantasy.

Lloyd Biggle, Jr., the SFWA's first secretary-treasurer, originally proposed in 1965 that the organization publish an annual anthology of the best stories of the year. This notion, according to Damon Knight in his introduction to Nebula Award Stories: 1965 (Doubleday, 1966) "rapidly grew into an annual ballot of SFWA's members to choose the best stories, and an annual awards banquet."

Since 1965, the Nebula Awards have been given each year for the best novel, novella, novelette, and short story eligible for that year's award. An anthology including the winning pieces of short fiction and several runners-up is also published every year. The Nebula Awards Banquet, which takes place each spring, is attended by many writers and editors and is preceded by meetings and panel discussions.

In addition to the Nebulas Awards(tm), SFWA gives out other awards, including the Grand Master Award, the Author Emeritus, and the Bradbury Award.

THE NEBULA AWARDS RULES

1. The Nebula Award year shall begin on January 1 and end on December 31 of the year for which awards will be presented.

2. Awards will be made in the following categories:
a. Short Story: less than 7,500 words.
b. Novelette: at least 7,500 words but less than 17,500 words.
c. Novella: at least 17,500 words but less than 40,000 words.
d. Novel: 40,000 words or more. At the author's request, a novella-length work published individually, rather than as part of a collection or an anthology, shall appear in the novel category.
e. Script: a professionally produced audio, radio, television, motion picture, multimedia, or theatrical script.

3. Eligibility
a. Works in categories (a) through (e) are eligible for twelve (12) months from the month of publication or release. A work's eligibility period begins on the first day of the month of its first publication in the United States, or, in the case of a dramatic work, on the day of its first release in a U.S. public theater, or first air-date on U.S. TV, or equivalent for radio plays and theatrical products, and ends on the last day of the preceeding month in the following year, or, in the case of a dramatic work, 365 days later.
b. A work is eligible to be placed on the Preliminary Nebula Ballot only once. A work that has been placed on the Preliminary Nebula Ballot is no longer eligible, even if the twelve month eligibility period has not expired.
c. The novel-length version of a previously-published short story, novelette, or novella shall be eligible upon the novel's first English-language publication in the USA. A novel re-issued in expanded or modified form shall not be eligible unless previously withdrawn in accord with Rule #6. A short story, novelette, or novella based on a previously-published work shall not be eligible.

4. Works must be in either the Science Fiction or the Fantasy genres. The Nebula Award Report Editor will decide the eligibility of a questionable work, subject to appeal to the Nebula Awards Committee.

5. Works are eligible whether or not their authors are members of the Science Fiction Writers of America. Works are eligible whether or not they have been previously published outside the United States of America.

6. The author of any eligible work may withdraw it from consideration in a given year and request that a later edition be considered for the Nebula, but only in two specific cases: (a) if it appeared as a limited edition publication, or (b) if the author finds the published version unacceptable as the result of editorial changes or production errors.
The Nebula Award Report editor shall decide whether or not to allow a withdrawal, subject to appeal to the Nebula Awards Committee.

7. Withdrawals
a. An author must present a written request for withdrawal to the Nebula Award Report editor within 30 days after the publication of the first Nebula Awards Report following publication of the work.
b. For a later edition of a withdrawn work to be eligible, the author must present a written request for reinstatement of eligibility to the Nebula Award Report editor.
c. Recommendations shall not be accepted for a work withdrawn from eligibility, nor shall recommendations on file for any such work be carried over to the future.
d. An author may permanently withdraw a work from eligibility by delivering a written request to the Nebula Award Report editor. No work so withdrawn shall ever again be eligible for the Nebula.

8. All active members of SFWA in good standing are entitled to make recommendations and may vote on award ballots.

9. Works may not be recommended by their authors, editors, publishers, or any other party with a monetary interest in the work.

10. The SFWA President shall appoint a Nebula Award Report editor to compile, publish, and distribute to members a list of recommendations of works to be considered for the awards at intervals during the award year.

11. At the end of the Nebula Award year, the Nebula Award Report editor will issue a Preliminary Nebula Ballot.

All works receiving ten (10) or more recommendations during their period of eligibility shall be placed on the Preliminary Ballot in their appropriate categories. The Preliminary Ballot must be mailed to active members no later than January 15.

12. Members will nominate no more than five works in each category on the Preliminary Ballot. These ballots shall be returned to the Nebula Award Report editor or independent agent (as indicated on the ballot) before the Preliminary Ballot closing date, which will be not less than 28 days after the date of distribution of the Preliminary Ballot. The five works in each category receiving the most nominations will be placed on a Final Ballot.

13. The Final Ballot will be published and distributed by the Nebula Award Report editor to all active members within fourteen (14) days after the Preliminary Ballot closing date.

14. Members will cast numerically ranked votes for works on the Final Ballot, writing 1 for the first choice in each category, 2 for the second, and so on; or, instead of ranked votes for nominated works, members may vote for "No Award." If any ranked vote is cast in a category, a vote for "No Award" in the same category will be disregarded. Members may leave any category completely unmarked; their ballots will only be counted in categories in which they have cast ranked votes or voted for "No Award."

15. Votes for "No Award" will be counted before ranked votes are counted. If forty (40) percent or more of the ballots received in a particular category received are marked only for "No Award," then no Nebula Award will be given in that category and votes in that category will not be counted.

16. Ranked votes for nominated works are counted by the "Australian ballot" method defined in this paragraph. On the first count of ranked votes for nominated works in a category, only first-ranked choices are counted. If any work is the first choice of a majority of the ballots cast for works in that category, it is declared the winner of the Nebula Award for that category. If no work has received a majority of first-ranked votes on the first count, additional counts will be made, as follows: The work which received the lowest number of best-ranked votes on the latest previous count is removed from further contention. Each ballot cast for the removed work is now counted for the work, still in contention, which received the next-best-ranked vote on that ballot. If no work that is still in contention has been marked with a ranked vote, that ballot is not counted again for that category. Additional counts will be made, removing the last-place work from contention each time, and adding next-best-ranked votes from its ballots to the totals for the works still in contention, until one work receives a majority of the votes cast in the latest count in that category, in which case that work is declared the winner of the Nebula Award for that category; or until only two works remain with exactly the same number of ballots counted in their favor, in which case the work, of those two, which received the greater number of first-ranked votes on the first count is declared the winner of the Nebula Award. If both works also had the same number of first-ranked votes on the first count, the voting is declared a tie, and both works will receive the Nebula Award.

17. The Final Ballot will be tabulated by an independent agency. To be counted, properly prepared Final Ballots must be received by the Final Ballot closing date, which shall be not less than 28 days after the date of distribution of the Final Ballot.

18. Nebula Juries
a. The SFWA President shall appoint, and the Nebula Awards Report editor administer three Nebula juries, each consisting of at least three (3) and not more than seven (7) members. In the case of the Dramatic Script Nebula Jury, at least two members of that Jury shall have had at least one script professionally produced.
b. The Short Fiction Jury shall have the option of adding one work to the Final Ballot in each of the three short fiction categories (short story, novelette and novella).
c. The Novel Jury shall have the option of adding one work to the novel category.
d. The Script Jury shall have the option of adding one work to the Script category. The Script Jury shall also be charged with ensuring, to the best of its ability, that the Nebula for best script is presented to the primary writer or writers of an actual script. Accordingly, the Jury shall be responsible for requesting a copy of the production script for each script on the Preliminary Ballot, and reviewing the attribution on those scripts, to ensure that the Award shall accurately reflect the true authorship of the Work. The Jury may disqualify productions where authorship is unclear or in doubt, or the accredited authorship consists of more than four individuals, with no primary author. Such disqualified productions will not appear on the Final Ballot.
e. A Jury may not add to the Final Ballot a work written by a member of that Jury.

19. The Nebula Jury shall consider only eligible works published between January 1 and December 31 of the year for which awards will be presented.

20. The president shall have the power, at his/her discretion, to call for the presentation of a Grandmaster Award. A maximum of one Grandmaster Award can be presented each year with no requirement that an award be presented in any particular year. Nominations for Grandmaster Award shall be solicited from the Board of Directors, with the advice of participating past presidents, who shall vote, with participating past presidents, to determine its recipients. In case of a tie, the president's vote shall decide.

21. The officers of SFWA, at their discretion, may propose additional awards in special categories to be voted on by the active members. These additional awards will not be a Nebula Award.

22. The President shall appoint a three (3) person Nebula Awards Committee to rule on questions pertaining to the Nebula Award rules. The Nebula Award Report editor will serve as a secretary to this committee, but shall not be a voting member.

23. The Nebula Award rules may be amended by a majority of the active membership or a majority of the officers.

The Nebula Awards Winners

1965-2001

1965

Best Novel: DUNE by Frank Herbert
Best Novella: "The Saliva Tree" by Brian W. Aldiss / "He Who Shapes" by Roger Zelazny (tie)
Best Novelette: "The Doors of His Face, the Lamps of His Mouth" by Roger Zelazny
Best Short Story: "'Repent, Harlequin!' Said the Ticktockman" by Harlan Ellison

1966

Best Novel: FLOWERS FOR ALGERNON by Daniel Keyes / BABEL-17 by Samuel R. Delany (tie)
Best Novella: "The Last Castle" by Jack Vance
Best Novelette: "Call Him Lord" by Gordon R. Dickson
Best Short Story: "The Secret Place" by Richard McKenna

1967

Best Novel: THE EINSTEIN INTERSECTION by Samuel R. Delany
Best Novella: "Behold the Man" by Michael Moorcock
Best Novelette: "Gonna Roll the Bones" by Fritz Leiber
Best Short Story: "Aye, and Gomorrah" by Samuel R. Delany

1968

Best Novel: RITE OF PASSAGE by Alexei Panshin
Best Novella: "Dragonrider" by Anne McCaffrey
Best Novelette: "Mother to the World" by Richard Wilson
Best Short Story: "The Planners" by Kate Wilhelm

1969

Best Novel: THE LEFT HAND OF DARKNES by Ursula K. Le Guin
Best Novella: "A Boy and His Dog" by Harlan Ellison
Best Novelette: "Time Considered as a Helix of Semi-Precious Stones" by Samuel R. Delany
Best Short Story: "Passengers" by Robert Silverberg

1970

Best Novel: RINGWORLD by Larry Niven
Best Novella: "Ill Met in Lankhmar" by Fritz Leiber
Best Novelette: "Slow Sculpture" by Theodore Sturgeon
Best Short Story: No Award

1971

Best Novel: A TIME OF CHANGES by Robert Silverberg
Best Novella: "The Missing Man" by Katherine MacLean
Best Novelette: "The Queen of Air and Darkness" by Poul Anderson
Best Short Story: "Good News from the Vatican" by Robert Silverberg

1972

Best Novel: THE GODS THEMSELVES by Isaac Asimov
Best Novella: "A Meeting with Medusa" by Arthur C. Clarke

Best Novelette: "Goat Song" by Poul Anderson
Best Short Story: "When it Changed" by Joanna Russ

1973

Best Novel: RENDEZVOUS WITH RAMA by Arthur C. Clarke
Best Novella: "The Death of Doctor Island" by Gene Wolfe
Best Novelette: "Of Mist, and Grass, and Sand" by Vonda N. Mcintyre
Best Short Story: "Love Is the Plan, the Plan Is Death" by James Tiptree, Jr.
Best Dramatic Presentation: Soylent Green - Stanley R. Greenberg for Screenplay (based on the novel Make Room! Make Room!) / Harry Harrison for Make Room! Make Room!

1974

Best Novel: THE DISPOSSESSED by Ursula K. Le Guin
Best Novella: "Born with the Dead" by Robert Silverberg
Best Novelette: "If the Stars Are Gods" by Gordon Eklund and Gregory Benford
Best Short Story: "The Day Before the Revolution" by Ursula K. Le Guin
Best Dramatic Presentation: Sleeper by Woody Allen

1975

Best Novel: THE FOREVER WAR by Joe Haldeman
Best Novella: "Home Is the Hangman" by Roger Zelazny
Best Novelette: "San Diego Lightfoot Sue" by Tom Reamy
Best Short Story: "Catch that Zeppelin!" by Fritz Leiber
Best Dramatic Writing: Mel Brooks and Gene Wilder for Young Frankenstein

1976

Best Novel: MAN PLUS by Frederik Pohl
Best Novella: "Houston, Houston, Do You Read?" by James Tiptree, Jr.
Best Novelette: "The Bicentennial Man" by Isaac Asimov
Best Short Story: "A Crowd of Shadows" by Charles L. Grant

1977

Best Novel: GATEWAY by Frederik Pohl
Best Novella: "Stardance" by Spider and Jeanne Robinson
Best Novelette: "The Screwfly Solution" by Raccoona Sheldon
Best Short Story: "Jeffty Is Five" by Harlan Ellison
Special Award: Star Wars

1978

Best Novel: DREAMSNAKE by Vonda N. McIntyre
Best Novella: "The Persistence of Vision" by John Varley
Best Novelette: "A Glow of Candles, a Unicom's Eye" by Charles L. Grant
Best Short Story: "Stone" by Edward Bryant

1979

Best Novel: THE FOUNTAINS OF PARADISE by Arthur C. Clarke
Best Novella: "Enemy Mine" by Barry Longyear
Best Novelette: "Sandkings" by George R. R. Martin
Best Short Story: "giANTS" by Edward Bryant

1980

Best Novel: TIMESCAPE by Gregory Benford
Best Novella: "The Unicorn Tapestry" by Suzy McKee Charnas
Best Novelette: "The Ugly Chickens" by Howard Waldrop
Best Short Story: "Grotto of the Dancing Deer" by Clifford D. Simak

1981

Best Novel: THE CLAW OF THE CONCILIATOR by Gene Wolfe
Best Novella: "The Saturn Game" by Poul Anderson
Best Novelette: "The Quickening" by Michael Bishop
Best Short Story: "The Bone Flute" by Lisa Tuttle (This Nebula Award was declined by the author.)

1982

Best Novel: NO ENEMY BUT TIME by Michael Bishop
Best Novella: "Another Orphan" by John Kessel
Best Novelette: "Fire Watch" by Connie Willis
Best Short Story: "A Letter from the Clearys" by Connie Willis

1983

Best Novel: STARTIDE RISING by David Brin
Best Novella: "Hardfought" by Greg Bear
Best Novelette: "BIood Music" by Greg Bear
Best Short Story: "The Peacemaker" by Gardner Dozois

1984

Best Novel: NEUROMANCER by William Gibson
Best Novella: "PRESS ENTER" by John Varley
Best Novelette: "Bloodchild" by Octavia E. Butler
Best Short Story: "Morning Child" by Gardner Dozois

1985

Best Novel: ENDER'S GAME by Orson Scott Card
Best Novella: "Sailing to Byzantium" by Robert Silverberg
Best Novelette: "Portraits of His Children" by George R.R. Martin
Best Short Story: "Out of All Them Bright Stars" by Nancy Kress

1986

Best Novel: SPEAKER FOR THE DEAD by Orson Scott Card
Best Novella: "R & R" by Lucius Shepard
Best Novelette: "The Girl Who Fell into the Sky" by Kate Wilhelm
Best Short Story: "Tangents" by Greg Bear

1987

Best Novel: THE FALLING WOMAN by Pat Murphy
Best Novela: "The Blind Geometer" by Kim Stanley Robinson
Best Novelette: "Rachel in Love" by Pat Murphy
Best Short Story: "Forever Yours, Anna" by Kate Wilhelm

1988

Best Novel: FALLING FREE by Lois McMaster Bujold
Best Novella: "The Last of the Winnebagos" by Connie Willis
Best Novelette: "Schrodinger's Kitten" by George Alec Effinger
Best Short Story: "Bible Stories for Adults, No. 17: The Deluge" by James Morrow

1989

Best Novel: THE HEALER'S WAR by Elizabeth Ann Scarborough
Best Novella: "The Mountains of Mourning" by Lois McMaster Bujold
Best Novelette: "At the Rialto" by Connie Willis
Best Short Story: "Ripples in the Dirac Sea" by Geoffrey A. Landis

1990

Best Novel: TEHANU: THE LAST BOOK OF EARTHSEA by Ursula K Le Guin

Best Novella: "The Hemingway Hoax" by Joe Haldeman
Best Novelette: "Tower of Babylon" by Ted Chiang
Best Short Story: "Bears Discover Fire" by Terry Bisson

1991

Best Novel: STATIONS OF THE TIDE by Michael Swanwick
Best Novella: "Beggars in Spain" by Nancy Kress
Best Novelette: "Guide Dog" by Mike Conner
Best Short Story: "Ma Qui" by Alan Brennert

1992

Best Novel: DOOMSDAY BOOK by Connie Willis
Best Novella: "City of Truth" by James Morrow
Best Novelette: "Danny Goes to Mars" by Pamela Sargent
Best Short Story: "Even the Queen" by Connie Willis

1993

Best Novel: RED MARS by Kim Stanley Robinson
Best Novella: "The Night We Buried Road Dog" by Jack Cady
Best Novelette: "Georgia on My Mind" by Charles Sheffield
Best Short Story: "Graves" by Joe Haldeman

1994

Best Novel: MOVING MARS by Greg Bear
Best Novella: "Seven Views of Olduvai Gorge" by Mike Resnick
Best Novelette: "The Martian Child" by David Gerrold
Best Short Story: "A Defense of the Social Contracts" by Martha Soukup

1995

Best Novel: THE TERMINAL EXPERIMENT by Robert J. Sawyer
Best Novella: "Last Summer at Mars Hill" by Elizabeth Hand
Best Novelette: "Solitude" by Ursula K. Le Guin
Best Short Story: "Death and the Librarian" by Esther Friesner

1996

Best Novel: SLOW RIVER by Nicola Griffith
Best Novella: "Da Vinci Rising" by Jack Dann
Best Novelette: "Lifeboat on a Burning Sea" by Bruce Holland Rogers
Best Short Story: "A Birthday" by Esther M. Friesner

1997

Best Novel: THE MOON AND THE SUN by Vonda N. McIntyre
Best Novella: "Abandon in Place" by Jerry Oltion
Best Novelette: "The Flowers of Aulit Prison" by Nancy Kress
Best Short Story: "Sister Emily's Lightship" by Jane Yolen

1998

Best Novel: FOREVER PEACE by Joe Haldeman
Best Novella: Reading the Bones by Sheila Finch
Best Novelette: Lost Girls by Jane Yolen
Best Short Story: Thirteen Ways to Water by Bruce Holland Rogers

1999

Best Novel: PARABLE OF THE TALENTS by Octavia E. Butler
Best Novella: Story of Your Life by Ted Chiang
Best Novelette: Mars is No Place for Children by Mary A. Turzillo
Best Short Story: The Cost of Doing Business by Leslie What

Best Script: The Sixth Sense by M. Night Shyamalan

2000

Best Novel: DARWIN'S RADIO by Greg Bear
Best Novella: Goddesses by Linda Nagata
Best Novelette: Daddy's World by Walter Jon Williams
Best Short Story: macs by Terry Bisson
Best Script: Galaxy Quest by Robert Gordon, David Howard

2001

Best Novel: THE QUANTUM ROSE by Catherine Asaro
Best Novella: The Ultimate Earth by Jack Williamson
Best Novelette: Louise's Ghost by Kelly Link
Best Short Story: The Cure for Everything by Severna Park
Best Script: Crouching Tiger, Hidden Dragon by James Schamus, Kuo Jung Tsai, and Hui-Ling Wang

THE 2002 NEBULA AWARDS NOMINATIONS

Press Release

The Science Fiction and Fantasy Writers of America (SFWA) has released the final ballot for this year's Nebula Awards. Winners will be announced at the Nebula Award banquet in Philadelphia, April 18-20, 2003.

NOVEL

American Gods, Neil Gaiman (Morrow)
Bones of the Earth, Michael Swanwick (Eos)
The Other Wind, Ursula K. Le Guin (Harcourt Brace)
Perdido Street Station, China Miéville (Del Rey)
Picoverse, Robert A. Metzger (Ace)
Solitaire, Kelley Eskridge (Eos)

NOVELLA

"Bronte's Egg", Richard Chwedyk (F&SF Aug 2002)
"The Chief Designer", Andy Duncan (Asimov's Jun 2001)
"Magic's Price", Bud Sparhawk (Analog Mar 2001)
"The Political Officer", Charles Coleman Finlay (F&SF Apr 2002)
"Sunday Night Yams at Minnie and Earl's", Adam-Troy Castro (Analog Jun 2001)

NOVELETTE

"The Days Between", Allen Steele (Asimov's Mar 2001)
"The Ferryman's Wife", Richard Bowes (F&SF May 2001)
"Hell is the Absence of God", Ted Chiang (Starlight 3, Patrick Nielsen Hayden, ed., Tor)
"Lobsters", Charles Stross (Asimov's Jun 2001)
"Madonna of the Maquiladora", Gregory Frost (Asimov's May 2002)
"The Pagodas of Ciboure", M. Shayne Bell (The Green Man: Tales From the Mythic Forest, Datlow/Windling, eds; Viking)

SHORT STORY

"Creation", Jeffrey Ford (F&SF May 2002)
"Creature", Carol Emshwiller (F&SF Oct/Nov 2001)
"Cut", Megan Lindholm (Asimov's May 2001)
"The Dog Said Bow-Wow", Michael Swanwick (Asimov's Oct/Nov 2001)
"Little Gods", Tim Pratt (Strange Horizons 4 Feb 2002)
"Nothing Ever Happens in Rock City", Jack McDevitt (Artemis Summer 2001)

SCRIPT

Buffy the Vampire Slayer: "Once More with Feeling", Joss Whedon
The Dead Zone: "Unreasonable Doubt", Michael Taylor (created for TV by Michael Piller and Shawn Piller, based on characters from the Stephen King novel)
The Lord of the Rings: The Fellowship of the Ring, Fran Walsh, Philippa Boyens & Peter Jackson (New Line Cinema)
Shrek, Ted Elliott, Terry Rossio, Joe Stillman, & Roger S.H. Schulman (DreamWorks)

This year's ballot marks the first final-ballot Nebula nominations for China Miéville, Robert A. Metzger, Richard Chwedyk, Charles Coleman Finlay, Richard Bowes, Charles Stross, Gregory Frost, M. Shayne Bell, Carol Emshwiller, Tim Pratt, and all of the script nominees except for Joss Whedon.

BRONTE'S EGG

by Richard Chwedyk

There is an old house at the edge of the woods about sixty kilometers out from the extremes of the nearest megalopolis. It was built in another century and resembles the architecture of the century before that one. In some ways it evokes the end of many things: the end of the road, the end of a time, the end of a search (which the house has been, and on occasion it still is). But it is also a good place for beginnings, a good place to begin a story about beginnings—as good as any and better than most.

And it began at dawn.

As the first hint of daylight entered the large second floor bedroom where the saurs slept in a great pile, Axel opened his eyes and whispered, "Yeah!"

There was *stuff* to do and he was ready.

He pulled himself out from under Agnes's spiked tail and Rosie's bony crest and horns, then over Charlie's big rear end, almost stepping into Pierrot's gaping mouth. He pressed, prodded and pushed his way until he could lift up the blanket and make a straight dash to the window. He hopped onto a wooden stool and from there climbed up another step to the box-seated window ledge. His little blue head moved left to right like a rolling turret as he stared out at the wall of trees past the yard, silhouetted against the brightening sky.

The *sun* is coming! And the sun is a *star!* And it's spinning through *space!* And *we're* spinning through space around the sun! And—there's *stuff* to do!

"Stuff to do!" he whispered, hopped back to the stool and then to the floor.

Axel looked back at the sleep-pile. It was a great, blanket-covered mound. Except for the breathing, a few grumbled syllables and occasional twitches, none of the other saurs stirred. They were good sleepers for the most part—all but Axel. Axel could run about all day long from one end of the old Victorian house to the other, and when sleep time came and the saurs gathered themselves into a pile, he would shut his eyes—but nothing happened. His *mind* kept running. Even when he did manage to drift off, his dreams were of running, of traveling in speeding vehicles, like interstellar cruisers. And even if *he* wasn't moving, he dreamed of motion, of stars and planets and asteroids, of winds and birds and leaves in autumn. The whole universe was whirling and spinning like an enormous amusement park ride.

He'd been to an amusement park once, so long ago he couldn't distinguish it anymore from the rest of life.

He had no need to creep out of the room. The thump-thump-thump of his big padded feet disturbed no one. His tail in the air didn't make a sound. He ran past the room of the big human, Tom Groverton. The human ran and ran all day long too, cleaning and feeding and keeping the saurs out of trouble—but he got tired and slept almost as hard as the saurs.

Axel headed down to the first floor. Descending human stairs should have been difficult for a bipedal creature only forty centimeters tall, but he flew down them with ease. There were *so* many things to do today! The universe was so big—that is, *sooooo* big! How could anyone just lie about when the sky was already lighting up the world?

No way! Axel thumped the floor with his tail. Space and Time and Time and Space! The Universe is one big place!

He'd learned that from the computer.

The computer was on a desk in the dining room, or what had been the dining room when the house was just a place for humans, before it became a shelter for the saurs. The desk sat over by the east-facing window. The computer was old in many respects, but the old computers were often more easily upgraded, and as long as they were linked to all the marvelous systems out there in the world past the porch and the yard, there was nothing this old model couldn't do.

"Yeah!"

Axel rolled a set of plastic steps up to the desk and dashed straight up until he stood before the huge gray monitor—huge to Axel, at least.

"Hey! Reggie!" Axel addressed the computer by name.

The computer could be voice-activated and voice-actuated. The brain box chirped at Axel's greeting and the screen came to life. Icons were displayed in the corners and along the top, one of them being the Reggiesystems icon: "Reggie" himself, the light green seahorse-or-baby-sea-serpent thing, with its round black eyes and orange

wattle that drooped down his jaw like a handlebar mustache.

The icon dropped to the center of the screen and grew until it was almost half the height of the screen. The figure of Reggie rotated from profile to head-on and in a smooth, slightly androgynous voice he spoke:

"Reggie is ready."

"Hiya!" Axel waved a forepaw and smiled, mouth opened wide, revealing all his tiny, thorn-like teeth.

"Good morning, Axel" said Reggie. "What can Reggie do for you today?" Reggie always referred to himself in the third person.

"A whole bunch of stuff!" Axel stretched his forepaws far apart. "Important stuff! Fate of the universe stuff! Really truly big important stuff!" His head bobbed with each exclamation.

"Where would you like to begin?" Reggie said with patience.

Axel looked sharply to one side, then the other. "Don't know! I forgot. Wait!" He nodded vigorously. "The screensaver! Show me the screensaver!"

The icon's head seemed to jiggle slightly, affirmatively, as if acknowledging the request. Reggie disappeared and the screen darkened to black. Axel drew his paws together in anticipation.

A bright speck appeared in the center of the darkness. It grew until it flickered gently, like a star, then grew some more until it looked as big as the sun.

It *was* the sun—as it might look if you were flying through space, directly toward it. It filled the screen until it seemed you were in imminent danger of crashing right into it.

"Aaaaaaaahh!" Axel screamed with delight.

The sun moved off to the right corner of the screen, as if you were veering away and passing it by. Darkness again. Another bright speck started to grow in the screen's center: Mercury, the closest planet to the sun. It was followed by Venus, then the Earth, and Mars, and Jupiter—all the way through the solar system until a pudgy oblong bump rolled past odd-wise and all that was left on the screen were hundreds, thousands of bright specks, changing their positions at differing speeds, as you might see them if you were flying through space.

"Yeah!" cried Axel. "*Yeah!!*"

Through the haze of the Oort Cloud, then out past the solar system, the stars kept coming and coming until you could make out a bright little smudge, like a smeared thumbprint in luminous paint.

It was a galaxy! Another galaxy!

"Yeah!" shouted Axel. "Yeah yeah-yeah-yeah-yeah YEAH!"

The galaxy grew in size until you could just about make out some of the more individuated members of the star cluster. Axel cheered them on.

"Yes! Galaxies! Let's *go!*"

The screensaver cycle was over and it was back to the beginning: the little speck grows into the sun, then the planets, then the far off galaxy—

Axel watched it all again, and then one more time before Reggie interrupted his reverie.

"There was something else you wished Reggie to do?"

"Ohhhh. That's-right that's-right that's-right!" Axel kept his eyes on the moving stars. He remembered someone from the dream he'd had during his brief sleep: he couldn't remember who, but it was someone he wanted to talk to. "I gotta send a message!"

"And where do you wish to send the message?"

Still looking at the screensaver, he said, "To *space!*"

Reggie took an instant longer than usual to reply. "Space, as an address, is not very specific. Are there any particular coordinates in space to which you wish your message directed?"

"What are coordinates?" Axel kept looking at the stars.

The screensaver blinked away. In its place appeared numbers from top to bottom: numbers with decimal points and superscripted degree signs—

"Coordinates," Reggie said, "are a way to divide space by increments, so that one can more accurately determine which part of space one is looking at or to which section one might want to direct a message."

"Ohhhhh."

Reggie scrolled the numbers upward. Axel gaped at them, partly perplexed at the notion of numbers as directions, partly in awe at the sheer volume of them. Numbers, decimal points, degree signs—space was threatening to become an impenetrable wall of numbers. If he thought about it any more his head would heat up and explode.

"That one!" Axel pointed with his left forepaw. "I'll take that one!"

The numbers stopped scrolling. "Which one?" asked Reggie.

"*That* one!" He pressed the forepaw to the glass screen, then tapped against it adamantly.

The numbers were so small—and his forepaw so big in comparison—that Reggie could still not discern which coordinate Axel had chosen. Reggie highlighted one of the numbers in bright red.

"This one?"

"Yeah! That's it!" In truth it wasn't. But the red highlighting was distracting to Axel, whose choice of number was

already purely arbitrary. Facing a wall of numbers, one seemed as good as another. "Send it there!"

"What kind of message?" Reggie asked. "Vocal? Alphabetical characters? Equations?"

"Like, maybe radio," Axel said. "Or whatever you've got that's faster, like micro-tachy-tot waves, or super-hydro-electro-neutrinos."

"One moment," said Reggie. "At what frequency?"

"Frequency? Just once is okay." He rubbed a little spot just under his jaw.

A machine, even one as sophisticated as this Reggiesystems model, is not given to sighing, though one might imagine this model had many occasions to do so. What Reggie did was increase his pauses and slow down his speech delivery.

"What is meant by 'frequency,' Axel—" Reggie explained it all carefully. Axel faced another wall of numbers and made another choice—exactly the same way he'd made the first.

The numbers disappeared and the screensaver images returned. Axel watched it as avidly as if he'd never seen them before.

"Reggie has reserved time on the radio telescope at Mount Herrmann. The message can be sent at 13:47 our time this afternoon, when their first shift team breaks for lunch."

"Wow!" Axel's head reared back. "Thank you, Reggie. Thank-you-thank-you-thank-you!"

"Reggie still needs one more piece of information."

"What's that?"

Very slowly, Reggie said, "The *message,* please."

"Oh, right!" Axel tried to remember the message he'd worked out during the night, as he'd peeked out from under the blankets and stared out through the window—at the rectangle of indigo speckled with pinpoints of light—and imagined all the "space guys" out there. Space and Time and Time and Space—They might look like Axel: blue theropods with coal-black eyes, tiny forepaws and clumpy feet—but without the long scar down his back; or they might look like one of the other saurs—miniature tyrannosaurs or ceratopsians or long-necked sauropods or crested hadrosaurs. Or they might look like human guys, or birds, or jellyfish, or clouds—

"What is the message?" Reggie asked.

"Okay-okay-okay. The message—" Axel held out the last syllable as long as he could to buy a little more time. "—is—it's—'Hiya!'"

"That is the message?"

"Yeah."

"The *complete* message?" Reggie didn't often emphasize his adjectives that way.

"I don't know. Is that enough? What else should I say?"

Reggie paused long enough to formulate an appropriate answer. "You may say as much or as little as you like, but it is customary to tell the recipient of a message who you are."

"Why?"

It may just have been a function of the old hard drive (technology had long since moved past the use of them), but Axel heard a strange, almost nervous, clicking coming from inside the brain box.

"Because the recipient might possibly—for some reason completely unknown to Reggie—want to send a message back to you, in reply."

"Heyyy—" Axel imagined the screensaver running backward—you could do that if you looked at it hard enough—back through space the other way. "Space guys! Yeah!"

"You may also want to tell them a little about yourself," Reggie suggested. "Where you live. What you do. Where you come from—just to be friendly."

"Ohhh! Yes! Got it! Yes! I can say—'Hiya! I'm Axel, and I live in this big house and I'm here with all my friends. We're saurs, you know, all of us except for the human who brings us food and cleans up stuff. His name is Tom. But we're saurs!

"'Saurs are like dinosaurs. They were these really big guys who lived a long time ago and went extinct. We're supposed to look like them except we're smaller and we don't have the scary parts.

"'We came from a factory that was like a laboratory too, and we were made out of living stuff—you know, biology.

"'They made millions of us and sold us to humans as toys. All these human guys who made us made big, big money and drove around in giant bankmobiles and wore top hats and had houses a *thousand* times bigger than this place. But then they had to stop selling us.

"'Turned out we were smarter than we were supposed to be, and lived longer. This lady from the Atherton Foundation said we weren't toys at all but real-real-*real* things that were alive and they shouldn't be selling us.

"'But we kept getting cut up and run over, or the kids who owned us stepped on us or threw us out of windows. Or the parents who bought us drove us to the woods and left us there—or they stopped feeding us and stuff like that. So after a while there weren't many of us left.

"'People started to believe the Atherton lady. They set up a bunch of houses for us and that's how we got to live here.

"'We do all sorts of stuff the guys who made us didn't think we could do, like think and feel and live longer than three years. My buddy Preston writes books. My other buddy Diogenes reads all the stuff in the library. And the Five Wise Buddhasaurs, who don't say anything but they play this stuff that sounds like music sometimes. And Agnes is this stegosaur with plates on her back and spikes on her tail and she knows all about humans and what's wrong with them. She's twenty-five years old, so she must know *everything*. Doc is smart too, but he's nice!

"'The guys who made us said we couldn't make eggs because we don't have the right parts and stuff, but we can do *that* too! Not me, but like Bronte and Kara—female guys. The humans aren't supposed to know, except for Tom and Dr. Margaret—she's the lady who comes every week to make sure we're not sick or dead. I'm not supposed to know either because they think I can't keep a secret, so don't tell the other space guys about this, okay?

"'And when I finish this message, I'm gonna build Rotomotoman. He's this cool robot I dreamed about last night. Reggie's gonna help me, because Reggie's the very-best-smartest whole computer in the world. Then I'm gonna get on a starship and travel all through time and space and save the universe and crash into supernovas and get sucked into wormholes.'"

Axel took a long, necessary breath, then said to Reggie, "Is that okay?"

"Under the circumstances," Reggie said, "Your message is—exceptional."

"Wow!"

"It is, however, customary to ask after the well-being of the recipient of the message, and to close the message—"

"Oh, oh, I know! I know! So I'll say, 'Hope you're okay. Your friend, Axel.' Like that, right?"

"The message will be sent as you dictated it," Reggie replied, "with a few grammatical corrections."

"All *right!*" Axel leapt up. "A message to space! Thank you, Reggie! Oh, thank-you-thank-you-thank-you-thank-you!"

"You are very welcome, Axel," said Reggie. Then, with what one might interpret as a trepidatious pause—and with careful attention to pronunciation—he asked, "Now, please explain to Reggie, what is a Ro-to-mo-to-man?"

Tom Groverton stood at the door of the room where the saurs slept. Eyes half open, hair still mussed, a middle button of his shirt undone, he said the word "breakfast" clearly but not too loudly and stepped back as the little ones ran past him.

The bigger saurs rose slowly: grunting, grumbling and stretching. The triceratops named Charlie always had a little trouble righting himself. He braced up against his mate, Rosie, until his hind legs were reasonably straight. The two gray stegosaurs, Agnes and Sluggo, went through a ritual that resembled push-ups—hind legs first, then forelegs up slowly with a sliding sort of motion.

Hubert and Diogenes, the two biggest theropods—each over a meter and a half tall—helped the other big guys, like Sam and Dr. David Norman. Tails really do help.

Diogenes leant a forepaw to Doc, the light brown tyrannosaur with a "tricky" left leg.

"Thank you, my friend," Doc said, his eyes barely visible under his thick lids. "Each day it seems to get a little harder."

"It does for everyone," said Tom Groverton from the doorway.

Doc nodded. "But not quite the same way for everyone. You were a little one once, who grew into an adult. We saurs were engineered. We were 'born' with our eyes open. What growth we experienced is beyond memory. The little ones stay little and the big ones were always big."

"Either way, we grow old," Tom insisted.

"Until we grow cold." Doc smiled serenely. "Or perhaps you can say we wear out instead."

"So do we."

As Hubert and Diogenes folded up the blankets and covers, Tom walked over to the wheeled, bassinet-sized hospital bed in the center of the room. Upon it was a figure who was recognizably a saurian and recognizably a theropod, but whose limbs—all of them—were missing and whose tail was a crushed-looking stump. Several long-healed scars criss-crossed his abdomen and where his eyes should have been were empty sockets.

"Good morning, Hetman," Tom said to the figure on the bed. "How are you feeling?"

"Not so bad." Hetman's voice was faint and raspy, always a little more so in the morning. "I had an odd dream. Odd, but pleasant."

"What was it?" Doc asked, resting his forepaws on the bed railing.

"Very odd. Very odd indeed." Hetman turned his head toward the voices. "Can you imagine me riding on a horse's back?"

"I can, old friend." Doc closed his eyes. "Like Zagloba, the Cossack—rebellious, reckless, full of life—riding with incomparable skill." He opened his eyes again and smiled. "It must have been a splendid dream."

Hubert and Diogenes stood at the bed railing, ready to move Hetman downstairs to breakfast.

"Like some help?" Tom offered.

"They can manage." Doc spoke for them. Hubert and Diogenes were quite literate and articulate but spoke only when necessity dictated. "Thank you all the same, but you better get downstairs before Jean-Claude and Pierrot get impatient. You remember yesterday."

The day before, Jean-Claude and Pierrot chanted "Meat! Meat! Breakfast *Meat!*" until even the little ones who ate nothing but soy pellets and oatmeal shouted along.

Tom nodded. He looked at the other saurs who had still not gone down to breakfast: Agnes, Sluggo, Kara, Preston and Bronte. All of them were looking up at Tom except for Bronte. The bright green apatosaur was gazing in the direction of Hetman's bed.

Tom gave them an asymmetrical grin before leaving the room. "Well don't wait *too* long."

When he was gone, Hetman whispered, "Check the egg! I twisted in my sleep last night. I'm afraid I may have hurt it!"

Hubert turned Hetman gently on his side and lifted his pillow as Doc watched. Under the pillow was a pale yellow egg, no more than a few centimeters long.

"It's fine," said Doc.

"Don't let Doc pick it up," said Agnes. "The clumsy oaf."

"My dear Agnes, I had no intention."

Sluggo had already run over to retrieve a tiny cardboard box stuffed with cotton, hidden behind the chest near the window, where the blankets and covers were kept. He pushed it back along the floor with his snout. Diogenes picked up the egg and carefully placed it in the little box.

Agnes nudged past Sluggo and examined it, almost sniffing it, in search of the slightest possible fracture. "I guess it looks okay."

Kara butted Agnes with her head. She was an apatosaur, but her head was big—and hard. "Let Bronte see. It's *her* egg, after all."

"Oh. Right." Agnes stepped back and let Bronte timidly press in.

As Bronte stared, a set of three tiny furrows took their place on her forehead. She worried, she pitied, she pondered, all at once as she took in the egg's contours and slightly rough surface. She held her breath and stared.

They all did, gathered around the cardboard box, except for Hetman, who listened as carefully as the others watched.

"The shell looks so frail," whispered Sluggo.

"Are you an idiot?" said Agnes. "Have you touched it? It's like granite. She won't have the strength to break through that shell."

"Or he," Doc suggested.

"What do *you* know?" Agnes grumbled.

"What do any of us know?"

Agnes grumbled again, but left it at that.

None of them knew if the time was soon for the first hairline cracks to form on the shell—for the little creature who might be within to break through the calcium walls of her prison and her protection—or his. Now. Later. Or ever.

Agnes's egg had had a yolk and a fetal sac, but no infant. So had Kara's. Bronte's first egg had contained a tiny, almost shapeless thing that never moved and never showed any signs that it could have moved, like some little plastic charm in the center of a bar of soap. The saurs had sealed that one carefully in a little plastic box and buried it in the garden.

In the past few months they had combed every database they could find with any bit of information about egg-laying creatures. They knew about ostriches and cobras, platypuses and echidnas. They even read about dinosaurs—the "real" ones, the ones who had lived millions of years before. It helped them guess at what might—or what *should*—happen, if anyone could have guessed that this *could* happen at all, which no one had.

Bronte had even practiced with bird eggs Sluggo found out in the yard, eggs that had fallen out of nests in the trees. They hatched successfully, but who knew if the egg of a saur was anything like the egg of a sparrow?

"It needs heat," said Bronte, who spoke rarely, and then only in a whisper.

"Sit on it," said Agnes. "Gently."

"It's too frail," said Sluggo.

"Put it by the window, in the sun," said Kara.

"Too much," Agnes replied. "You might boil it. Then, what if it clouds up in the afternoon?"

"We might ask Tom," Sluggo suggested meekly. "Or Dr. Margaret."

"No!" Agnes thumped her tail on the floor. "It's not their business! It's *our* business! Besides, they won't know any better than we do. And *besides* that besides, if it gets out that we're producing eggs the humans out there will go into a panic. They'll stick us in labs again and examine us and try to work out what went wrong. Or they'll just round us up and exterminate the whole lot of us."

"They—they wouldn't do that," said Sluggo. The words didn't come out with quite the certainty he intended.

Agnes sailed on the energy of her own bleak visions. "They might even decide they like the eggs and make us sit in pens and lay them like chickens! They'll boil, scramble and fry them!"

"No!" Bronte and Sluggo gasped almost in unison.

Kara simply butted Agnes again. "Shut up!"

"Mark my words!" Agnes gave each syllable blunt, apocalyptic emphasis. "You can't trust humans! They say one thing then do the other. They want the whole damn place for themselves. They want everything. Everything! They're greedy and sneaky and creepy and they kill things for pleasure! They screw up everything then go around and look for more things to screw up!"

"That's true," said Preston, who for all the thousands of words he'd written, bent over a keyboard, tapping away with his four digits, rarely spoke more than a dozen words in a month. "After all, they made *us.*"

"What kind of a joke is *that?*" Agnes's spiked tail swept the air in a short arc.

"Tom isn't like that," said Sluggo. "Dr. Margaret isn't like that."

"They aren't *now.*" Agnes lowered her tail. "But they can turn on you just like that! It's all that *meat.* It poisons their brains and they go crazy. That's why you always have to keep your eyes on them."

"Dr. Margaret doesn't eat meat," Sluggo reminded her. "She's an herbivore."

"A vegetarian, you mean," said Doc.

"Oh, shut up! Who asked you anyway?" Agnes sneered at Doc.

"Who asked *you?*" said Kara. "We were talking about the egg."

"What we need," said Doc, resting a forepaw on Bronte's back, "is patience. We must be careful and observant. This egg may not hatch, my dear. But if it doesn't we will learn more and know better next time."

"Someday," Kara whispered, "one will hatch."

"I hope so." Doc patted her consolingly. "But as much as I hate to say this, it may also be possible that—in our genetic idiosyncrasies—we may be only capable of performing half the job."

"Oh, who died and made *you* king?" Agnes turned away in disgust—or perhaps to hide her pained expression momentarily.

Doc smiled and gently said, "Sweet Agnes, pay no attention to me, then. I am just a lame old fool who knows nothing except that he loves all his good friends here assembled."

"You old windbag!" Agnes backed away. "As if I trusted carnosaurs any better than humans! You're all filled with baloney!"

"Nevertheless," said Hetman, his weak voice belying his proximity, "I have a feeling this one will hatch. Just a feeling, but they're about all I have left."

"Hetman," Agnes said after an embarrassed pause, "I didn't mean *you* when I said that about carnosaurs. I—I get carried away sometimes."

"*Do* you?" Kara snorted.

"If you didn't get carried away," said Hetman, "I'd fear I'd been spirited off to another house in the night. Don't apologize for being Agnes, Agnes."

She responded with a rumble—this time from her stomach. A moment later, Doc's stomach made a stuttered purr, like the starting up of an old internal combustion engine.

"Breakfast," said Kara.

Hubert and Diogenes nodded and pushed Hetman's bed toward the door, where they nearly collided with the blue blur of a breathless theropod.

"Preston! Hey! Preston!"

Axel slowed himself just long enough to shout a hurried "Hiya!" to Hetman, Hubert and Diogenes, then he charged on, coming to a halt as he slid broadside into Agnes.

"Uff! Will you watch it!" Agnes barked. "Isn't it enough—"

"Sorry-sorry, Agnes. Preston! Preston! Can I have—"

His attention was drawn to the cardboard box, and its contents.

"Heyyy!" Axel took a careful look inside. "There it is!"

Doc nodded. "There it is."

He looked around at the others and pointed to the box. "That's the egg!" he said, as if they might not know yet.

"Indeed," said Doc.

"Know what that means?" Axel continued.

"No," Agnes sighed impatiently. "What *does* that mean?"

"Someone's been having *SEX!*"

"Oh, shut up!" Agnes shouted. "You don't know a thing about it!"

"Yes-yes-yes-*yes!* I learned all about it from the Reggie! I saw 'Animal Mating Practices and Habits,' 'Barnyard Babies,' 'From Sperm to Germ'—or something like that, and—and I saw 'Angelique Blows Her Birthday Candles.'"

"Shut up! *Shut up!*" Agnes's back plates clicked with the tremor of her tail smacking the floor. "Are you completely—"

"Axel," said Doc, "not that I want to distract you, but you came up here to ask Preston something, didn't you?"

"Yes! Right! Yes!" Axel stepped over to Preston. "Can I have five thousand dollars?"

Agnes gasped. "*What!*"

"Five thousand dollars. That's all. And, and then they'll *build* him! They really will! They already made up the

diagrams and ski-mats and stuff! Reggie showed them what I wanted!"

"And what's that?" asked Agnes. "A working brain?"

"I'll show you! Come on!" He took a few inaugural steps toward the door. "Come on!"

"'Him,'" Doc said with his best deliberation, in an effort to get Axel to slow down and explain. "You said 'him.' And 'they.' You said 'they' too. Who is 'him'? And who are 'they'?"

"Rotomotoman, Doc! It's Rotomotoman! Rotomotoman!" Axel beckoned with his forepaw. "Come on!"

Doc wasn't sure if this was supposed to be an answer to one question, or two, or to no questions at all. The more he tried to decipher what Axel said the more his stomach rumbled.

Agnes shut her eyes and raised her back as far as it would go. "Why? Why *us?*"

"I—I think we better go along with him," Doc said, "if we're ever going to find out what this 'Roto-man' thing is."

"Roto-*moto*-man!" Axel corrected him, then said it again more quickly, as if the mere saying of the name was a kind of sheer delight.

"He's flipped," Agnes said. "What hold he's had on sanity—"

"It hurts nothing to see what's got the little fellow so excited." Doc took a step toward the door.

"Little *fellow,*" Agnes spat the words out and turned to Bronte. "Little *fellow!*"

"Come-on-come-on-come-on!" Axel shouted from the doorway.

Preston picked up the box with the egg and, hearing no objections from the others, followed Axel. Bronte kept to Preston's side, as close to the egg as possible, with Kara on the other side. Doc limped along with Sluggo while Agnes, furiously reluctant, brought up the rear.

By the time the entourage reached the stairs Axel was already at the bottom. Looking up and waving.

"Hurry up!" he shouted, as if they were missing the last total solar eclipse for the next fifty years.

"Patience," said Doc, as he and the others boarded the lift. "Patience. We're coming."

The lift was an adaptation from the "human days" of the house and was originally built to carry a wheelchair up and down the stairs. Now it was a simple flatbed platform that transported the saurs who were too small, too lame or too tired to climb up or down between the two floors. Speed was never part of its design or of its renovation. To Axel, it was agony watching the others come down on the lift, like being forced to watch the tide go out.

When the lift came to a halt, Doc and the others had barely gotten off before Axel raced on to the dining room and up the plastic stairs to the computer.

"Come-on-come-on-come-on!"

"We can see the screen from here," Doc said, as the group settled a meter or so back from the desk. "Show us whatever it is you want us to see."

"Reggie," Axel said to the screen, "display Rotomotoman."

The monitor screen displayed a gray background and light blue grid lines. A snatch of music played, something with a bouncy tempo and a lot of horns. A metallic gray figure appeared on the screen—a cylinder topped with a hemisphere. Just above the line where the cylinder met the hemisphere were two white circles with two smaller black circles inside them, like cartoon eyes. The cylinder rested on four small circles that one could suppose were wheels or casters, and attached at its sides were two articulated rods that one could imagine were arms. At the end of each rod was a flat, rectangular plate, out of which sprung five digits, one set off thumb-like from the others. The retinas of the presumed eyes shifted slightly from left to right, as if the figure were surveying the scene around itself.

"Go!" cried Axel.

The figure rolled off to the left of the screen, followed by horizontal "speed" lines and a cartoon dust cloud left behind. It reappeared, this time rolling in from the left and disappearing to the right side of the screen. It rolled from left to right, right to left, left to right again, as Axel chanted:

"Ro-toh Moto-*Man!* Ro-toh Moto *Man!*

Ro-toh Moto-*Man!* Ro-toh Moto *Man!*"

Before the saurs became completely dizzy watching this relentless back and forth motion, the grid lines were replaced on the screen by a simple cartoon street scene, with houses, sidewalks, trees, bushes, lawns and fences. Rotomotoman remained still now while the speed lines and changing background lent him the illusion of motion.

A chorus of voices joined the musical accompaniment.

The melody was simple enough, like a theme from an old television program from the middle of the last century, cannily synthesized by Reggie:

"*He's our man! Ro-to-moto Man—*"

Axel sang along, staring at the screen, completely enthralled.

"*He's our man! He's not from Japan—*"

Doc looked at Preston. Kara looked at Bronte. Sluggo looked at Agnes.

"Japan?" he asked.

Agnes shook her head. She stood in front of the box with Bronte's egg where Preston had placed it on the floor, as if to shield the egg from the sight.

The "theme song" continued:

"*Whaa-at a man!*

It's none other than that Ro-to Moto Man!"

"But," Bronte whispered to Doc, "it's not a man at all."

"It's not even—" but Doc couldn't go on.

The verse repeated, while Rotomotoman, up on the screen, crashed through a brick wall. He raced down a busy street while a flashing red light rose out of the top of his hemisphere-head. He extended himself on thin metal legs. His cylindrical body also extended, something like a telescope, until Rotomotoman could see through second- and third-floor windows. By the end of the second verse, little flashes of flame were shooting from one of the digits of his right "hand," as if it had turned into a machine gun.

By end of the song, Rotomotoman was holding at bay a group of "bad guys" who wore traditional snap-brim caps and black masks over their eyes. Their arms were raised in surrender. Round, bulging bags with dollar signs printed on them lay on the floor where the bad guys had dropped them. A policeman with the appropriate badge, gun and club saluted Rotomotoman before taking custody of the villains. Rotomotoman modestly returned the salute. A man in a dark suit, a monocle and top hat—presumably a bank president—shook Rotomotoman's metal hand—the same one from which bullets had been firing earlier.

The screen faded.

The saurs stood there, gaping in silence, wide-eyed, stunned and dumbfounded.

"See?" Axel trotted down the plastic steps. "Wasn't that great? Wasn't that the neatest-greatest thing you've ever seen?"

Doc, struggling for a politic response, was the first to speak. "Axel," he asked sympathetically, "have you been getting enough sleep?"

"Axel," Agnes said quietly but firmly, "are you nuts?"

"I saw it in a *dream!*" Axel insisted. "If I dreamed it, I was sleeping!"

"I wish *I* were dreaming," said Kara.

"But these guys can make a *real* one!" Axel continued. "A real-real-real Rotomotoman! I asked Reggie and he found a company that makes—what did he call them? Prototypes!"

Bronte, in her whispering voice, said "Roto-prototypes."

"Proto-motoman," Preston mumbled.

"We should disconnect Reggie," Agnes said. "Right away."

"So—they can *build* him!" Axel turned to Preston. "And they can send him *here!* And—and it costs five thousand dollars. So can I have it, Preston, please? Please-please-please?"

Agnes made a sound that started like a cough and ended like a gag. "Five thousand dollars for a trashcan on wheels! A trashcan on wheels *that crashes through walls!* A trashcan that'll run around and *crush* us until we're flat as pancakes! A trashcan with a revolving red light flashing on his head and *bullets* shooting *out of his fingers!*"

"Yeah!" said Axel. "Isn't he neat?"

"Axel—" Doc started, but Agnes cut him off.

"Axel, look around. Do you see any walls around here that need to be *smashed* through? Do you see any saurs that need to be *flattened* out? Do you see *anyone* that needs to be *riddled with bullets?*"

"Won't do that! Won't do that!" Axel raised his forepaws. "Reggie said we shouldn't ask for that. No bullets, no smashing. He's gonna have sense—like, a sensing system so he won't squash anybody!"

"In other words," Agnes said, "a trashcan that rolls back and forth, endlessly and uselessly. For *five thousand dollars!*"

"Not a garbage can!" Axel admonished her. "Rotomotoman! He'll be mine! I made him up! Reggie helped but I made him up!" His voice took on a pleading tone. "He won't smash anything! He'll be our *friend!*"

"He won't shoot anything?" Sluggo asked.

Axel shook his head. "Rotomotoman is *good.*"

"It's good you made Rotomotoman," Bronte said. "That was very clever of you. But—"

"You did a very nice job," Kara added. "Very well done. But—"

"You are a deranged idiot and probably insane," said Agnes.

"Thank-you-thank-you-thank you." Axel bowed to each of them.

"But perhaps," Doc ventured, "it would be better for everyone—" Axel turned to him.

Doc pointed to the computer. "—if your Rotomotoman limited his activities just to that screen." His stomach rumbled—another call to breakfast. "You can still play with him as you wish. Rotomotoman can smash through whatever he likes as long as he remains on the screen." His stomach now made an "urrrr" sound, distinct from the other noise.

Axel looked carefully at Doc.

He continued. "You can assuage the rancor of sweet Agnes here and relieve the apprehensions of the rest of us."

Axel kept staring, saying nothing.

"Axel? Are you listening?"

"Yes." Axel nodded. "Do it again."

Doc cleared his throat. "Do *what* again?"

"Make your stomach go 'urrrrrr' like that."

Doc took a deep breath. "I meant, did you listen to what I *said?*"

"Sure. What was it?"

Agnes thumped her tail against the floor. "He said that there's no way in hell that we're ever going to agree to have that metal trashcan in this house!"

Axel's jaw dropped and his eyes grew wide. One could almost feel the theropod's heart sinking. "But, but—I made him up! I did!"

He looked at Kara, Bronte and Sluggo—he couldn't bear to look at Agnes. "It's not what Rotomotoman *does!* It's that he *is!* Do you see? I've *got* to make Rotomotoman!"

"*I* see that Preston would have to have lost his mind to waste five thousand dollars on a useless, dangerous piece of junk!" said Agnes.

"Axel," Doc said with great sympathy, "Preston here writes books all about great star captains, mighty armies and flying cities, but he doesn't have to build prototypes of them or march them through the halls of our little abode." He patted Axel on the head. "We can't build everything we imagine."

Axel stepped away, head lowered, and turned to Preston.

"Is that true, Preston? Is that how you feel?"

It was always difficult to gauge Preston's feelings. He spoke so little, and what he wrote in his books presented so many points of view it was difficult to figure which ones might be his own. He smiled at his companions, a little more to one side of his mouth than the other.

"I think what Axel has done is creative and—amusing," he said in his soft tenor voice.

"Amusing?" Agnes replied. "I suppose a direct hit from a missile would have you in hysterics!"

Preston put his hand on Axel's head and led him to the plastic stairs, up to the computer. The other saurs, with the exception of Agnes, were speechless.

"Preston!" she cried. "What are you doing?"

Axel and Preston kept going without reply.

"Preston, you're not—you wouldn't *dare!*

At the top of the stairs, standing before the computer, Preston said, "Reggie?"

"Reggie is ready," the computer replied.

"Please connect me to my bank."

"Preston!" Agnes wailed. "You've gone nuts too? Preston!"

"What will Tom say?" Sluggo asked Doc.

"I suppose Tom will have to deal with it. As we all will."

Preston leaned over and said right into Axel's ear, to make sure he heard, "Remember, no machine guns. No death rays. No crashing through walls. No squashing little ones. No speeding."

"Yes-yes-yes-yes-YES!" Axel wrapped his forepaws around Preston's leg. "Whatever you say! Oh, thank-you-thank-you Preston!"

The transfer of funds to the prototype company went smoothly. It had long ago ceased to be strange for non-humans to hold bank accounts. The idea that banks thought in terms of anything but accounts and their activities belongs to the generation of our fore-parents. Preston's financial holdings were hardly remarkable except for their size, as were the accounts held by some other saurs—like Alphonse, who often won money on radio quiz programs—and Doc, who had a trust fund from a former "owner."

Axel's excitement set the plastic stairs wobbling as the two came down from the desk.

"Oh, thank you, Preston! Thank-you-thank-you-thank-you-thank-you! You are the best-best, most wonderful perfect greatest friend in the whole complete universe! Thank you thank you *you YOU!*"

"Is *anyone* in here planning to have breakfast?" Tom Groverton stood behind them, arms folded and head tilted. "Now that everyone else has finished?"

"Breakfast-breakfast-breakfast!" Axel dashed out past Tom. "Come on, Preston! My best-best friend! Let's have breakfast!"

"Sorry for the delay," Doc said to Tom, "but we had a little business to take care of."

"Business?"

"I'll explain later," Doc said. "I think it will take a little time."

"Don't ask me," Agnes shook her head wearily, "I don't think I ever want to eat breakfast again."

Bronte carefully covered up the egg with a swath of cotton before Preston picked up the box and headed for the kitchen.

"What's that? Another egg?" Tom asked.

Agnes raised her tail and stared severely at Bronte.

"Y-yes," Bronte said nervously, looking from Kara to Agnes. "Sluggo found it the other day. A crow's egg, I

think. It-it's rather big."

"Well," Tom said, bending down and rubbing Bronte just above the little furrows on her brow, "best of luck. You're a first-rate egg-hatcher. You'll do a fine job."

"Thank you." the words came out as a rasp, as if her mouth was very dry.

She followed Preston out of the room, just behind Kara and Sluggo, slowly heading for the kitchen. Doc walked with his head down, attempting the difficult gesture of rubbing his head with one of his short forepaws. His stomach rumbled again.

"After breakfast." He sighed. "After breakfast."

Agnes narrowed her eyes and stared up at Tom.

"You just mind your own damn business!" she said, and followed the others out of the room.

At dawn the next day, when Axel crawled out from the sleep pile and ran downstairs, he heard muffled sounds coming from the living room and noticed that the big video screen was still on.

Hubert had turned off the video just before sleep-time—Axel distinctly remembered. Maybe the video had gone on by itself—or was there another saur who decided to get up even earlier than Axel? He hurried over to investigate.

In the middle of living room, about the same place where the saurs sat when they watched the video, was a lone frog—a *frog!*—about the size of a softball; pale green with a pattern of gray, blotty spots all over.

Next to the frog was the remote control pad the saurs used to change programs. He, or perhaps she, sat very still, head turned to the screen. But the frog must have heard Axel approaching. Before he could get any closer the amphibian slapped the remote pad with his left forepaw. The video clicked off and the frog hopped over to the couch by the window, then up onto the cushions.

"Hey! Where ya goin'? Hey!"

Axel ran after the frog, but not fast enough. In seconds the frog was up on the back of the couch, onto the window ledge and—flooop!—out the window and out of sight.

Axel climbed up after him—or her. He looked out into the yard, still dark in the early morning shadows, then back at the video screen.

"Wow!" He whispered. "A frog who can watch TV!"

After breakfast—and after most of the saurs had made their morning visit to the litter room—Doc found a spot of sunlight near the big window in the dining room and pushed the plastic box he used as a stool there. It was a good place to sit and feel a little warmth, and it still afforded him a view of the video screen, where he could see a fat man and a thin man, both in ill-fitting bowler hats, trying to move a piano up a ridiculously long flight of stairs. The piano movers monopolized his attention until the hats started to remind him of the head of Rotomotoman and he looked elsewhere for contemplation.

Little saurs were grouped in front of the Reggiesystem computer. Doc could hear them learning what the principal exports of Ghana were. On the other side of the room, the Five Wise Buddhasaurs were sitting on the couch, running their plastic horns through a synthesizer, playing something fast and wildly rhythmical that they referred to as "Chinese" or "Dizz" music. To his left, Kara was sitting with Hetman, reading to him from *A Connecticut Yankee in King Arthur's Court.* She had the book propped up against the back of a straight wooden chair and she carefully turned the pages with her snout.

Other little ones were using the small, battery-powered wheeled platforms called skates to get from one end of the house to the other. On the far end of the living room, the stegosaur pair, Zack and Kip, were playing with Jean-Claude and Pierrot, the theropod tyrannosaurs, a game using checker pieces whipped across the floor with their tails, like hockey pucks. The game was called "Hit 'Em Hard" until a red stegosaur named Veronica got hit a little too hard by a stray checker. Then Agnes declared the game should be changed to "Not So Hard."

In the library, Diogenes and Hubert busied themselves shelving and re-shelving books for the saurs who perused them, whether they could read them or not—fascinated by pictures, colophons, shapes and even the smell of the paper and binding.

Over the noise of the "Dizz" music and the tinny accompaniment of the hapless piano movers on the video, Doc could hear Agnes shouting to someone on a skate, "Hey! Slow that down! What d'you think you're doing? Racing?"

The world was in order—for the moment. Doc closed his eyes and basked in the warmth. What there was to worry over, he thought, could wait.

"Hey Doc!"

Doc opened his eyes. Axel stood before him.

"Guess what I saw this morning?"

Doc trembled. "*Not* another robot, was it?"

"Nooo!" Axel waved the notion away with his forepaw. "It was a *frog!* In here! He was watching the video!

"Yes, Axel." Doc tried to smile. "And what he was watching?"

"I didn't see, but I heard news-guy-type voices, like when they talk about stocking markets and underwater

volcanoes." He looked up at Doc, who was glancing back at the video screen: the fat man was wailing and the piano was rolling down the stairs.

"You don't believe me, do you?" Axel said.

"My friend, I remember when you warned us of the giant tidal wave bearing down on us. And I remember you telling us that the Army of Northern Virginia was camped outside on the driveway. There were the Saracen hordes riding their horses through the woods—I remember that too. And who can forget the battle-cruisers from Alpha Centauri firing their photon rays at the power lines?"

"But that was *playing,*" Axel insisted. "This was a real-real frog-guy!"

"Axel," Doc patted him on the head, "I believe that *you* saw a frog here this morning. But the rest I'd rather leave as a matter of conjecture."

Doc closed his eyes and went back to his basking, but the spot of sunlight had shifted by then. He pushed his stool over a bit to recapture it.

Axel, however, wondering over the meaning of "conjecture," moved on.

Kara and Hetman were close by. She was reading the passage from the novel where Clarence describes to Harry Morgan the trap laid by King Arthur against Sir Launcelot.

"Lancelot?" Axel forgot about the frog for an instant and asked Kara, "Where? Where's Lancelot?"

"*Laun*-celot," Kara said. "The name is Sir Launcelot. He isn't anywhere. He's a character in this book."

"Ohhh." Axel remembered Lancelot, but not *Laun*celot. Lancelot wasn't a character, he was a *saur*—a buddy—long-long-long ago. Axel tried to remember more, but the harder he tried the more he forgot.

"Hey!" he said to Kara, as Lancelot faded back from his memory, "Guess what I saw this morning?"

And he told them all about the frog who watched the video.

He told Bronte, sitting with her egg. He told Tyrone and Alfie and the other saurs gathered around the Reggiesystem computer. He told Hubert, Diogenes, Charlie, Rosie and the Five Wise Buddhasaurs, but none of them believed him.

He even told Tom Groverton, once he finished cleaning up in the kitchen. Tom sat down on the floor and explained to Axel why he couldn't have *really* seen a frog in the living room.

"You know that the house and the grounds are covered by a security system." Tom ran his hand over the blue saur's back. "It's heat and motion sensitive. If anything enters the security zone that's not one of us, it sets off an alarm."

"Like when the cat got in and tried to eat Symphony Syd." Axel said. "Or that raccoon that scratched Agnes."

"Exactly. A long time ago. And since then the system's been improved. So how can a frog enter the grounds without setting off the alarm?"

Axel glanced back at the window where he had seen the frog make his escape. "He must be a really *smart* frog."

Tom showed Axel the security system log on the Reggiesystem, indicating that nothing had even touched the security perimeter the night before, at least nothing bigger than a moth.

"Maybe Reggie knows that he just came here to watch the video and that he wasn't here to hurt anyone."

"I don't think Reggie works that way, Axel."

"Why not?"

Tom opened his mouth as if to speak, then erased the action with a shake of his head and tugged on one end of his droopy mustache.

"Okay. Let's say Reggie did that. Since there seems to be some question about the objective reality of this creature, Reggie figured it was okay for the frog to come in and watch the video."

"So you think the TV frog's not an objectionable reality."

That look came over Tom's face again and again he went for that end of his mustache. "Okay. Let's leave it at that. The frog is not an objectionable reality."

"Then you don't mind TV Frog coming in and watching the video?"

"TV Frog?"

"That's what I'm gonna call him."

"Well," Tom patted Axel on the head, "as long as he's not stealing anything, or hurting anyone, and as long as he shuts off the video before he goes, like you said he did, I don't mind."

A few saurs—some of the little guys, Sluggo, Hetman—believed him, or at least said they did.

And Geraldine came out of the cardboard box she called her "lab" and told Axel that she believed him too.

"He's not a real frog," she said in her soft, tinny voice. "He's from a planet on the other side of the galaxy. He's made a little tunnel through space-time to get here."

Axel took this in without question and concluded: "Wow!"

"Don't pay attention to her," Agnes cautioned him. "She's making fun of you. She makes fun of everyone. She thinks we're all stupid."

"You all *are* stupid." Geraldine said, then returned to her lab. Axel watched the box until the flickering lights coming from inside worried him. Tom put those fire extinguishers nearby for a reason.

"Maybe you need to sleep some more, Axel." Preston counseled him. "Maybe you're dreaming in the daytime

because you don't sleep enough."

But that night, Axel stayed behind when the other saurs went upstairs to sleep. He hid behind the couch and waited until the frog hopped through the window onto the back of the couch, then to the seat of the couch, then to the floor. He hopped to the center of the room and slapped the remote pad with his left forepaw.

The screen flickered on, and the frog watched—all night long, occasionally slapping the remote pad to change the program.

He watched old films and talk shows. He looked at nature programs and documentaries about automobiles and the wars of the previous century. He watched a chorus of dancing girls sing the praises of bottled water and a man on a weather program talk for a whole hour about cloud patterns. It put Axel to sleep.

But the frog watched on. He seemed comforted by the images, as if they were relieving him of a great anxiety, or perhaps he was just grateful for the light, for that sense of life moving from moment to moment without threat or danger that the video provided.

"TV Frog" left at dawn, but came back the next night and the night after that.

Axel resolved not to disturb the frog. In the morning, as Axel ran past on his way to the Reggiesystem computer, he would call out, "Hiya, TV Frog!" and leave it at that.

But by the end of the week, as Axel ran past, TV Frog lingered long enough on the window sill so that Axel could see him, in silhouette, raising his left forepaw as if in greeting before hopping out the window to wherever TV Frogs went in the daytime.

When the crate containing Rotomotoman finally arrived, all the saurs gathered to watch as Tom Groverton opened it in the center of the living room.

The crate was enormous. Even Diogenes had to get up on his toes to peer inside. Axel climbed up on his shoulders, expecting to see Rotomotoman inside just as he envisioned him, fully charged and ready to go.

What Axel actually saw was about a dozen batches of components wrapped in vinyl bags and cushioned with packing foam.

Along with a copy of the invoice were several sheets of paper filled with very tiny type and headed with big bold letters:

"Some assembly required."

As everyone knows, "some" is a relative word. The creation of the Grand Canyon took "some" time and the formation of matter at the instant of the Big Bang required "some" assembly.

Tom carefully took the components out of the crate. As the pieces slowly collected on the floor, Agnes looked them over, frowning and sniffing.

"Hmph! Looks like they sent you the trash instead of the trashcan!"

"He's all in pieces," Bronte whispered, looking from one component to the next.

"Did he fall apart?" asked Rosie.

"They forgot to put him together," Charlie observed.

Diogenes bent over so that Axel could climb down and survey his unassembled creation. He stood with his mouth agape, looking slightly appalled and definitely overwhelmed.

"We're in luck," Agnes whispered to Doc. "With all these pieces, it'll take months for him to put it together."

"If he manages to put it together at all," Doc replied. "Not that I doubt the little fellow's enthusiasm and determination, but his attention *does* tend to wander."

"Then we'll gather up the pieces and throw them in the cellar, or put them out with the trash, where they belong!"

"Let's not get ahead of ourselves," Doc said in his deep whisper. "I really don't want to see the little fellow despondent or disappointed."

"No, you want that big hunk of metal rolling over your toes every ten minutes!"

Axel wandered around the unassembled Rotomotoman not unlike an accident investigator surveying the wreckage of a train or a jet. He looked up at Tom Groverton.

"What do we do now?"

"That's up to you, Axel."

The other saurs watched silently as Axel took another turn around the components.

Tibor—the brooding, runt-size apatosaur—came up to the crate with a crayon in his mouth and quickly scrawled on it: "Tibor's Imperial Winter Palace—do NOT throw out, by order of Tibor."

Axel pointed to a dome-shaped piece of metal and said to the others, "Look! That's his head! And this other part here—" he slapped the cylinder which was the largest piece taken out of the crate "—that's his body! Those are his wheels in that bag over there! Those rods in that other bag are his arms! And this—" He held up a large white disk which contained a dark, intricate retina in its Plexiglas frame "—this is one of his eyes!" He held it up between his forepaws and against his chest and approached one section of the circle of saurs. The retina rolled around inside the larger disk as if the disembodied eye was scrutinizing the room.

The saurs retreated a few steps. Alfie hid his head against Tyrone's chest.

"Don't be afraid! It's Rotomotoman! Rotomotoman is *good!*"

With the retina rolling back and forth, right to left, along the bottom perimeter of the disk, the smaller saurs were unconvinced.

"You'll see, when I put him together!"

Axel sang the "Rotomotoman Song" and tried to get the other saurs to sing it with him, but as they looked over the pile of parts they appeared justifiably unenthused.

"Beware of any trashcan with its own theme song," Agnes trudged away with the hope that this was the last she would see of Rotomotoman.

The contents of the crate were moved into the same workroom upstairs where Preston wrote his novels and Alphonse sent out his quiz and contest entries. It was also where Geraldine kept her cardboard "lab" and, at another desk, Tibor hid in his cardboard "castle."

Axel walked around the still-wrapped components laid out on the floor in a kind of random formation, a kind of "Metal Henge."

In the center of the formation he turned around and around until he was in danger of making himself dizzy.

"Where do I start?"

Preston handed Axel the several pages of tiny type that came in the crate. "Try to read this over all the way through once—*at least once.* Then read each section and do what it tells you and don't go any farther until you finish what it tells you to do."

"Okay. How do you do that?"

Preston shut his eyes and summoned his patience with a great sigh.

"We'll read the instructions together." He sat down next to Axel, took the instructions and held them out where both of them could see. "To paraphrase Aristotle, 'First things first.'"

After reading through the instructions twice together, and after addressing Axel's occasionally pertinent interruptions, Preston arranged the components or sets of components in a circle around Rotomotoman's main cylinder.

"You'll start here," Preston pointed to a little black box that contained a quantity of intricate circuitry. "You put that into the cylinder where the instructions tell you, then you move to the next piece, and the next piece, clockwise. That way you can keep track of what goes first and what goes next. When you get all the way around the circle—and as long as there are no parts left over—Rotomotoman should be completely assembled and ready to go."

"Wow!" Axel walked around the main cylinder and looked at all the surrounding parts. "When do you think we'll be finished?"

Preston shrugged and shook his head. "The sooner you get started the sooner you'll be done." He made sure to stress the "you" in that statement.

"Yeah!" Axel looked up at the ceiling as if he could stare straight through it.

Preston looked at Axel. For the first time in years he took notice of the long scar down his back, then followed Axel's gaze. He gently put his forepaw on Axel's head. He had been looking at the stars through that ceiling for many years himself.

"You'll do fine," he said softly. "Just fine."

The discipline of doing one thing at a time was almost too much for Axel to comprehend, but he was undeterred. His energies—which were capable of flying off in a dozen directions at once—were for once singly directed to the task of assembling Rotomotoman.

It wasn't quite high-energy physics, or as the saying went in another century, "rocket science." The most detailed aspects of circuitry and data systems had been assembled at the company that produced the prototype. But each set of components had to be linked to another set, and those to another set. A had to plugged into B, and B had to be slipped inside C, and so on.

Axel worked until long past sleep-time that first night, and did not join the other saurs when exhaustion finally took him. He curled up next to Rotomotoman's dormant head.

"It won't be long," he said to the polished metal dome, placing his forepaw in the place between where Rotomotoman's eyes would eventually go. "I'll have you all put together in no time."

The next day, he started after breakfast and only stepped away from the work for lunch, dinner, trips to the litter facilities and two times when he asked the Reggiesystem for explanations and advice.

Doc, with great economy, managed to explain to Axel the saurian techniques for manipulating certain tools designed for human hands, specifically the screwdriver and the adjustable wrench.

By the time the other saurs were wrapping up their daily routines and heading up to the sleep room, Axel had made it through the circle of components Preston had laid out from twelve o'clock (the first piece) to three o'clock.

It took all of the following day for Axel to get from three o'clock to five. He didn't go downstairs to eat, but Sluggo brought food up to him.

"He'd finish faster if we helped him," Sluggo told Agnes, as she peeled a strip of rind from an orange.

"So?" she asked. "That's his own damn problem. I didn't ask for that rolling trashcan to be brought here. Besides," she mashed up a piece of orange with her teeth, "the longer he works on that thing, the longer he isn't knocking around here jumping off the couch and screaming about holes in time and space or tidal waves or some damn frog sneaking in and watching the video."

"He might get sick," Sluggo insisted.

"Well, what if he does? We've got more important things to worry about."

She motioned to where Bronte and Kara stared with worried expressions into the little cotton-filled box.

"It's been too long," Bronte whispered. "A bird's egg would have hatched by now."

"It's *not* a bird's egg," Kara said. "It's *your* egg. And we just don't know how long it might take."

"Too long." Bronte bent down and with slightest pressure touched the egg with her snout. "Too long."

By sleep-time, Axel had made it to seven o'clock on the circle of parts. The components were joined together, but they had to be placed inside the main cylinder. Together, they weighed much more than Axel could possibly lift, or even drag. And by this time Axel's head was filled with numbers and letters: Bs and Ds and Cs and Qs floated around like tadpoles in a pond; he looked at the joined components, but all he could see was a wall of binary numbers.

Still, he made the effort, grabbing on to one end with his forepaws and pulling mightily.

It wouldn't budge.

He went around to the other side and pushed. The assemblage remained immobile. He kept pushing.

He pushed until Sluggo came by.

"You need to sleep," he said.

"First," Axel said breathlessly, "I have to get this *stuff,*" he took several deep breaths and patted the block of components, "into *that* thing—" His voice trailed off as he took more deep breaths and weakly pointed at the cylinder.

They both pushed, but all they could manage to do was polish the floor under their feet.

"Get some rest," Sluggo said when they finally gave up. "We'll think of something in the morning."

"Think," Axel mumbled deliriously. "Think think think! I have to *think!*"

"Sleep first," Sluggo said, and nudged him toward the door.

Axel went along like a prisoner being led back to his cell.

The sleep-pile looked a little like a circus under a collapsed tent. The saurs were already all gathered under the blankets, except for Hetman in his little bed, just next to the pile.

Sluggo lifted the blanket up at one end to look for Agnes and Axel crawled in with him. It was impossible to make his way in without stepping on someone and eliciting responses like, "Hey! Watch it!" "Ooof!" and "Your foot's on my crest!" He climbed around from one end of the pile to the other, paying little attention to the ruckus he caused, but he couldn't find a place that seemed comfortable.

"Think think think!"

He lifted up the blanket, crawled out and headed straight to Hetman's bed, climbing over the railing and getting in next to him.

"Hetman! Hetman!"

"Yes, Axel," Hetman whispered in his raspy voice.

"Okay if I sleep here?"

"You're very welcome to sleep here, Axel."

"I didn't mean to wake you, if I did. Did I wake you?"

"No," said Hetman, who was often haunted by pains old and new, though he refused any strong drugs to help him sleep. "It hasn't been a good night."

"Is the egg under your pillow?"

"Yes it is. Poor fellow," he said, referring to the egg. "I hope he is sleeping better inside his little shell—or she. But perhaps it can't be called sleep if you haven't yet awakened."

"Sluggo said I should sleep, but I have to think too. There's all this *inner* stuff I have to get into Rotomotoman, but it's all put together and too heavy to move." Axel rolled a little closer to Hetman. "Did I tell you yet about Rotomotoman?"

"At least twenty times, Axel, but tell me again. I enjoy hearing you tell me about the wondrous Rotomotoman. Whisper it, though, this time. We needn't wake the others. And maybe it would be best if you left out the Rotomotoman song."

Axel did just as Hetman requested, starting all the way back, from the dream to the "inner stuff," careful to leave out the theme song, though he really-really *did* want to sing it.

As Hetman hoped, Axel fell asleep as he listed the catalog of parts: Motor Assembly A to Relay Systems Response Assembly B, Relay Systems Response Assembly B to Motor Systems Response Assembly C—and so on. Axel's voice trailed off after he mentioned that Thermostat Assembly F attached to Carrier Drawer F1.

Hetman stared up at the unchanging darkness. The house was silent except for the occasional grunts and snores

from the sleep-pile. He might manage a little sleep too before dawn, if he could just get a little question out of his mind—

What does a Rotomotoman need with a thermostat?

Axel slept harder than he had at any time before: he slept past dawn. For once he was not at the window to glimpse the last light of the stars (if it were a clear night) and the first light of the sun (if the day was similarly clear).

Instead, he was lost in a dream of Rotomotoman roaming about the house. The strangest thing about the dream to Axel was that Rotomotoman, with his round head, looked very much like a big soft-boiled egg sitting in a cup. It occurred to Axel that in some ways Rotomotoman was *his* egg—but instead of needing the pieces to come apart, he needed to put them together.

Together!

He sat up, awake. Put them together! He looked around and the room was already filled with sunlight. Hetman lay beside him, asleep at last, but the sleep-pile was gone—everyone was gone, the blankets put away.

He climbed out of Hetman's bed and ran to the workroom just in time to see Diogenes and Hubert lowering the assembled components into the uprighted cylinder.

Not only that, but the wheels were attached to the bottom, the arms attached to the sides: listless, but attached.

Nearby, Doc rested on his little box, screwdriver still held between his forepaws.

A crowd of saurs, mostly little ones, was gathered around them, watching and chattering. The Five Wise Buddhasaurs sat up on the top of a set of plastic stairs, to get the next best view to the ones Geraldine and Tibor had from their respective desktops.

Agnes had the assembly instructions spread out in front of her.

"Okay, next to the motor assembly junk is that other junk."

"The battery pack?" Doc asked.

"That's what I said, you dimwit! You're going to need the gray cable and the two blue cables that are in that little bag."

Tyrone and Alfie opened the bag and brought the cables to Agnes.

"Hey!" Axel said. Everyone stopped and turned to him.

"Don't look at *me!*" said Agnes. "It wasn't *my* idea! I can't help it if everyone in this house has gone completely insane."

"Sluggo mentioned to us this morning the trouble you were having," Doc said, putting the screwdriver down. "We thought a little help might get the project moving along."

"But, but—" Axel moved closer. He couldn't keep his eyes off the cylinder. It was still headless, but it had wheels and arms, and it looked nothing like a soft-boiled egg anymore.

He glanced at the circle of parts: nine o'clock. Three quarters of the parts were gone.

"Guys—I can't—I don't know—"

"Oh, shut up!" said Agnes. "Go down and get your breakfast. Tom's waiting for you. Then get back up here and help us out."

To Diogenes and Hubert, she said, "Now that that thing is loaded and Axel is up, get Hetman downstairs and come straight back. I want the lid put on this trashcan today! Tomorrow at the latest!"

Agnes left nothing else to say. Axel ran downstairs. Diogenes and Hubert left the room looking back over their shoulders. Agnes noticed Doc staring at her with his most serene smile.

"What the hell are you looking at?" she said.

"I am looking at a marvel, my dear—at a kind of brief miracle. I am looking at Agnes in a good mood."

"You'll be looking at a spiked tail meeting your face if you don't move your butt off that box and get to work!"

With that encouragement, Doc picked up the screwdriver and returned to the cylinder without further comment, but unable to remove the grin from his face.

About this time, in the world out past the yard and beyond the trees, a buzz was starting.

As best as anyone could tell, the buzz began in the offices of the radio telescope at Mount Herrmann. Apparently, a message had been sent to certain coordinates from someone who went by the name of "Axel" and was addressed to "space guys." There was nothing particularly extraordinary in that, as the telescope operators had been accepting messages for many years as part of a promotional and public relations program to aid in the funding of their research, which included a search for extra-terrestrial intelligence.

What started the buzz had to do with the content of the message, of a certain reference to "making eggs." And since address of the sender was one of the houses operated by the Atherton Foundation for surviving saurs, it presented a rather astounding possibility.

The rumor could have been a prank, a mistake, a misunderstanding. But there were a number of important persons in the bioengineering community who were not sleeping well and would not sleep very well until the mystery was cleared up. And the bioengineering community was an important group of persons who held a great deal of sway in many circles. They did not bear sleeplessness well.

And so a call was made to Ms. Susan Leahy, the grandniece of Hilary Atherton herself, who was then in charge of

the foundation.

"They want answers," she said to Tom Groverton over the phone. "Or I should say they want assurance, if you know what I mean."

"They want to send someone over to inspect the house," Tom replied.

"Our charter allows us to legally restrain them, but I'm afraid that would only stir up more controversy. The Office of Bioengineering Standards has never approved of our autonomy and would like nothing better than to challenge it."

"So they're coming," Tom said.

"I'll be with them. And I want Dr. Pagliotti there too," she said, referring to Dr. Margaret. "I won't have them pushing their way around, but I'm afraid they have to search everywhere to their satisfaction to see that the saurs aren't producing their own eggs. If they find anything that makes them think otherwise, they'll file to do further research, and that will get us into a battle I'd much rather avoid."

"I understand," said Tom.

"I know you do. You'll tell the saurs. Let them know we're coming."

"Yes. It'll be good seeing *you* again, at least."

"I only wish it was under less stressful circumstances. You do a wonderful job, Tom. And the saurs never fail to surprise me."

"Then you won't be disappointed this time, Susan. I can assure you."

By sleep-time the workroom was empty of everyone but Axel—and Rotomotoman.

The faint traces of moonlight coming through the window endowed everything in the room with a kind of ashen, metallic hue. The circle of components was gone. In their place stood Rotomotoman, just under a meter and a half tall, set upon four sturdy wheels and his narrow, rod-like arms down at his sides. His large, round eyes, set against the curvature of his head, were fixed in an expression perhaps best described as dementedly earnest—a fitting reflection of his creator. When seen in connection with the first horizontal seam of the cylinder, a dozen centimeters below them—a seam that suggested a mouth—those eyes also betrayed a certain perplexity, as if Rotomotoman might be thinking to himself an incomplete expression of surprise in the vein of "What the—!"

A cable connected him to a wall outlet, charging his battery. That was all he needed—with the exception of downloading some delicate software into his brain—before he could come to life.

Axel stood transfixed, staring up at him with undiluted awe.

"It's real," he whispered. "Real-real-real."

"You should get some sleep," said Doc. He'd come into the workroom at Sluggo's request, when Axel could not be found in the sleep-pile. "It won't do to have you falling asleep tomorrow, at the moment of your triumph."

"Look at him!" Axel pointed up at Rotomotoman. "Isn't he the greatest thing you've ever seen? The most stupendous, marvelous, fantastic, *greatest* thing you've ever seen?"

"I've seen quite a lot of him, my friend, in these past few days." Doc's forepaws were still sore from handling all the human tools. His foot still hurt a little from when it got wedged under the cylinder while he was attaching the last of the wheels—but it was the foot of his weak leg anyway; the addition to his limp was barely noticeable. "But yes," he put his forepaw on Axel's shoulder, "it is—impressive."

"I couldn't have done it without all you guys helping me. I have the best-greatest friends in the whole universe!"

"It's your creation, don't forget. Without you, your Rotomotoman would not exist, would it?"

"I don't know," Axel said, seriously pondering the question. "It's like now I feel like—like he always *was,* you know? And all I did was, like—"

"Like what?"

"Like, *recognize* him! Like, there's all this real stuff in one place and all this could-be-real stuff in another place, like behind a window. Did you ever see one of those gumball machines that's got stuff other than gumballs in it? Like shrunken heads and rubber spiders and stuff? That's what it's like—like Rotomotoman was in one of those gumball machines and I turned the handle and got him out!"

"Now I *know* you need some sleep, my friend. You're talking like a Platonist. Or even worse: a Jungian."

"What's that?"

Doc patted his head. "It's a kind of person who needs a great deal of sleep. Come along. When Axel sounds profound it's a strong hint that one is either dreaming or should be dreaming."

Doc led Axel out of the workroom with a series of tugs. Only after they turned the corner and entered the hallway would Axel stop looking back at Rotomotoman.

But then Axel stopped in his tracks, struck with an idea.

"Hey!" He gestured to Doc and headed for the staircase. "Now I can show you!"

"It's far too late, little fellow, to show me anything—"

"No-no-no-no! Come on!" Axel trotted a few steps ahead, then looked back at Doc. "But quiet!" He held one digit of his forepaw up. "Ssshh!"

Axel crept down one stair, and then another, and then another. Even at this slow pace, Doc found it hard to follow. His bad leg made it hard for him to take stairs, up or down, at any pace. He held to the round, vertical balusters of the handrail and inched himself along until it occurred to him that he still hadn't been given a good reason for putting himself through this exertion.

"Axel, would you mind—"

"Ssshh! Just a little farther." His whisper was louder than Doc's appeal. "One more step!"

Doc had to put his weight on his bad leg to descend the next step. He winced, but caught himself before he cried out.

"There! See?" Axel whispered. "Can you see?"

Doc could see nothing. He reached for the next baluster, putting himself in an awkward angle, almost hanging over Axel. He raised his tail to counterbalance his weight. If he slipped a mere centimeter he would topple headfirst down the rest of the stairs. But at last he could make out what Axel was pointing to: a light coming from the living room.

The light changed color and intensity with quick little flickers and flashes, as if the video screen was still on.

Not "as if"—it *was* on!

"See?" Axel whispered, more successful this time in keeping his voice down. "It's TV Frog! I told you he was really there! He's really-really-really there!"

"Axel," Doc felt his grip slipping on the baluster. "It's much more likely that someone forgot—" He couldn't finish the sentence, since it was *he* who turned off the video that night.

"Maybe," Doc muttered, "a technical thing. A 'glitch,' as they say. A malfunction in—"

A voice with the range and volume of a train horn sounded above them:

"Hey! What the hell's going on down there!"

In the fraction of a second between Doc hearing Agnes's voice and his forepaws slipping from the baluster, Doc could distinctly see the light go off in the living room, as if someone had slapped the "off" square on the remote pad.

After that, he saw nothing, but distinctly felt himself in gravity's clutches as first he tumbled over Axel, then tumbled again and tumbled again.

He shut his eyes for what seemed like a moment, but when he opened them the lights were on. He was looking up at Axel and several other saurs, including Kara and Sluggo—Tom Groverton was there too—all standing over him with worried expressions. Tom ran his hands over Doc's back and abdomen, checking for broken bones, no doubt.

"I'm all right," Doc said several times, and after Tom examined him carefully he even believed it. Bruises, muscle pains, but nothing worse. Agnes, still at the top of the stairs, kept berating him for "skulking around in the dark like a goddamn idiot!"—which was akin to having a bad ringing in the ears—Doc had lived with that before.

"Ohhh, Doc! I'm sorry-sorry-*sorry!*" Axel repeated it until it became a litany. "I didn't mean—I wanted you to see—that it *was* TV Frog! It really was! I'm soooo sorry-sorry-sorry!"

"I followed along of my own choosing, Axel." Doc tried to reach for Axel's forepaw but, falling short, weakly waved to him. "It must have been funny to watch. A good pratfall, had there been an audience."

As Tom helped him back up the stairs and into the sleep room, Doc couldn't help thinking about the light in the living room. Not that he could believe in TV Frog any more than he had before, but there was something—*something*—very strange about that video screen being on when no one could have turned it on. And as he leaned his head back against the little cushion Kara brought for him, it was that thought, more than any bumps or bruises, that kept him up for the better part of the night.

Rotomotoman was ready—almost.

The saurs gathered in the workroom. Most of them were on the floor, surrounding—at what they believed was a safe distance—the figure of Rotomotoman that towered over them. Others were perched on Preston's desk and others yet were on the desk set across from it.

None had ventured up to where Geraldine and Tibor kept their separate abodes, but they too were quite literally out of their boxes to view the great moment. Tibor even wore his "hat," which was really a green piece of concave plastic with a little rim. It looked ridiculous on his head but Tibor insisted it was quite regal and dashing, especially when he wore it at a jaunty tilt.

Rotomotoman was attached by cable to the hard drive of Preston's computer. No one knew how long the download would take, but when it was finished Rotomotoman would come to life. Axel, standing next to his creation, tried to count down the seconds, but he lost his place several times and had to start over.

"Attention!" Agnes called out from her place near the door. "Attention! Keep *back!* When this piece of junk goes berserk there's no telling *who* will be crushed under its wheels! All saurs must *keep back!*"

Only Sluggo paid attention to her, and that was only to get her to stop shouting.

Tom Groverton was there too. No one noticed, though, that he was standing next to the two fire extinguishers he'd placed next to Geraldine's lab.

Axel gave up on the countdown and started to chant: "Go! Go! Go! Rotomotoman! Go! Go! Go! Rotomotoman!"

Some of the other saurs picked it up. "Go! Go! Go! Rotomotoman!"

Others joined in. "Go! Go! Go! Rotomotoman!"

Even the saurs who didn't speak squeaked and chirped to the rhythm of the cheer.

"Go! Go! Go! Rotomotoman! Go! Go! Go! Rotomotoman!"

"Attention all saurs! Keep *back! When* the piece of junk goes berserk—"

"Go! Go! Go! Rotomotoman! Go! Go! Go! Rotomotoman!"

"—will be indiscriminately *crushed* under—"

Rotomotoman jerked very slightly, hardly a movement at all. The download was finished. A faint hum and whir emanated from his mechanical innards. His hemisphere head turned slightly to the left and the pupils of his huge eyes followed the same general direction, then started back slowly to the right, taking in the whole scene.

The chanting stopped. Even Agnes held off her shouted warnings.

It is hard to imagine a more startled expression on a piece of machinery, if one can imagine an expression on a piece of machinery at all. The eyes had much to do with it, looking like enormous versions of the eyes that adorned toys and dolls in years long past—but much more active, animated, in fact. Those eyes and the mouth-like seam in his cylinder-torso created an expression: surprise, panic, astonishment.

He surveyed the ninety-odd dinosaur-looking creatures staring up at him—and one human, with arms folded, leaning back against a desk, smiling with apparent admiration.

Rotomotoman raised his arms in a gesture of surrender and recoiled right into Preston's desk.

The liquid-gray display screen on his torso—his only means of communication—filled with exclamation points, question marks and other strange symbols that may even have been incomprehensible to other rotomotomen, if any existed.

"See?" Agnes shouted. "Just as I told you! The monster is ready to pounce! Back away!"

But Rotomotoman just froze in that posture until Axel approached him on the back of the large brown triceratops named Dr. David Norman. Dr. Norman lowered his head and Axel dismounted. He walked straight up to his creation with his left forepaw upraised.

"Hiya! I'm Axel!"

Rotomotoman stared down at the small blue creature. He lowered one of his arms and bent the joint that approximated the elbow of the other. His display screen cleared of symbols, except for five characters of simple, recognizable alphabet and punctuation:

"Hiya!"

Many of the saurs cheered. Tom Groverton put his hands together and applauded.

Agnes nudged Preston and muttered, "You sure there aren't any machine guns in those fingers?"

"Positive."

"No flame throwers or lasers?"

"You saw the instructions yourself. Rotomotoman is weapon-free. He *does* have a rotating red flashing light that comes out of the top of his head, but as you can see he hasn't had cause to use it yet."

Agnes grumbled. "He *still* looks like a trashcan made up for Halloween!"

"Hey! Guys!" Axel said, as if the other saurs might not know yet, "I want you to meet your new friend! This is Rotomotoman!"

Rotomotoman held his metal hand horizontally just above his eyes: a salute to the assembly, with "Hiya!" still on his display screen. More cheers greeted him.

"Come on!" Axel coaxed his metal friend away from the desk. "A little this way! Follow me!"

Words appeared on his display screen: first "Axel," then "follow."

Rotomotoman complied with each direction, if a little tentatively. His software may have overly cautioned him about running over little ones, but he cast his gaze downward and thoroughly surveyed the floor, checking to make sure no one was underfoot. If a meter-and-a-half tall cylinder rolling on four wheels could be described as moving "daintily," it would describe Rotomotoman just then.

Axel led him to the door of the workroom. Rotomotoman—making no sound but an efficient, high-pitched whir—saluted the door. The word "door" appeared on his display screen. He followed Axel down the hallway, holding his salute all the way to the lift platform, where he stopped cold.

Rotomotoman didn't seem confident that he could keep his balance on the flatbed lift, with its guardrails set no more than a few centimeters high. Axel coaxed him on with the assurance that the lift moved so slowly he would be in no danger—*and* with the assistance of Diogenes and Hubert pushing from behind. With "Help!" replacing "Hiya!" on his display screen, Rotomotoman held so tightly to the staircase wall he left a trail of grooves in it, but everyone was too excited to notice them.

As he rolled from the platform to the floor he cast his gaze upward as if in thanks to some heavenly Rotomotogod.

"Look over here, Rotomotoman!" Axel said, pointing to the living room. "That's where the video is."

Rotomotoman saluted the video screen. His own screen alternated the words, "Video" and "Hiya!"

"Over in that room is where we eat!"

Rotomotoman saluted the dining room. "Dining room—Hiya!—Dining room—"

He saluted everything that Axel showed him, including the computer, the plastic stairs, the bookcases and the Five Wise Buddhasaurs' plastic saxophones. And all their names were printed out on his display screen, each punctuated with the same greeting.

"I suppose this question should have come up long ago," Doc asked the ecstatic Axel, while Rotomotoman saluted the lamp table, the couch and a broom Tom had left leaning by the living room window, "but just what exactly is Rotomotoman supposed to *do?*"

"Rotomotoman is here to protect good guys from the bad guys!"

"Well," Doc sighed deeply and patted Axel's head, "may your labors be few."

The notion of "bad guys" was not entirely forgotten by Doc as Tom Groverton gathered all the saurs around in the library later that afternoon. In the back of the room—standing at attention, of course—was Rotomotoman, his creator proudly at his side.

"They'll be here tomorrow, and they'll be looking for eggs," Tom said, his hands folded loosely as he sat on a little stool in the center of the room.

"Tell them to mind their own damn business!" Agnes shouted back.

"That would be fine," Tom said, "if we could. But these folks have rescinded their so-called 'proprietary rights,' based on a certain definition of what you guys are. And as you know they've been looking for loopholes ever since they agreed to the Atherton Foundation's proposal. Your intelligence, your emotional capacity, your longevity—it's baffled them for years. They have the support of a certain portion of the scientific community who'd like very much to make you the subject of study. And they want desperately to find out what they did, well, 'right,' so to speak, when they designed you. Generating eggs might change the deal if they find out. I mean—" Tom cleared his throat, "if they find any."

"Any *what?*" Doc asked in a whisper.

Tom smiled. "That's the spirit. I won't ask any questions and you won't tell me any lies—other than the ones you may already tell me."

"Why, *Tom!*" Doc said, his heavy eyelids raised as far as they would go. "What makes you think we'd tell you any lies?"

Tom ignored the remark. "Remember, I'll be here. Dr. Margaret will be here and even Ms. Leahy will be here to make sure these folks don't do anything out of line. But they *will* be thorough, and we can't really stop them, because we want to show them that we have nothing to hide."

"We *have* nothing to hide," Doc said.

"Exactly." Tom stood up. "Now, I have some things to do upstairs before I start dinner. But there's one more thing: it might be a good idea to keep Rotomotoman in the background when they come. We don't want to hit them with more than they can take."

"What did he mean by that?" Axel asked as Tom left the room.

"He means that our visitors tomorrow are unprepared for your genius," said Doc.

"Genius!" Agnes marched up to Axel. "Spelled the same as 'idiot!' This is all *your* fault! Sending messages to 'space guys!' You're the one who should be locked up! Not Bronte!"

"*Bronte!*" Axel gasped. "Who wants to lock up Bronte?"

"No one said anything about locking up Bronte!" Kara looked over at Bronte, whose concern about her egg had done little to steady her nerves for the meeting. Now she was trembling.

"What do you *think* they'll do?" Agnes continued. "They'll take her off to a laboratory and stick her with needles and cut her up to find out how she did it!"

A cry of alarm rose from the surrounding saurs. Memories of past injuries and dangers became acutely tangible even to the smallest and simplest of them.

"Don't listen to her," Kara said to Bronte. "Agnes is overreacting as usual. No one's going to take you away." She turned angrily to Agnes. "Can't you *ever* keep your mouth shut? We're all in a panic when we need our heads about us!"

"They'll take the egg away, won't they?" Bronte stammered. "Like the scientists in the video we saw once, climbing into nests and stealing the eggs of rare birds."

"No one's going to do that here," Preston put his hand on Bronte's back. He could feel her shivers. "We'll think of something."

"I'm sorry, Bronte," Axel said, his face never before looked so long and mournful. "I didn't know this would happen."

"It's not your fault," said Bronte, her nubby teeth grinding at her lower lip. "You were just—just being Axel."

"That's the whole damn problem right there!" Agnes said.

"Maybe Rotomotoman can help us now," Axel said in a low voice.

Rotomotoman, in the back of the room, saluted at the mention of his name.

"Listen," Agnes barked at Axel, "I don't want to hear *one more word* about Rotomotoman! Space guys! Electric trashcans! Frogs watching the video! If I hear *anything* more from you..."

Agnes was interrupted by a voice that had so far not entered the discussion. It came back from the little bed over by the window, and in a low, raspy voice.

"Axel is right," said Hetman.

"*What*?" Agnes was ready for verbal battle, and the words "Axel is right" set her back plates upright, but they were spoken by the one saur she would not assail. "*What* did you say?"

"I said, Axel is right. Something Axel told me a few nights ago has kept me up thinking and—I could be wrong, but—Axel, do you still have the assembly directions for your Rotomotoman?"

"They're with Preston's stuff, up by the computer," he said.

"Bring them down here, and hurry! We have *stuff* to do!"

"Stuff to do!" Axel ran upstairs without hesitation.

"The rest of you," Hetman continued, "I want you to look very carefully at the sections on that sheet which refer to the Thermostat Assembly F and Carrier Drawer Assembly F1. Perhaps I'm completely wrong, but I think we've been overlooking something remarkable about that creation of Axel's."

When the big car arrived the next morning, Axel was at the window, up on the little lamp table, scouting.

"Huuuu-mans!" He announced to the others. "They're here! And they're in a *bad guys* car!"

The long dark limousine had an official seal from The Office of Bioengineering Standards on the side door. It stopped right in front of the house and out came three strangers, Dr. Margaret and Mrs. Leahy. Of the strangers, there was a young African-American, impeccably dressed in a topcoat and dark suit; a gray-haired Caucasian, much more casually dressed, in an unbuttoned leather jacket and a dark T-shirt; a young Asian-looking woman with very short canary-colored hair, wearing a plaid workshirt and a denim jacket.

Ms. Leahy led the way. Tom met the little group out on the porch.

"I'm really sorry about this," she said as she shook Tom's hand. Susan Leahy was trim and efficient as always, and she was starting to let the gray come into her hair. She was one of those eccentrics who still wore glasses, though hers were rimless. "You've told them what this is all about, didn't you?"

"Yes, they know."

She nodded and turned to the three persons who were to search the house.

"Okay, folks, you know the rules. You can search everything, everywhere, but if anything you do seems to be upsetting or traumatizing the saurs, I or Dr. Pagliotti here will have to ask you to back off. This is Tom Groverton." She put her hand on his shoulder. "Any questions you may have I'm sure he'll be glad to answer. We want to cooperate fully, but you have to understand that we have to act in the best interest of the saurs."

The young African-American, Dr. Phillips, nodded politely to Ms. Leahy. "We've done this kind of work at other houses. I can assure you we'll be as non-disruptive as we possibly can."

Dr. Margaret, who had seen some of the saurs' eggs herself, came up to Tom and gripped his hand. She wore a white jacket that looked a little like a short lab coat, and for once her long brown hair wasn't tied back. She didn't say a word but searched his expression for any sign of what she might expect.

Tom could only shrug. Anything can happen, he seemed to say, but don't get worried yet.

"You know," Ms. Leahy said, "it's nice to have an excuse to come here and visit some old friends."

Axel was still standing at the window, waving to her.

She waved back. "Hiya!"

When the group entered the house, some of the saurs stopped to watch them, cautiously and curiously. The smaller saurs went on with their business, moving from room to room on skates, getting their computer lessons, a brief game of Not So Hard, or watching the video.

"*Attention humans!*" Agnes announced from atop a lamp table near the door. "Attention all humans! It's time to SHAPE UP!"

"Don't mind Agnes," Ms. Leahy told the officials. "She greets most humans that way."

"Humans!" Agnes continued, "It's time to SHAPE UP! You've been running things stupidly for too long! It's time to STOP BEING STUPID!"

"So here's the little guy who's caused all the ruckus." Ms. Leahy went straight to Axel.

"Miss Lay-hee! Miss Lay-hee! Howya doing? What are you doing with the bad guys?"

Ms. Leahy carefully picked him up and perched him on her shoulder. "Important stuff, Axel. Want to see?"

"Yeah!"

She made sure she had a safe grip on him and that he wouldn't slip, even with all his excited gesticulations. "So what's all this about you sending messages to space?"

"Yeah!" said Axel. "Reggie and me! We sent a message to the space guys and told them all about us!"

The three investigators gathered around to listen to the conversation. The young woman, Dr. Yoon, took out a pocket computer to record it.

"And have you heard anything back from the 'space guys' yet?"

"Yeah! Maybe! At least I think that's why TV Frog is here! He comes at night and watches the video, but no one's seen him but me! Doc almost saw him but he fell down the stairs! He's okay, though. Doc, I mean, but TV Frog's okay too. Anyway, I think TV Frog just wants us to think he's here because he can't sleep. But Geraldine said he was really sent by the space guys, because they know to drill holes in time and space!"

Ms. Leahy looked at the three investigators.

"Well, here's your source for the egg story."

Dr. Yoon slipped the computer back into her pocket.

"And who's that over there?" Mrs. Leahy pointed to the metal cylinder with the hemisphere head, standing out of the way, just to the left of the video screen.

"That's Rotomotoman! I built him myself! Well, Reggie helped me, and Preston, and Doc, and Agnes, and a lot of the other guys. But I thought him up all by myself!"

Rotomotoman was motionless. His display screen was empty. His left arm was listless at his side but his right arm was raised in a salute. It was hard to say what he might have been saluting—his right eye looked off to his left and his left eye looked off to his right.

The investigators looked over Rotomotoman carefully. They even took his head off and inspected the components. Some of the saurs got very quiet and even Agnes briefly desisted from her shouted exhortations.

"What is it supposed to do?" the man in the leather jacket, Mr. Chase, asked Tom.

"Ask the inventor." He pointed to Axel. "You can talk to them, you know."

"He fights bad guys and protects the good guys!" Axel offered without waiting to be asked.

"Doesn't look like he can fight any bad guys in his shape," Dr. Yoon said as she re-secured Rotomotoman's head.

"I—I forgot to plug him in last night!" Axel looked over at Doc, sitting on his little box, nodding almost imperceptibly. Then he looked to Agnes, who waved her tail threateningly.

"I've got to charge him up! He'll be okay tomorrow!"

"The kitchen is this way," Tom said to Dr. Phillips, "but I'm afraid the only eggs you'll find are in the refrigerator."

The investigators looked anyway—very carefully. They looked into every cabinet and along the baseboards and around the ceilings. They went through the cellar and the litter room, the living room, the dining room and the library. They looked behind all the books on the shelves. Dr. Margaret wouldn't let them look under Hetman's pillow, but she took the pillow out herself and let them inspect it.

"If the lady and gentlemen wish to look under the mattress," Hetman said, "they are welcome to do so."

"If I may?" Dr. Phillips said in an apologetic voice and did his work as quickly as possible. Before he moved on, he said "Thank you," to Hetman, came back and added, "Thank you—sir."

"You're very welcome."

They searched all the rooms upstairs and even went up into the attic, where the saurs had their "museum," made up of all the things friends and former "owners" had left them over the years: toys, paintings on construction paper, knick-knacks and little articles of clothing. The investigators found several egg-shaped things, made of glass and plastic, but not one real egg.

Mr. Chase's attention was drawn to a little charm on one of the shelves, a gold-plated Star of David on a slender chain. He picked it up to examine more closely.

"Put it back!" Agnes, who had followed them up into the Museum, shouted at him.

"Is this yours?" Mr. Chase asked her. "It's very pretty."

"None of your damn business! Put it back!"

Agnes harangued the investigators all the way down from the attic.

"Foo! Humans! War mongers! Animal eaters! Planet spoilers! G'wan! Beat it! Scram!"

"Adamant, isn't she?" Mr. Chase said to Dr. Margaret.

"You're upsetting her," Dr. Margaret replied.

"Sounds to me like she's upsetting herself."

"Didya hear?" Axel, still perched on Ms. Leahy's shoulder, whispered to her. "He called Agnes *an ant!*"

Ms. Leahy held her finger up to her lips. "Ssshh. Maybe he meant *'aunt.'*"

When the investigators reached the sleep room they were approached by a pale green hadrosaur who, after some deliberation, shouted to them, "Yar-woo?"

"No! No!" Agnes coached the hadrosaur. "That's not what I told you to say!"

The hadrosaur tried again: "Yar-woo!"

"No! 'Foo!' You're supposed to say 'Foo!'" She smacked her tail against the floor.

"Foo?"

"Forget it! Just *forget it!*"

"Foo!" The hadrosaur smiled and walked away.

In the closet of the sleep room, Mr. Chase found a little cardboard box with wadded-up cotton inside. Nestled in the cotton was a tiny egg.

"Here's something," he said to his colleagues, who were searching in other parts of the room.

"Hey! Put that back!" Agnes shouted. "That's not yours!"

Mr. Chase held up the egg and inspected it carefully. It had a blue tint to it, and was no bigger than the first joint of his thumb.

"It's a bird's egg," Bronte walked up to Mr. Chase nervously. "A robin's, probably. Sluggo found it in the yard. Sometimes we try to hatch them—as if they were ours."

She looked up at Dr. Yoon and Dr. Phillips. "If they do hatch, we feed the little bird until it's old enough. Tom can sometimes find another nest in the yard and put it back. Sometimes the older birds accept him." Her voice was trembling now. "It's—it's just sort of a thing we do."

Dr. Phillips took the egg and held it up to the light from the window. "Looks like a robin's egg to me."

"That's what she said!" Agnes stood next to Bronte. "Now beat it! G'wan! Scram!"

"Is this when they pull their guns out?" Axel whispered to Ms. Leahy.

"They don't have guns," she answered.

"I thought they were bad guys!"

"Well, not really. Not *that* kind, at least."

Dr. Yoon, with arms folded, glanced at Agnes and said to her colleagues, "It may be that their eggs and the robin's eggs are almost alike. We better take it in."

"No!" Bronte gasped.

Ms. Leahy bent down and put her hand gently on Bronte's back. "Must you?" She asked the investigators.

"We have to know," Dr. Phillips put the egg back into its box. "I can give you all sorts of reasons, but the answer simply boils down to this: we have to know."

"Hear that?" Agnes shouted to the other saurs. "He said 'boil!' I *told* you they were going to eat them!"

"Please," Kara said to the investigators. "It really *is* a robin's egg. Honest. Don't take it away."

Dr. Phillips bent down and spoke to Bronte, resting the box carefully on his knee. "We won't hurt it. We just need to know what it is. It's a very simple procedure and we can have it back to you in a day or so."

"What if it hatches?" Bronte asked. "You'll take care of the little bird? You won't just—pitch it?"

"If that's what happens, I'll take care of it." He reached out and touched the little furrows on her brow. "I promise."

Dr. Phillips put the cardboard box into a little specimen bag, but left the bag open. Dr. Yoon made some notes with her pocket computer. Saurs filled the room. None of them spoke, not even Agnes, but they all looked at the investigators, who did their work quickly and tried not to look back.

"They may not be bad guys," Ms. Leahy whispered to Axel, "But I'll bet you that right now they don't feel like good guys."

She, along with Tom and Dr. Margaret, followed the investigators back out to the limousine, but in the living room she noticed Doc, still sitting on his plastic box, staring out toward the window as if deep in thought.

She put Axel down and kissed him on the snout. "I'll see you later," she said. "Gotta talk to my old buddy over there."

Ms. Leahy knelt down next to Doc and hugged him. "My old friend. Forgive me for not stopping to talk to you."

"You were busy, I know. There is nothing to forgive."

"I'll come back soon. For a *real* visit. We'll sit on the porch and talk of Cicero and Democritus and St. Augustine."

"Cicero." Doc smiled. "'*Quis custodiet ipsos custodes?*'" He looked out toward the front door, where the limousine waited. "Not bad for a tiny, manufactured brain, eh?"

"It's not how much brain you've got, but how you use it."

She hugged him again and Doc reciprocated as best he could with his short forearms.

She whispered: "Is there any *real* reason to worry?"

Doc shook his head. "We'll be fine, for now."

When she stood up, Ms. Leahy could see the motionless metal cylinder of Rotomotoman saluting her. She returned his salute, bid farewell to the others and walked out to the limousine.

On the porch, Dr. Margaret asked Tom, "What will you do now?"

"I think I'll sit out here for a while."

She put her hand on his shoulder. "That's not what I meant."

"It's not really my call. It's theirs." He gestured back to the house with his thumb.

"What are they doing in there?"

The horn sounded from the limousine.

Tom walked Dr. Margaret to the limousine. "Come back tonight."

He took her hand and squeezed it gently. She got into the limousine and he watched it until it was out of sight, past the trees. For a few more minutes he sat on the bench on the porch, then got up and looked through the living room window.

Rotomotoman, back in motion again, had rolled out to the center of the room. The saurs were gathered around him in a circle. Tom could hear a faint mechanical buzzing and a high-pitched beep come from the metal cylinder.

At the same moment, a section of the odd little robot, defined by nearly imperceptible seams in his cylindrical torso, slid out like the drawer of a desk.

Tom couldn't see what was inside, but he knew what it was. Bronte was the closest to the drawer, peering in with sad, hopeful eyes.

Then she opened her mouth as if to gasp.

She spoke to the others and they all moved in even closer, trying to get a peek inside. Tom couldn't hear a word of it, but he didn't have to.

Axel, perched on Hubert's back to stare into the little drawer, shouted out, "It moved! I saw it move!"

Tom went back to the bench. His coming in now would just create more nervous commotion and probably start Agnes shouting again.

There would be plenty of time later to consider all the implications. The investigators, back-tracking through their information, might request a look at the schematics of Axel's metal friend and discover Rotomotoman's very practical function as an incubator.

But then, Reggie may have anticipated that too, and devised a little camouflage for it. Never underestimate the Reggiesystem, Tom learned long ago.

After all, Reggie too was a kind of human-made life form, and like the saurs had developed in his own way.

For now, though, the moment belonged to the saurs, especially Bronte, the mother-to-be.

That night, Axel descended the stairs as stealthily as he could manage, in search of TV Frog. But the living room was dark, the video turned off. For a moment he thought that TV Frog must not have come, but he turned around and saw the illuminated screen of the Reggiesystem computer in the dining room, and before it sat TV Frog, visible in silhouette. The plastic stairs were placed in front of the desk, just behind where TV Frog sat with an old-fashioned clicker mouse, which he slapped with his left paw just as he'd slapped the video's remote pad.

TV Frog seemed to be clicking through a set of files, text on the right side and pictures on the left. Axel couldn't make out any of it, so he crept up the steps to get a closer look.

The pictures weren't very pleasant to look at: emaciated creatures with agonized expressions, bruised, battered, and scarred. Gaping mouths, hollowed eyes, muscles tensed with pain—

They were saurs, all of them.

These were the official files of the Atherton Foundation, all of their cases, with photos taken of the saurs when they were first found or brought to them.

Axel recognized some of them—Zack, Kip, Charlie, Hetman—Oh! Hetman! How did he ever make it? He barely looked alive. He—

The words got all tied up in Axel's head. If he looked at the pictures, at least he didn't have to think about them. But how could he *not* think about them after looking at all the faces, all the pain—

And then he saw a photograph of a small, blue theropod, exhausted, lying on his side, head twisted back as if he could hardly raise it—one black, expressionless eye was visible, staring upward. A second photo showed a long, straight cut down his back, infected and swollen.

The cut was the same length as the scar down Axel's back.

Axel felt as if the desk dropped out from under him—and the floor, the house, everything—as if he was falling through time and space.

"Space and Time and Time and Space—"

Whirling and spinning like an amusement park ride, but only the really, truly scary parts, and no one was there with whom he could share the elation and danger.

A boy, the one he'd been purchased for, had cut him open, goaded on a bet, to see if he had mechanical parts or biological organs. "Not like he's an animal," the boy had said. "Just a thing. Don't matter what anyone does to him."

But the boy said "him," like he *was* someone—

And Lancelot was there! Lancelot, his buddy! The two of them were purchased together, and they lived with the boy and his family. "Buddies forever, Lancelot and Axel, Axel and Lancelot—"

But Lancelot was all cut open, spread out on the floor, screaming, pleading, "Please! Stop! Help me! Kill me! Stop!"

And Axel had shouted too. "Don't! Don't hurt him! Stop it!"

A grown-up interrupted the impromptu dissections. Axel had run, with all his strength. He'd run, hidden himself, bled. With no food, with all his energy and muscle spent, he slipped into a hole on the edge of a construction site and waited to die, like Lancelot.

Axel remembered what that upward-turned eye in the photograph was looking at.

It had been night. The stars were out, and they were everywhere.

"Space—" said Axel. He put his forepaw on TV Frog's smooth back. It shuddered like an unbalanced engine.

"It was all space and big and perfect and endless. And even though I was small, I felt as big as space. I felt as big as the universe."

TV Frog clicked the mouse and the monitor screen went dark.

"That's what I should have asked the space guys about," Axel told him. "What I wanted to ask before I forgot. I wanted to ask if they knew any way to bring Lancelot back, or do something, so that he wouldn't be dead."

TV Frog just sat there. Still shuddering. His eyes looked immeasurably deep and sad.

"I guess they couldn't, huh?"

Whether or not he could answer, TV Frog didn't, which seemed like a kind of answer in itself.

Axel and TV Frog stood in front of the computer, and after a while the monitor clicked on again.

The screen filled with stars

This time, when the screensaver reached the end of the cycle, with the smeared thumbprint galaxy just in view, it seemed to go a little farther. The galaxy filled the whole screen.

"You know, Reggie says the universe is one big place!"

TV Frog's eyes bobbed down into his head in a kind of affirmative gesture.

"I came down to ask if you wanted to come upstairs and see what's happening. It's the biggest thing that's ever happened here. The biggest thing that's ever happened *anywhere!*"

TV Frog didn't move.

Axel bent down and tugged at TV Frog's forepaw. "It's okay! No one will see you there! They're all looking at the egg!"

Axel kept tugging and urging until TV Frog turned away from the computer.

"We'd better hurry! It's almost ready to hatch!"

But TV Frog propelled himself slowly, one cautious 'flop' at a time.

"Come on! No one will see you! I promise!"

All the way down from the desk, across the floor and up the stairs to the second floor, with Axel leading, TV Frog moved on: flop, pause, flop, pause, flop.

They peered around the doorway into the sleep room. All the saurs were gathered around Rotomotoman, situated in the center of the room. He, like everyone else, was staring into his incubator drawer, his pupils cast at an awkwardly downward angle. Bronte stood closest to the drawer, along with Kara, Agnes, Doc and Preston. The only sounds in the room were the soft purr of Rotomotoman's machinery and the anticipatory breathing of every creature in the room.

Sitting in the back, as far out of the way as they could situate themselves, were Tom Groverton and Dr. Margaret. They were holding hands, which Axel thought especially fascinating. He tapped TV Frog and pointed to them.

"Look at *that!*" he whispered. "I'll bet they're learning how to make eggs too!"

He kept staring at the humans until he heard a kind of chiming sound coming from Rotomotoman. A disk-shaped part at the top of his head slid away and up from the cavity rose a flashing, rotating red light—just as Axel had designed it.

A word flashed on Rotomotoman's display screen: "Ready!"

The little drawer opened.

The quiet sighs of awe and pent up relief from everyone gathered around sounded a little like a low, deep chord from some great church organ.

"Come on! Let's get a closer look!" Axel reached over to tap TV Frog again, but there was no one at his side now.

TV Frog was gone.

"Hey!"

Axel wanted to go look for him, but his curiosity about the egg proved the greater draw. Axel crept up to the incubator drawer and told himself he'd find TV Frog later.

He gently pushed through the thick crowd of saurs. Charlie grouched at him until Rosie reminded him that it was Axel who was responsible for Rotomotoman. They let him through, and Axel climbed up on Hubert's back, where he could easily see into the drawer.

The first few hairline cracks had already appeared on the surface of the shivering egg. A piece of the shell dropped away and from that breach popped a little pink head at the end of long neck.

No one looked more surprised than Rotomotoman, whose huge disk-eyes implausibly seemed to grow larger at the sight.

The tiny hatchling's eyes were shut at first, but its mouth was open and it made a little sound, a "Gack!" like a clearing of its throat.

Diogenes, who in all his years at the house had never been heard to utter more than a few words, turned to Hetman's bed and whispered, "Did you hear?"

Hetman nodded. "Thank you, that I lived long enough to hear it."

Then he (or she) opened his (or her) eyes.

The small, black, glistening orbs seemed instantly focused. The hatchling looked over the top of the drawer and seemed to see everyone and everything.

Bronte bent down and caressed the little creature with her snout, then tapped away another piece of the shell to

free it more.

"It's hard to say," Doc looked at the hatchling, "since he's without precedent, as far as we know, but he looks like a healthy little fellow to me."

"Little *fellow?*" Agnes snapped. "Can't you see it's obviously female? Obviously intelligent? Obviously smarter than any carnosaur could ever *hope* to be?"

"Don't start," said Kara. "It's not the time to fight."

"What will happen now?" Bronte asked Kara. "Will she grow? Will she change and mature? Will she learn to do all the things we do?"

"Who knows?" said Kara. "We'll learn as we go along."

"It won't stay a secret for long," said Charlie, rubbing his nasal horn against the floor. "Those humans in the big car know more than they're saying. They wouldn't have taken Axel's story so seriously if they didn't."

"That they figure it out isn't what matters," Agnes said. "It's what they'll do when they know."

"Which we can't predict," said Preston, smiling at the little pink creature in the incubator drawer. "And this isn't the time to try."

All this time Axel, balanced on Hubert's back, kept trying to get the hatchling's attention, waving excitedly with one forepaw while holding to Hubert's neck with the other.

"Hiya! Hey! Up here! Hey! Hiya!"

The tiny pink sauropod looked up at Axel.

"Gack!"

"Hiya Gack! I'm Axel!"

"That's not her name!" Agnes waved her tail. "Moron!"

Kara nudged her and shook her head. "We'll sort it out later."

When Axel climbed down, Preston put his forepaw on his head and said, "We need to thank you. You—and Reggie."

Axel looked up at Preston. "Don't forget Rotomotoman!"

"Yes, Rotomotoman too."

Rotomotoman stared down and saluted the hatchling, the red light on his head still rotating, as the word "Gack" flashed on his display screen.

Axel looked around the sleep room and noticed that Sluggo was up on the box seat under the window, looking out.

"Hey!" Axel hopped up and joined him. It was his favorite spot, after all. "Whatya doing up here?"

"I—I just wanted to look up at the stars. I don't know why. The egg—and everything—I feel scared and I don't know why. Or I do—but I'm still scared. I just needed to look up at the sky and see the stars."

"Me too." Axel put his forepaws up against the glass. "The moon and the planets and the stars and the galaxies are all spinning through space! And *we're* spinning through space too! It's a fact!"

"When I look up at the stars," Sluggo said, "I feel—I don't know—I feel—"

"As big as the universe!" Axel said.

"Yes. That's it. As big as the universe."

"It's a good night for looking," Axel gazed at the moon, his mouth wide open. "It's the biggest, best universe in the whole world!"

Agnes might have disputed him, and if not there were many others who would, but it wasn't in Sluggo to argue. He had only one universe to judge from, just as he had only one egg to judge from, but the both of them in their different ways seemed pretty remarkable.

And so, in an old house at the edge of the woods, far from the nearest megalopolis, Axel and Sluggo looked out from the window of the sleep room, up at the stars.

"Look at that!" Axel pointed to a luminous streak, razor thin, cutting a diagonal line across the night sky.

"A shooting star!" Axel nudged Sluggo. "Do you see it?"

"Yes," Sluggo answered.

The shooting star was there for a few seconds, then disappeared.

"Wasn't that neat?" Axel said.

"Yes, but—" Sluggo looked over at Axel, then out the window again.

"What?"

"Aren't shooting stars supposed to shoot *down?* That one was going *up!*"

"Heyyyy!" Axel rubbed the spot just under his chin. "That's *right!*"

The two of them kept looking out at the sky—the waiting universe before them and the new world behind, as good as any and better than most—but that was the only upward-shooting star they saw that night.

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THE CHIEF DESIGNER

Andy Duncan

I. Kolyma labor camp, sometime during World War II

"Korolev."

D 327 did not look around. He was busy. His joints grated together, his ligaments groaned as he lifted the pickax over his head—a motion as fast as he could manage, yet so terribly slow, slower even than the last time, which had been slower in turn than the time before that; then he released his breath and with it the tension, and the will, so that his arms fell forward and allowed the tip of the pick to glance across the jagged face of the wall. A few greasy-black chips pattered his shoes. The fall of the pick almost balanced in joy the inevitable ordeal of lifting, but not quite, so D 327's misery accumulated in minute increments like the drift of slag in which he stood ankle-deep. He knew that none of the other workers, spaced five paces apart down the length of the tunnel, were faring any better. They had been ordered to dig for gold, but he knew this tunnel held no gold; this tunnel was the antithesis of gold; the gold had been pried from its workers' teeth and chased from their dreams; and his pick was as soft and blunt as a thumb. He raised it again, and tried to lose count of how many times he had done so.

"Korolev."

D 327 tried to focus his attention not on the lift and fall, lift and fall of his triple burden, arm and pick and arm, but on the slight added weight in his right jacket pocket—an imagined weight, really, so coarse and mostly air was the bit of bread he had palmed from poor Vasily's plate at midday. Vasily had collapsed at just the right time. Later, and Vasily would have used that crust to swipe even the shine of food from the tin plate, would have thrust it into his mouth with his last dying breath. Sooner, and the guard would have noticed the remaining food and snatched it away. Guards starved less quickly in the Kolyma than the prisoners, but all starved. A dozen times D 327 had come deliriously close to eating his prize, but each time he had refrained. Many of his fellow prisoners had forgotten how to savor, but he had not. After supper would be best: Just before sleep, as he lay with his face to the barracks wall, the unchewed food in his mouth would add warmth and flavor to oblivion.

"Korolev."

The voice was cold and clear and patient, an electronic pulse against the rasps, clinks, drips, and scuttles of the tunnel. What word, in this hole, could bear such repetition? Only a name, like God, or Stalin.

"Korolev."

I heard that name often at the Institute, D 327 thought. Often in my presence others said that name. A response was expected, assumed; was only just. Down fell the pick, clatter and flake; he turned, half afraid of seeing nothing in the light of his carbide lamp.

Instead he faced an infinitude of stars.

"Come down from your orbit, Comrade Korolev. Come down to Earth, that a mere mortal may speak with you."

The stars were printed on a sheet of glossy paper: a page. A hand turned the page, to a cutaway diagram of a tapered cylinder like a plump bullet. Inside its shell flowed rivers of arrows. At that moment, more clearly even than he remembered his own name, Sergei Korolev remembered another's.

"Tsiolkovsky," he said.

"Your memory is excellent, Comrade Korolev." The man who had held the open book before Korolev's face reversed it and examined it himself. He wore a full-dress officer's uniform, and two soldiers flanked him. " *Exploration of Cosmic Space with Reactive Devices,* by Konstantin Tsiolkovsky. Published 1903. And did the czar recognize his genius? Fah! If not for the Workers' Revolution, he would have died of old age still wiping the snot of schoolboys in Kaluga." He sighed. "How often we visionaries labor without recognition, without thanks."

"It is a shame, Citizen General. I am sad for you."

The officer snapped the book shut one-handed. In the dim light of Korolev's helmet gleamed the brim of the officer's cap, the golden eagle's wings, and the rifle barrels of the soldiers on each side. "You flatter me, Korolev. I am only an engineer like yourself. And henceforth you may call me Comrade Shandarin, as you would have before your crimes were exposed and punished." He surveyed the meager rubble beneath Korolev's feet. "Your service here is done. From today you serve the Motherland in other ways. You will join me in my work."

Korolev was not attentive. Just as the mere sight of food could flood his mouth with saliva and his stomach with growling, raging juices, the glimpse of Tsiolkovsky's diagrams had released a torrent of images, facts, numerals, terms, all familiar and yet deliciously new. Apogee and perigee. Trajectory and throttle. Elevation and azimuth. Velocities and propellants and thrust. He was trying to savor all this, and this man Shandarin was distracting him. "And what work is that—Comrade?"

Shandarin laughed, a series of sharp detonations in the tunnel. "Why, what a question. The work your Motherland trained you to do, of course. Do you think your skills as a gold miner are in demand?" He reached into his brass-buttoned coat (and one part of Korolev, eternally cold in his thin and tattered parka, noted how the coat retained the smooth, unwrinkled drape of great comfort and thickness and weight) and pulled out a folded sheaf of papers that he handed to Korolev. "The chief problem," he said, as Korolev exulted in the glorious feel of paper, "is distance, of course. The German rockets have a range of hundreds of kilometers, but are thousands of kilometers possible? Not all the Motherland's enemies are her neighbors. The V-2 achieves altitudes greater than eighty kilometers, more than sixteen times the height of your GIRD-X; our new rockets must fly even higher than the Germans'." Korolev leafed through the papers. His blisters smeared the charts and graphs no matter how much care he took. Shandarin continued: "So our rockets must somehow better the Germans' twenty-five thousand kilograms of thrust, and by a wide margin at that. This requires drastic innovations in metallurgy or design, if not both—Comrade, are you listening?"

Korolev had turned one of the charts on its side, so that the rocket's arc swept not from right to left, but upward in a languid, powerful semicircle, as if bound for...

His thumb left a red star in its path.

"I *am* listening," Korolev said, "and so is everyone else." He was aware of fewer noises, fewer motions, from the other miners, and some of the Institute's concern for security had returned to him, along with an echo of his voice of command. "In my day," Korolev continued, "such talk was classified."

Shandarin shrugged, grinned. "I am speaking only to you, Comrade," he said. He inclined his head backward, toward the soldiers, and said, "We may speak freely before cretins," then flicked a gloved finger toward the miners, "and even more so before dead men." He slid a page from Korolev's hands and held it up for all to see, turned completely around, waved the sheet a little so that it fluttered. No miner met his gaze. He turned back to Korolev. "Shall we go?" He feigned a shiver. "I am not so used to the cold as you."

In 1933, after the GIRD-X triumph, after the vodka and the toasts and the ritual congratulations from Comrade Stalin (delivered in great haste by a nearsighted bureaucrat who looked as if he expected rockets to roar out of the doorways at any moment), Korolev and his mentor Tsander, who would die so soon thereafter, had left their joyous colleagues downstairs and taken their celebration aloft, clambered onto the steep, icy rooftop of the Moscow office building that housed the State Reaction Scientific Research Institute. To hell with the vodka; they toasted each other, and the rocket, and the city, and the planet, with a smuggled and hoarded bottle of French champagne.

"To the moon!"

"To the sun!"

"To Mars!"

They ate caviar and crabmeat and smoked herring, smacked like gourmands and sailed the empty cans into orbit over the frozen streets of the capital. Never, not even in the Kolyma, had Korolev so relished a meal.

He remembered all this, and much more, as he sat beside Shandarin in the sledge that hissed away from the snow-covered entrance of Mine Seventeen. He burned to examine the papers, but they could wait. He folded them and tucked them into his worn and patched jacket, through which he almost could have read them had he wanted to. As Shandarin regarded him in silence, he pulled the crust of bread from his pocket and began nibbling it with obvious relish, as if it were the finest delicacy plucked from the ovens of the Romanovs. He settled back, closed his eyes, and in eating the bread relived the bursting tang of the caviar, the transcendent release of the launch, the blanketing embrace of the night sky that no longer danced beyond reach. In this way he communed with his former self, who dropped gently down from the rooftop of the Institute and joined him, ready to resume their great work, and the sledge shot across the snow as if propelled by yearning and fire.

II. Baikonur Cosmodrome, September 1957

Awakened by the commingled howls of all the souls in Hell, a startled Evgeny Aksyonov lifted the curtain of his compartment window and looked out onto a circus. Loping alongside the train was a parallel train of camels, a dozen or more of the gangling beasts, their fencepost teeth bared as they yelped and brayed and groaned, lips curled in great ropy sneers. Bulging gray sacks jogged at their flanks, and swaying atop each mount was a swarthy, bearded rider in flowing robes, with a snarl to rival that of his camel.

So this is Kazakhstan, thought Aksyonov, who before this trip never had been farther east than the outskirts of Moscow, the home of a maiden aunt who baked fine tarts. He breathed the choking dust and coughed with enthusiasm; he was too young to be uncomfortable. One of the camel drivers noticed him gawking, grinned, and

raised a shaggy fist in a gesture so rude that Aksyonov hastily dropped the curtain and sat back, fingering his own suddenly inadequate beard. He rummaged in his canvas bag for the worn copy of Perelman's *Interplanetary Travels,* which he opened at random and began to read, though he could have recited the passage with his eyes closed. He soon nodded off again, and in his dreams he was a magnificent bronze fighter of the desert, who brandished a scimitar to defy the rockets that split the sky.

No conductor, no fellow passenger disturbed his sleep, for Evgeny Aksyonov was bound for a place that did not officially exist, to meet a man who officially had no name. Access to such non-places and non-people was strictly regulated, and so Aksyonov was the only passenger aboard the train.

"Come," the soldier on the platform said, after he peered from Aksyonov's face to his photo and back again just enough to make Aksyonov nervous. "The Chief Designer expects you."

For fifteen minutes or more, he drove Aksyonov along a freshly paved highway so wide and straight it seemed inevitable, past a series of construction sites where the hollow outlines of immense buildings rose from pits and heaps of dirt. Gangs of workers swarmed about. Atop one pile of earth, three armed soldiers kept watch: the men swinging picks below must be *zeks,* political prisoners, the Motherland's most menial laborers. A gleaming rail spur crossed and recrossed the road, and Aksyonov began to brace himself for each intersection, because the driver did not slow down. Some completed buildings looked like administrative offices, others like army barracks. Behind one barracks were more inviting dwellings, a half-dozen yurts. A couple of Kazakh men were in the process of rolling a seventh into place, as if it were a great hide-covered hoop.

The driver abandoned Askyonov without speech or ceremony at the concrete lip of a kilometer-wide pit. Aksyonov looked down sixty meters along the steep causeway that would channel the rocket blasts. He shivered and retreated from the edge of the launch pad, a tremendous concrete shelf hundreds of meters square. No amount of rocket research would make him fond of heights. Above him soared three empty gantries, thirty-meter talons that would close on the rocket and hold it fast until liftoff.

Hundreds of workers dashed about the pad. Some drove small electric carts, some clambered along scaffolds that reached into the tips of the gantries and the depths of the pit. Among them were many Kazakh men, distinguishable even at a distance by their felt skullcaps. Amid all this activity, Aksyonov tried to look as knowledgeable and useful as possible while he guarded his luggage and felt homesick.

As he considered getting out his book, he was jolted nearly off his feet by a voice that boomed and echoed from everywhere: to left, to right, the pit, the sky.

"Testing. Testing. One two three. Tsiolkovsky Tsiolkovsky Tsiolkovsky."

Then came several prolonged and deafening blasts, like gusts into a microphone. Aksyonov clapped his hands over his ears. No one else in the whole anthill took any visible notice of the racket.

"Hello. Hello. Hello." The words rolled across the concrete in waves and rattled Aksyonov to the bone. "Can you hear me? Eh? Hello? I'm asking you—you there with the beard. Yes, you, the one doing no work. Can you hear me?"

Aksyonov released his ears and looked about the launch pad. Unsure where to direct his response, he waved both hands high above his head.

"Good," the voice said. "Wait there. I'll be right up—" The next words were swallowed in a spasm of rattling coughs that echoed off the sides of the pit and seemed to well up from the earth itself. Aksyonov covered his ears again. In mid-cough, the amplification stopped, and all that fearsome reverberation contracted to a single small voice that hacked and cleared its throat far across the concrete pad.

Aksyonov turned to see a man step out of an elevator set into one of the support pillars. The man walked toward Aksyonov, swabbed his mouth with a handkerchief: heavy-set, fiftyish, with low, thick eyebrows and a brilliant gaze. He wore an overcoat, though the day was warm for autumn.

"You are Aksyonov," he said, hand extended. He said it as if he had reviewed a list of names in the elevator, and had selected just the right one for the job; if he had said Dyomin or Pilyugin or Molotov, Aksyonov would have answered to it just as readily, then and forever. "My name is Sergei Korolev," the older man continued, "but you are unlikely to hear that name again. Here I am only the Chief Designer, or the Chief. Welcome to Baikonur Cosmodrome."

Aksyonov made a little bow, just more than a nod. He had rehearsed his opening and was quite proud of it. "I am honored to meet the man who designed the first Soviet rocket."

"And I am honored to meet the designer of our future ones," Korolev replied. "In collaboration, of course. Space is a collaborative effort, like a nation, or a cathedral. Come with me, please," he added over his shoulder, for he already was well on his way across the pad. Aksyonov grabbed his bags and scrambled to catch up.

"I regret that I have no time to give you a tour of the facility, nor a proper interview. Can you recognize a lie when you hear one? What I just told you was a lie. Truthfully, I do not regret it at all, for I am glad finally to be busy with this launch of the *Fellow Traveler*—you read the brief I sent you, yes? Yes. Instead of the usual formalities, you will accompany me on all my rounds in the coming week, from this moment. Will this be satisfactory?"

"Very much so, Comrade Korolev. Er, Comrade Chief."

"Simply Chief will do. Hello, Abish, you mad Kazakh, please keep it out of the pit, will you?" he cried to a waving, grinning man who whizzed past in an electric cart. "You come from the Academy with the highest

recommendations, Comrade Aksyonov. So high that you actually had a choice of postings, and choice is a rare thing in this new century. Tell me, why did you choose Baikonur? Do you nurse some abiding love for sand?"

"Primarily, Comrade—er, Chief—I came here to work with you." He awaited some response, got none, and went on. "Also, Comrade Shandarin's design group involves—well, let us say much more conventional applications of rocketry? Your work at Baikonur, what little I could learn of it, seemed much more interesting."

"I understand," the Chief said. He led the way down a metal spiral staircase that clamored at every step. "Comrade Shandarin is like the old Chinaman, who lobs arrows of flying fire at the Mongols. The firepower is greater and greater, but still the Mongols keep coming." At the foot of the reverberating stairs, he turned back and stared at Aksyonov's luggage. "What in the hell are all these things you carry around with you?"

Aksyonov stopped. "Ah, just some... just my luggage, Chief." The older man's gaze was unreadable. "My clothes, and books... and some personal items..." He faltered.

After some thought, the Chief grunted in mingled assent and surprise and said, "Books are useful." Turning to the parking lot, he swept one arm back toward the launch pad. "Consider this a personal item, too."

As the two men approached, a large soldier bounded from a car, threw open the back door, and stood at attention. In one hand he held a book, his place marked with an index finger.

"Thank you, Oleg," the Chief said, and followed Aksyonov in. "Oleg here is reading his way through all the major published works on rocketry and interplanetary travel. What do you think of the Goddard, Oleg?"

"Very interesting, Chief," the soldier said, as he cranked the ignition. Aksyonov studied the man's thick, shaven neck.

"It is a directed reading," the Chief continued. He pulled a slide rule and a slim notebook from his coat. The shadows of the gantries swept across his face as the car circled the parking lot. "If I must live with an armed escort, I will at least be able to converse civilly with him."

"Would you like to converse now, Chief ?" the driver asked.

"No, thank you," said the Chief. His fingers danced across the numbers as Aksyonov looked out the back window at the receding claws of the pad.

III. Baikonur Cosmodrome, 4 October 1957

"*Ten.*"

Ten seconds to go, and no work left to be done. Wonderful, wonderful. Korolev stretched out his legs beneath the scarred wooden desk, pulled the microphone forward, and relaxed as he counted down to zero.

"*Nine.*"

A hundred meters away from this steel-encased concrete bunker, Korolev's voice must be booming across the launch pad. Only the topmost fifteen meters of *Old Number Seven* would be visible above the icy white fog vented from its liquid-oxygen tanks. Korolev had watched it through every periscope, from every angle, until his cheeks ached from squinting. Now he attempted to watch nothing. His subordinates glanced up from their consoles and radar screens sweaty and white-lipped, like men ridden by nightmares. Let *them* worry. It was part of the learning experience. Korolev was done with worries—for eight more seconds, anyway. Then the next trial would begin, but in the meantime he would savor his triumph like a crust of bread.

"*Eight.*"

Just weeks before, Comrade Khrushchev had given the go-ahead for an orbital satellite launch—a launch that would impress the world (so he said) with the fearsome might of the Soviet intercontinental ballistic missile. Ha! As if Washington were as easy to reach as orbit. The Party Chairman had played right into the Chief Designer's hands.

"*Seven.*"

Granted, *Old Number Seven* was a remarkable design achievement. Twelve small steering rockets and four strap-on boosters surrounded a central core with twenty separate thrust chambers. The metallurgists, wringing their hands, had told Korolev that his project was doomed, that any single rocket of Soviet make would shatter well before it reached four hundred and fifty thousand kilograms of thrust. Very well, Korolev said: How about two dozen, three dozen smaller rockets clustered together? The union is greater than the individual; was this not the essence of Communism?

"*Six.*"

For hours, Khrushchev and the members of the Politburo, who knew as much about rocketry as any equivalent number of camels, had scampered about the launch pad like Siberian peasants on the loose in Red Square. They wanted to touch everything, like children; Korolev had to be stern with them. And they asked childish questions: How much does it weigh? How fast does it go? How high will it fly? The answers made them even more excited, and Khrushchev was the most excited of all. "This is a great work you do, Comrade Korolev!" he kept saying. The man's cigar ashes were everywhere, and Korolev had not seen his favorite tea glass since.

"*Five.*"

Comrade Shandarin's objections, though they went unheeded at the Kremlin, were sound. What good was an ICBM that took hours to fuel and launch? One so large that it could be moved only by railway? One that could not maneuver itself to its target, but had to be guided by human controllers on the ground? Worst of all, from Shandarin's standpoint, only the northeastern corner of the United States had anything to fear from *Old Number Seven*. "Comrade," he intoned, "there are precious few military targets in Maine." The restless old Chinaman could hear the Mongols laughing.

"*Four.*"

Just a week before, young Aksyonov, at the close of a routine meeting, had loitered about with the constipated expression that signified an important question welling up inside. "Chief, I am confused," the young man said. "The field marshal keeps referring to *Old Number Seven* as a ballistic missile. Perhaps I am wrong, Chief, but—is *Old Number Seven* not a rather inefficient design for a ballistic missile?"

"*Three.*"

Korolev had beamed at the young man, leaned forward and said, "I do not think that a fair assessment, Comrade Aksyonov. I think it would be more accurate to call *Old Number Seven* a *shitty* design for a ballistic missile."

"Two."

"But," Korolev continued, "it will make a marvelous booster rocket to send men into space."

"*One.*

"*Ignition!*"

And so a new star blossomed in the Central Asian desert and rose into the heavens, and even over the thunderous roar of the rockets the others in the command bunker heard the Chief as he threw his head back and laughed.

IV. Steppes north of Baikonur, February 1961

Aksyonov stood beside the Chief, their elbows touching, twin binoculars raised. An eagle wheeled across Aksyonov's portion of sky, and he instinctively turned his head to keep it in view, then caught himself and swung back to focus on the orange parachute as it grew larger and larger—though not quite so large as expected.

Aksyonov lowered his binoculars and checked his map, but the Chief needed no confirmation. "Our peacock has flown off course," he muttered, and rapped twice on the roof of the cab.

The truck roared forward, jolted along the frozen ruts of the dirt lane, and the swaying engineers in the back held on as best they could. Across the vast fields to right and left, toy-sized trucks and ambulances raced alongside. A flock of far-distant sheep surged away from an oncoming truck; the wind carried the honks and bleats for kilometers. Streams of vehicles converged on the drifting orange blossom that was Pyotr Dolgov.

The Chief was on good terms with each of the prospective cosmonauts at Star City, knew their names and families and hobbies and histories, knew in fact everything in their dossiers (and KGB dossiers omitted nothing). The Chief had selected these men from thousands of candidates, in consultation with Khrushchev and, seemingly, half the Politburo; and despite all this, Aksyonov was convinced that the Chief never liked Pyotr Dolgov.

The cosmonaut would sit in the commons for hours waxing his absurd mustache and bragging to everyone about his sexual exploits and his skydiving expertise. "More than five hundred jumps, my friends, and not so much as a sprained ankle. You see this little pocket volume of Lenin? I collect them, just to have something to read on the way down. After the chute is open, there is nothing else to do, you see? Eventually I will have read all the great man's works between earth and sky! How many scholars can say as much?" And so on and so on, as the other cosmonauts hooted and jeered throughout. The Chief, shambling through the commons with a fresh sheaf of problems under his arm, would glare at him, and say nothing.

Yet Dolgov was the obvious man to test the East's ejection system, and such a test must be done without delay, if what the Chief read in the KGB reports, and in *Life* magazine, were to be believed. Woe indeed, that long, dry, cold spring, if the Chief caught someone taking a break to smoke a cigarette or place an idle telephone call or, worst of all, take a nap. "Do the Americans and the Germans shirk their jobs, down there in the tropics?" he would yell, waving the latest publicity photographs of the seven toothy spacemen. (The Americans surely would send the first dentist into space.) The Chief found this strange, perpetually sunny launch site, this Cape Canaveral Florida, a locale as exotic as Mars or the moon; to him it was always "down there in the tropics." So Dolgov was hustled through his training, and the final test was scheduled for late February.

The experiment was simple. Dolgov, suited up, was strapped into a prototype ejection seat inside a full-size mock-up of the East craft. Then the mock-up was carried aloft in the cargo bay of one of the big Antonov transports. Thousands of meters above the steppes, the capsule was shoved without ceremony out the back of the plane. Once clear, Dolgov pressed the "eject" button. Very simple. Also lunatic, but the schedule at Baikonur Cosmodrome made generous allowances for lunacy.

Dolgov had summed up the procedure: "You feed me to the plane, and the plane shits me back out!"

The Chief had winced, and then nodded his head.

The Chief's truck was not the first to arrive that afternoon. A gaggle of engineers all tried to climb over the tailgate together, and the Chief, impatient, gestured for Aksyonov to help him over the side. The rippling parachute danced sideways, but was anchored by the prone figure on the ground.

A pale soldier with a rifle jogged up to the Chief and said: "It's bad, Comrade Designer. Perhaps you should wait for the—" The Chief, of course, was already past, and Aksyonov checked his stride a bit so as not to outpace the Chief.

Dolgov lay on his back, arms and legs sprawled as no living man would willingly lie. His helmet, its faceplate shattered, rested at a crazy angle on his shoulders yet still was bolted to the suit.

The Chief stared down at the body and said, "We are fools before men and before God."

Doctors arrived, circling somewhat to maintain a respectful distance from the Chief, and confirmed the obvious: Dolgov's neck was broken. He had done no reading on the way down.

"His helmet must have struck the hatch upon ejection," Aksyonov said, for he felt he should say something. "He knew the risks," he added.

"Not as well as you, my friend, and certainly not as well as I." The Chief's voice was deceptively quiet. By now dozens of others had gathered. They looked sick, ashen, aghast, but the Chief's face was taut with fury. Slow and gentle in his rage, he knelt on the frozen ground, reached past the doctors, grasped Dolgov's outflung hands, and folded the arms across the orange chest so that Dolgov seemed to grasp the chest straps of his parachute.

"Better that way," the Chief grunted.

He turned and walked back toward the truck, into the cold wind, Aksyonov close behind. As he walked, the Chief pulled from his bulky jacket his notebook and a ball-point pen, shook the pen to get it going (it was of East German make), and began to write, pen plowing across the page, line after line. As he wrote, the Chief stepped over gullies and around rocks without stumbling or looking up. A marmot scampered across his path, practically underfoot. The Chief kept writing.

At the end of the lane, where the earth was permanently churned by the wide turns of tractors, the pale soldier had found a use for his rifle: He held it up horizontally, like a cattle gate, to keep three shriveled peasant women at bay. As the Chief approached, the eldest called: "What is wrong, Comrade? What's all the fuss?"

The Chief replied as he passed, without looking up or ceasing to write: "I just broke a young man's neck, Madam, with a slide rule and the stroke of a pen."

The old woman instantly crossed herself, then realized her error and clapped her hands to her face; but Aksyonov and his Chief could not care less, and the soldier was intent on the romping parachute, as rapt and wide-eyed as a child.

V. Baikonur Cosmodrome, 12 April 1961

Frustrated with merely adjusting and rearranging his stubborn pillow, Aksyonov began, shortly past one a.m., to give it a sound thrashing. He pummeled it with his fists, butted it with his head, and slung it into the corner. Aksyonov sat up, sighed, and amused himself for a few minutes by twisting locks of his hair into intricate braids with his left thumb and forefinger, then yanking them free with his right hand. "I am insane," he said aloud. He threw back the bedcovers and swung his bare feet onto the never-warm wooden floor of the cottage.

The snores droning through the hallway suggested Aksyonov was alone in his sleeplessness. Trousers, shoes, jacket, cap; he imagined they were the bright orange flight suit, the asphalt spreader's boots, the leaden bubble of the helmet. He made final adjustments to this fancy (to be sure of the oxygen-nitrogen mix) before he stepped boldly onto the back porch, arms raised in triumph, to claim the concrete walkway and the dusty shrubbery in the name of World Socialism.

Shaking his head at his foolishness—an option young Gagarin, suited up, alas would not have—Aksyonov strolled into the yard. He briefly mistook, for the thousandth time, the horizonal glow of the launch pad for the dawn of a new day. Aksyonov felt his internal compass corkscrew wildly. He closed his eyes and gulped the chill air, hoped to flood himself with calm, but instead thought of a rocket sucking subzero broth from a hose.

Across the garden, a light burned in the kitchen window of the Chief's equally nondescript cottage. Aksyonov walked toward it, since he had nowhere else to walk, and as he neared he became absurdly furtive, stepping with great care, raising his knees high like a prancing colt in zero gravity. He crept into the bushes alongside the house and peered over the sill. As a child, Aksyonov had longed to be a spy; he enjoyed, for example, covertly watching his secretly Orthodox grandfather in prayer. One day he gave himself away with a loud borscht-fed belch, infuriated his grandfather, and launched a family crisis... but the Chief, he saw, was just reading.

The harsh fluorescent light accented the frostbite scars on the Chief's face—a sign, too, of his weariness. As usual, his right hand supported his chin; his left index finger guided his eyes across and down the page of his notebook. At his elbow were a plate of cheese curds and a full glass of tea from which no steam rose. The Chief turned the page, read, turned another. Nothing worth watching; why, then, was Aksyonov so fascinated? Why did he feel such

comfort, knowing the Chief Designer sat up late in a lighted kitchen, reading? The Chief's finger moved as methodically as his pen, line after line after—he looked up, not toward the window but toward the back door, and Aksyonov ducked beneath the sill. He heard the scrape of a chair, and heavy footsteps. A wedge of light sliced across the grass.

The Chief whispered: "Gagarin? *Hsst!* Hello?"

After a pause, as Aksyonov held his breath, the Chief peered around the corner of the house at his assistant crouched in the shrubbery.

"Ah, it's you," the Chief said. "Good. Now perhaps I can get some work done, in this winter resort for narcoleptics."

Aksyonov was brushing leaves and twigs from his sleeves, trying to formulate an explanation to himself that also would pass muster with the Chief, when his superior reappeared. He strode from the house with the notebook under his right arm as his left arm fought for position inside his bulky jacket, which he wore outdoors in all weathers; Aksyonov figured it weighed at least as much as a flight suit. "Now then," the Chief said, and shepherded Aksyonov across the yard by the elbow. "Let us suppose, for the sake of argument and for our sanity, that all goes well in the morning. Gagarin goes up, he orbits, he comes down, he talks to Khrushchev, he talks to his mama, he is the good Russian boy, yes? Yes. Fine. All well and good. Still he is just Spam in a can."

"Spam, Chief ?"

The Chief waved his hand. "An American delicacy packed in cans, like caviar. I have read too much *Life,* perhaps. Stop interrupting. I mean that if good Russian boys like Gagarin are ever to orbit anything other than the Earth, they will need a craft better than that hollowed-out *Fellow Traveler* over there. They will need to be able to maneuver, to rendezvous with each other, to dock, and so on. *Now* interrupt me. What modular structure for this new craft, this *Union* craft, best would combine the strengths of our current craft with the terrible necessities of..."

For more than an hour the two men tromped across the yard, sometimes talked simultaneously and sometimes not at all, sometimes walked shoulder to shoulder and sometimes stalked each other like duelists, and they snatched diagrams from the air, and chopped them in the grass, and bickered and fought and hated one another and reconciled and embraced and bickered again, all beneath a brilliant starry sky at which they did not even glance; and when they tired, having solved nothing and having discovered about a dozen fresh impossibilities to be somehow faced and broken, they collapsed onto the back porch steps in giddy triumph and elation, and then Aksyonov said, "This is not my cottage."

The Chief looked around. "Nor mine," he said.

Heaped about the porch were bouquets, mostly frugal carnations, brought the previous day, in wave after wave, by dimpled envoys of the Young Communists League.

"This is Gagarin's cottage," Aksyonov whispered. The windows were dark. In the absolute silence: a faint snore.

"At seven last evening I marched over here and ordered him to go to bed and get a good night's sleep," the Chief murmured, eyes wide, "and he has the nerve to do exactly that." He heaved himself off the steps, rubbed the small of his back, stooped and raked the dirt with his hands. "Help me," he whispered, and began to load his pockets with pebbles.

Aksyonov dropped to hands and knees. "You're right, Chief. Why should we stay up all night, and do all his worrying for him?" He added, under his breath: "The bastard."

Incredibly, there was Gagarin, out cold, his outline visible in the darkened room thanks to the radium dial of the bedside clock. The two engineers danced back a few paces from the cosmonaut's window and began peppering the pane with handfuls of shot. Was the man deaf, or made of stone—a peasant boy already gone to monument? Ah, there's the light. Crouched behind Gagarin's complementary black government sedan, which he could drive from the middle of nowhere to the edge of nowhere and back again, his tormentors watched the young hero of the Motherland raise the sash, poke out his head, look around.

Gagarin whispered: "Chief ?"

No reply, and so the sash came down, and the light went off. The two ruffians stood up, turned solemnly to each other, and began to sputter and fizz with suppressed laughter. Aksyonov drew in a deep breath, and the Chief said, with quiet gravity: "As I prepared to leave the cottage, Gagarin said he had two last questions for me. One, was it not true that he could take a couple of personal items aboard, up to about two hundred grams? Yes, I told him, of course, perhaps a photograph or the like. Then, he made a request. Do you know what that boy wanted to carry into orbit tomorrow? Can you imagine? One of my writing pens."

"Did you give him one?"

The Chief's face spasmed. "Go to bed, Aksyonov," he said.

Aksyonov did, and behind him the Chief Designer leaned on the government-issue sedan and gazed at Yuri Gagarin's darkened bedroom window.

VI. *Sunrise One,* 12 October 1964

A planet rolled aside to reveal a star, and was itself revealed, lighted as if from within: storm systems roiled; mountain snowfields sparkled; a checkerboard of collective farms wheeled past the window, proof from space that Communism had changed the Earth. Orbital sunrise was the spectacle of a lifetime, yet Cosmonaut Aksyonov was distracted throughout. Cosmonaut Aksyonov was upside down.

Should he say something? He knew that at four hundred kilometers above the earth's surface the term "upside down" was meaningless, but the sensation persisted. Even with his eyes closed he felt inverted, as if all the blood was rushing to his head. Surely Yegorov's countless sensors, which studded every crevice and cranny of Aksyonov's body, would detect such a thing? For a moment, Aksyonov fancied that the doctor was aware of his upside-downness and just hadn't said anything, to spare Aksyonov's feelings. After all, reorienting himself, swapping ends, would be impossible for any of the three crewmen in this cramped space. Here there was even less room to maneuver than in the back seat of that ridiculous Italian car in which Aksyonov had ridden three abreast with these very men a month before, on a futile midnight jaunt to Tyuratam for vodka. Even with the ability to unstrap himself and float, could the middle person suddenly cry, "Switch!" and reverse himself at will? No, if Aksyonov was upside down, he would have to stay that way until re-entry. And if he was not upside down, but merely insane, then he might stay that way a lot longer, but he tried not to think about that.

"Looks like a slight anomaly in the saline balance," Yegorov said, as he peered at his hand-sized lab kit. The doctor sounded very proud of his salty blood. He had poked and prodded himself with sensors and needles and probes ever since reaching orbit, but found himself lamentably normal—until this final pinprick of blood, which Yegorov had flipped from his finger like a tiny red berry, finally yielded something unearthly, if tedious. Well, fine, Comrade Doctor, Aksyonov wanted to say, why do all your little tests not tell you that we've been upside down for the past two hours? Because if Aksyonov was upside down, then Yegorov and Novikov must be upside down as well. The thought did not console him.

"How do you feel, Comrade Aksyonov?" Novikov asked.

"I am fine," Aksyonov replied.

The pilot smiled in reply and returned his attention to the sealed tube of black currant juice that drifted between his outstretched hands. In space as on Earth, Novikov thrilled at small things. Back at the cosmodrome, he had been aghast at Aksyonov's ignorance of Kazakh food. He had prepared for the reluctant engineer lamb strips and noodles, which he called *besh barmak,* and poured him a foamy mug of fermented *kumiss.* "You will enjoy space more," the pilot had said, "if you experience more of Earth beforehand. Drink up. It's mare's milk, but what do you care? We are young yet. Drink." Now Novikov was engrossed with the plastic tube, which he batted first with his right hand, then his left, as if he were playing tennis with himself, and the tube tumbled first one way, then another. Aksyonov was fairly certain of the tube's movements to left and right, but what of "up" and "down"? Was the tube, end over end over end, ever truly upside down? Or was it right side up the whole time, as the rest of the capsule revolved around it? Aksyonov wanted to throw up.

"If you aren't going to drink that, how about passing it over?" asked the jolly doctor, who probably wanted to test the effects of black currant juice on his saline levels. "Here you go," replied the equally jolly pilot. He lifted his right hand to let the tube pass beneath it on its way across Aksyonov's chest. The doctor caught it and said, "Thanks." He popped the lid with his thumb and squeezed it to release a shivering blob of juice. The doctor let go of the tube (which began a slow drift back across the cabin in response to the slight push of his hand upon release), and brought both hands together to clasp the juice at its middle, mashing the blob until it divided, cell-like, into two separate jellies. The doctor raised his head from his couch and allowed one of them to float into his mouth. He licked his lips and said, "Mmm," and nudged the other blob toward Novikov. It drifted across Aksyonov's chest like a dark cloud above a picnic, and was gobbled in its turn; the pilot flicked out his tongue like a frog to catch it.

And these were grown men!

"Would you like some currant juice, Comrade Aksyonov?"

"No, thank you." His mouth tasted like *kumiss*.

"Water?"

"Coffee?"

"Orange juice?"

"Apple, perhaps?"

"Thank you, I'm not thirsty. Thanks all the same." He envisioned a head-sized glob of vomit bouncing about the cabin as its three captives flinched and moaned beneath, like schoolchildren trapped in a room with a bat. Aksyonov took deep breaths of the canned air and tried to focus on the fireflies outside the window.

"Comrade Aksyonov has the spacesickness," Yegorov murmured, as if he and Novikov were exchanging confidences.

"I do not!" Aksyonov cried.

"You have lain there like a fish for an hour," the doctor continued. "Pulse rate normal, respiration normal, eye movements slightly accelerated but otherwise normal, you check out normal on all my readouts, and frankly you look like hell."

"Everybody gets it," Novikov said. "Titov, Nikolayev, Popovich, Bykovsky, Tereshkova—all had it, in some

degree or other."

"Gagarin, too?" Aksyonov asked.

"No, Gagarin didn't get it."

"Do *you* have it?"

"Ah, no, actually I don't. But I've been a pilot for years, you know. Fighter training and so on."

"I have it a little, I think," Yegorov said. "Just some giddiness. The Americans have reported it, too. We think it may have something to do with the effect of weightlessness on the inner ear." The doctor had published a number of important papers on the inner ear, and Aksyonov was surprised he had waited so long to bring up that remarkable organ. "Do you feel disoriented, spatially confused in any way?"

"Yes," Aksyonov sighed. "I feel as if I'm upside down. I have trouble focusing my eyes. The instruments swim around a little when I try to read them. And I'm a bit queasy as well."

"Are you going to throw up?" Novikov asked.

"No!" Aksyonov retorted, and began to feel better.

"This is very interesting," Yegorov said, making notes. "You must report all your symptoms as they occur."

"I am not reporting, I am complaining," Aksyonov said. "And yet I am a crew member aboard the world's first three-man spacecraft, on the highest manned orbit in history. Forgive me, comrades."

Even as he said it, he winced to call the *Sunrise* a "three-man spacecraft." It was the same old East capsule minus reserve parachute and ejection system, a risky modification that left just enough room to wedge in a third narrow couch. No room for pressure suits, either, so they all wore grey coveralls, paper-thin jackets, and sneakers. "A shirtsleeve flight," Khrushchev had called it, when he presented his demands to the Chief at the Chairman's Black Sea villa the summer before.

The Chief's rage had percolated all the way back to Baikonur; by the time he relayed his orders to Aksyonov, he was in a near-frenzy, stomping about the design lab and slamming his fist on the work tables to punctuate his denunciations. "So now we must suspend work on the *Union,* delay all our progress toward the moon, so that Khrushchev can taunt the Americans, 'Ha ha! Your *Gemini* sends up two men, but our *Sunrise* sends up three! We win again!' " Pencils and rulers rattled as the great fist came down.

Aksyonov shook his head over the sketches. "It will be three brave cosmonauts who will board this craft," he said.

"Not three cosmonauts at all," the Chief replied. "I have not yet told you the worst part. The *Sunrise* will carry aloft one trained cosmonaut and two untrained 'civilians'—one a doctor, one a scientist or engineer. This way Khrushchev can brag of the first scientific laboratory in space. He said, 'If you cannot build this for me, if you cannot continue to advance our glorious space program, then I assure you that Comrade Shandarin can.' " The Chief paced back down the table to brood over the diagrams. "But what engineer, I ask you, would be noble and courageous and foolish and short enough to climb into such a bucket without a rifle at his back?"

At that moment, Aksyonov knew his answer. He had seen the Chief shudder at the mention of Shandarin's name. But Aksyonov spent a week working up the nerve to pass his answer on to the Chief, and then another couple of weeks persuading him.

The same evening the Chief finally relented, Aksyonov helped him write a long and detailed letter to be sent by special courier to the Politburo member most familiar with the Baikonur program—the former Kazakhstan party secretary, Comrade Brezhnev. The report detailed Comrade Khrushchev's increasing interference with the Soviet space program, and implied (without quite saying so) that ignominious disaster loomed if more rational and far-sighted leaders did not intervene. While the Chief laboriously pecked away at the final draft, for even his two-fingered typing was superior to Aksyonov's, the Motherland's newest cosmonaut sketched a cartoon called "How To Send A Bureaucrat Into Orbit." It showed Khrushchev being shoehorned into a cannon with a crowbar.

"Look out there," Novikov said.

The *Sunrise*'s porthole twinkled with hundreds of tiny lights, each lasting less than a second. A shimmering envelope of ice crystals surrounded the hurtling spacecraft.

"I heard and read descriptions of the fireflies," Aksyonov said, "but I never dreamed how beautiful they are."

"Are you still upside down, Comrade?" the doctor asked him.

Aksyonov laughed. "Yes, but if you can stand it so can I. If I were not as upside down as you two, I would not be here, would I?"

"Well, the Chief will turn us all upside down," Novikov said, "if we don't get some more chores done before we fly back into radio range. We have transitional spectra to photograph, ion fluxes and background radiation to measure, and of course spontaneous greetings to prepare for our Olympic team in Tokyo. Yegorov, perhaps you and our topsy-turvy friend could rehearse the script while I see to these instruments."

"Right away, Comrade. Let me just finish these medical notes...."

Aksyonov squinted at Yegorov's writing hand. "Comrade Doctor," he said. "Is that the pen you typically use for note-taking? In zero gravity, it seems prone to skip."

Yegorov stopped writing, opened his mouth, closed it again, and cast Aksyonov a sheepish glance. "This is not my usual pen, Comrade. I borrowed it for the flight. It is one of the Chief's pens."

His crewmates regarded the doctor for a few seconds. Then Novikov chuckled and reached into a pocket. "Don't be ashamed, Comrade Doctor. Look. I myself asked for one of the great man's handkerchiefs."

After a pause, pilot and doctor both looked at the engineer who lay between them.

"For my part," Aksyonov said, "I have a note he gave me just before launch." He pulled the small square of paper from his jacket and began to unfold it. "I see no harm in sharing it with you—"

Novikov tapped his hand.

"No, Comrade," he said. "That note is for you, and not for us. Maybe at some point we will need to hear it, and then you may read it to us, but not now. Not now. Now we have our orders, Comrades. Shall we get to work?"

VII. *Sunrise Two,* 18 March 1965

"I can't do it. Come in, Baikonur. I can't do it."

"Leonov, this is the Chief. What did you say? Please repeat."

"I can't get back into the airlock, Chief."

"Explain."

"My pressure suit, sir. It has swollen, as we expected, because of the unequal stresses on the materials... but it has swollen much more than we anticipated, in only a ten-minute spacewalk. I didn't realize how much, until just now, when I tried to bend to enter the hatch. It's becoming rigid, Chief, like a suit of armor, or a statue. Please advise."

"I understand, Leonov. This is an inconvenience, nothing more. Have you tried to maneuver with the handholds? Grasp them and haul yourself forward headfirst. Stretch out and pull yourself along like a log. I know it's awkward, but clipping the television camera to the hull was awkward, too, remember?"

"All right. I will try, Chief."

"You're doing fine, Leonov. You have executed a flawless extra-vehicular activity. Your suit may be stiff, but you are more free at this moment than any other man who has ever lived, and we all envy you, Leonov. Report when you are ready. Baikonur out."

"Uh, Baikonur, this is Leonov. Come in, Baikonur. Come in, Chief."

"Yes, Leonov, this is the Chief. What news?"

"No news yet, Chief, I'm still trying. It's hard, because my arms are getting stiff, too, but I'm trying. Chief, could you perhaps keep talking? It helps me focus. Believe it or not, there are a lot of distractions up here. I keep wanting to look at the Earth, at the clouds over the Volga. Or the other way, at the blackness—although it's really a dark blue, and it's beautiful too, in its own way. If you keep talking, Chief, it will help keep me on task."

"Why, Leonov. Am I such an evil boss that you fear my wrath even five hundred kilometers above? Everyone in the control room is smiling and nodding his head, Leonov, so everyone here agrees with you. I am quite the dictator, I see. Well, I will try to mend my ways. When you return I will be a new man, yes? Yes. I will be only the proud uncle to my young friend Leonov. How are you doing, Leonov?"

"I'm still trying, Chief. Keep talking."

"Leonov, do you remember when I came to your cottage last night to tell you to go to bed? I also told you that we cannot foresee every problem on the ground, that your job and pilot Belyayev's job is to step in to deal with the problems that we haven't foreseen down here, and that we have complete faith in your abilities to do this. Well, here is just such a problem as I was talking about, Leonov. This is the unforeseen that was foreseen. And there you are to solve it for us. How are you doing, Leonov? Please report."

"Chief... I'm still out here, and I don't think the handholds will be much use. It's not just that I can't bend in the middle; my arms and legs are sticking out, too, and the hatch is only a meter wide. And the suit is stiffening even as we speak. Maneuvering is like trying to swim without moving my arms and legs. Please advise."

"Thank you, Leonov, we better understand your situation now. We will advise you in a moment. Just now I am going to speak with your pilot, all right? I will switch over very briefly, then confer with my comrades in the control room, then come back to you. If you like, you may admire the Volga. You will be able to describe it all the more vividly when you return."

"All right, Chief."

"Baikonur out... *Sunrise Two,* this is the Chief. Come in, *Sunrise Two*."

"Chief, this is *Sunrise Two*. Do you want me to go out and get him?"

"Negative, Belyayev, negative. You are to stay inside until you receive contrary orders from me. I cannot have both my cosmonauts waltzing together outside the craft until we are sure we can get both of you back inside. Do you understand, Belyayev?"

"I understand, Chief. What shall I do?"

"Do as you are doing, and carry out your orders, and prepare yourself to exit if I say the word. Baikonur out."

"Leonov, this is the Chief. Any progress?"

"No, Chief... but the sunlight on the Black Sea is remarkable."

"And so are you, friend Leonov, and so are you. Listen, Leonov, we have found a way to make your pressure suit

a bit more manageable. Your current air pressure reading is six. If you begin to lessen the air pressure, you should gain some flexibility. Do you understand, Leonov?"

"...Uh, Chief, I do understand, but my pressure's already pretty low relative to the inside of the capsule. How much lower can I go without some real trouble when I get back in? I won't be much good to the mission if I get the bends, Chief."

"That is true, Leonov, but we have work for you to do inside. We don't pay you to loiter out there and watch the clouds all day. And Comrade Belyayev is lonely for your company."

"I don't like this, Chief."

"Nor do we, friend Leonov, nor do we. But you have counted the minutes as attentively as we have, have you not?"

"Yes, Chief."

"And you have noted your oxygen supply as well, correct?"

"Yes, Chief."

"And do you have any alternate courses of action to propose at this time?"

"No, Chief."

"Very well, Leonov, begin to adjust your—"

"Chief."

"I am here, Leonov."

"Is this a group recommendation, Chief ? A consensus? Or is it your personal recommendation?"

"...It is my personal recommendation, Leonov. This is the course of action I would take were I in your place. It is the recommendation of the Chief Designer."

"Thank you, Chief, I will do it. Adjust pressure to what level?"

"No target level. Adjust as slowly, as gradually as possible, all the while trying to flex your arms and legs and bend your waist. We want you through the lock with the highest suit pressure possible. Understood?"

"Understood, Chief. Beginning to reduce suit pressure...

"Five and a half, no good, continuing....

"Five, I do see some improvement in mobility, Chief, repeat, some improvement, but I am still a slow old man up here, continuing....

"Four and a half, I'm doing my best, trying to wedge myself in there, but I can't... can't quite... shall I continue this, Chief?"

"Continue."

"Continuing to reduce pressure.... Four point twenty-five, I really am not liking this, Chief, I really—Chief ! My head and shoulders are inside, I'm pulling myself along, I'm turning around in the airlock—I'm in, Chief ? I'm in, in! Hurrah!"

"Excellent, Leonov! Excellent! Can you hear our applause? Well done!"

"Shit, that was close. I beg your pardon, Chief. Closing airlock. Preparing to equalize pressure...."

"Any problems to report, Leonov? How are you feeling?"

"No problems, Chief. But Belyayev said I smelled pretty ripe when I came in."

"Chief, Lyosha here has not sweated so much since his last physics exams."

"He just completed his most difficult physics exam, friend Belyayev, and he passed it with honors. Congratulations, Leonov."

"Only because you helped me through, Chief."

"Well, I know all about such things, you see. I move like an old man every day. And now, I think, I will let one of these younger fellows talk to you a while, about how we are to get you fellows home again. Chief out."

VIII. Baikonur Cosmodrome, 12 January 1966

Vasily!

Alive! Here! How—?

"Oleg, stop the car! Stop the car, I said!"

After a moment's hesitation, Oleg braked and steered to the shoulder, just beside the ditch that separated the highway from the railroad track and the featureless warehouses beyond. Korolev was out the door before the car quite stopped; he lurched, off balance, until the world quit moving, nearly toppling into the ditch. Some engineer he was, to forget his physics like that.

"Chief, what is it?" Aksyonov called. "What's wrong?"

Ignoring him, Korolev trotted to catch up with the shuffling column of zeks being herded, single file, back toward the launch pad from which he had come. He felt slow, clumsy, like a runner in a nightmare. His legs moved as if knee-deep in roadside slush, though the ground was grey and bare. In this barren land, snow was as rare as rain.

"Chief ! Hey!" Car doors slammed. "What's going on?"

Vasily was dead, surely. Had to be. No man could survive, what—twenty years in the Kolyma? Even if he were such a wonder man, he would be no good to work an outdoor construction detail in a Kazakhstan winter. And Vasily had been at least ten years Korolev's senior to begin with. Thus Korolev reasoned as he quickened his pace, his heart racing. "Vasily!" he cried. "Wait!"

He started to identify himself, then wondered: Had he ever told Vasily his name? Would Vasily remember his number? Oh luckless day! No matter, no matter, surely Vasily would recognize him—unless eating utterly could transform a man. "Vasily!"

One of the guards at the rear of the line turned and raised a hand in warning. "No closer!" he cried. None of the fifty-odd prisoners looked around; all curiosity had been scoured from them, Korolev knew, long long ago. The other guard unstrapped his rifle.

"Halt the line!" boomed Oleg, as he sprinted past Korolev. "It is the will of the Chief Designer! Halt the line!"

The first guard blew a whistle, and the prisoners immediately looked like men who had not walked or moved in years, who had aged in all weathers beside the road, and who would not deign to fall even when they died.

Puffing, Korolev leaned on Aksyonov's shoulder.

"Chief, please. How many more heart attacks do you want? Calm down."

Hands on hips, glaring downward at them, Oleg was trying to intimidate the guards. "Do you have a man named Vasily in this detail?"

The guards, impervious, shrugged. "How should we know, Comrade?"

Oleg began to pace the line, calling the name at intervals. Korolev shook his head. The fortunate man obviously had no experience with political prisoners—himself excepted, of course. "Let's follow Oleg," Korolev told Aksyonov. "Slowly, mind you—slowly."

"That was my plan," Aksyonov said.

Korolev couldn't remember now whether the face he had seen from the car window had been in the back of the line, the front, or the middle (or in a cloud? a clump of weeds?), so he peered at all the faces as he overtook them. So far no glimmer, no trace, no Vasily; but as he walked on, another, more terrible recognition dawned. These men all looked alike. The vacant stares, the beards, the scars and creases of misery—they could all be brothers. How would anyone be able to distinguish among them?

Korolev stopped at the head of the line, smiled weakly at the guard he faced there, then looked back along the column. "I am sorry," Korolev said. "Do you all understand? I am genuinely sorry. My friends, I think I will rest a moment." With the help of Aksyonov and Oleg, he lowered himself onto the weedy rim of the ditch, as weary as the engines of the stars.

"Carry on," Oleg barked, and at the whistle the sad processional shuddered into motion again. The guards eyed Korolev as they passed. He heard them begin to mutter about how nutty the scientists get, with their heads in outer space all the time. Korolev started to laugh, then was seized with his worst coughing fit of the day.

"I will bring the car," Oleg said.

When the coughs had passed, Korolev glanced sideways at Aksyonov. "Your Chief is a wreck," he said. "Do you want a transfer?"

"Sure, Chief, send me to the moon. Who's this Vasily?"

Korolev shook his head, drew his coat a bit closer around him. "Someone I knew many years ago. In the camps."

"The Kolyma."

"Yes. He collapsed at mealtime, was dragged away. I got a piece of his bread, and enjoyed it. Maybe I'm guilty for that, I don't know. I assumed he was dead. I suppose he *is* dead. Yes, I'm sure he is."

"He died, you lived. That's nothing to feel guilty about, Chief. Have you brooded about Vasily all this time?"

Korolev smiled. "Comrade, I had not thought about Vasily once, not in twenty years, until a few moments ago in the car. And then it all came back. Like a comet that has been away for so long that no one remembers it, eh? Yet all the while it is on track out there, makes its great loop, comes round again. As dependable as Oleg, here. Yes, thank you, Oleg. No, stay put, we'll be right over. Aksyonov."

"Yes, Chief ?"

"Listen to me. Tonight I go to Moscow, back into the hospital. I hope to be back in a week, maybe two. The Health Minister has scheduled an operation for me, a hemorrhoid operation. I've had problems down there."

"Is it serious?"

"Serious. It's my ass, isn't it? Yes, my ass is serious. Stop interrupting. Do you still have your copy of Tsiolkovsky's book, of *Exploration of Cosmic Space*—"

"—*with Reactive Devices,* yes, Chief, you know I do."

"While I am gone, I want you to read it over again. Every word of it. Study every diagram. Read it as if it were the first time, as if there were no satellites, no Gagarin, no spacewalk, no cosmonauts, and see where your ideas take you. And I, I will do the same. For I have been too old lately, Aksyonov, and turning you old along with me, I'm afraid; but when I return, we will talk about all these new wonders we have envisioned, and we will savor the sky and be astonished again."

IX. Moscow, 14 January 1966

The Health Minister enjoyed one last cigarette as he leaned against the wall opposite the scrub room. Down the darkened corridor toward the elevators huddled the doctors and nurses who would assist him. They murmured among themselves. One or two looked his way, then avoided his glance.

No doubt they dreaded performing under the scrutiny of the Motherland's most honored physician, and so sought to encourage each other. They did not know their patient's name, but they knew they had not been whisked here after hours to work on any mundane Party apparatchik. They knew that Chairman Brezhnev himself awaited the outcome of the operation; the Health Minister had told them this at the briefing, to impress upon them the importance of this hemorrhoidal procedure, and the honor of their participation in it.

As he watched them now, the Health Minister smiled and shook his head with fond indulgence, smoke pluming. These hard-working men and women did not realize it, but he already had made up his mind to be lenient with them. They would be unusually nervous, with good reason, and he would make allowances when writing his report. He was a servant of the State, yes, but he was also a human being; he could understand, even forgive, the frailties of others; he prided himself on this trait, one of his most admirable and practical. He took a final pull, crushed the butt into his coffee cup, and sighed with satisfaction. Too bad these Winstons were so hard to find....

The doctors and nurses now approached him as a shuffling unit, little Dr. Remek in the lead. Stepping away from the wall, the Health Minister, who had been the third tallest dignitary on the reviewing stand at the 1965 May Day parade, drew himself to his full height and smiled down at them. "Are we all ready to wash up, Comrades? Our patient should be prepared by now."

Dr. Remek cleared his tiny throat. He sounded like a noisemaker blown by an asthmatic child. "Comrade Minister, my colleagues and I... with all due respect, sir... we would like to recommend that... that, the gravity of the situation being what it is, that you, or, that is, we, take the added precaution of, of..."

"I am waiting, Dr. Remek," the Minister murmured. His eyes had narrowed during this preamble.

Remek turned to the others with a look of despair. One of the nurses stepped forward and said:

"Comrade Minister, we request that Dr. Vishnevskiy be included on this surgical team."

"Vishnevskiy," the Minister repeated. He should have guessed. The others fidgeted. The nurse (whose name escaped him; he would look it up later) maintained her defiant gaze. "And what could *young* Dr. Vishnevskiy contribute to these proceedings?"

Now they all found voices.

"He has performed dozens of these operations."

"His technique is flawless, Comrade Minister, you should see him at work."

"He has not been so... burdened with administrative duties in recent years as you, Comrade Minister." That was Remek, the toad.

"And surely the welfare of this patient, so vital to the interests of the Revolution, warrants the collaboration of *all* the finest doctors on the staff."

The Health Minister smiled and raised a hand. "I thank you all for your counsel. It has been duly noted, and will not be forgotten. I cannot detail my reasons for not calling upon Dr. Vishnevskiy—for much of the material that crosses my desk, as you know, is classified—but suffice to say that security issues were among my considerations. Besides. *My* understanding is that *young* Dr. Vishnevskiy's surgical technique, however flashy and attention-getting, may be somewhat impaired after the dinner hour. Thank you all again for your concern. After you... comrades."

The team trudged into the scrub room like a detail of zeks. All avoided the Health Minister's gaze except for that one nurse, whose glance was not only contemptuous but dismissive. Fighting his anger, the Minister took a deep breath and consoled himself with the thought that the upstart Vishnevskiy would share none of the credit for this service to the Revolution. No, this personal friend of Brezhnev, this most laudable Communist, would receive a most singular honor: His operation would be personally performed by a full, sitting member of the Politburo. The Health Minister pushed forward, and behind him the swinging doors repeatedly clapped.

The sirens grew louder as Vishnevskiy and his friend the music critic, the last to leave as usual, bantered outside the opera.

"No, no, you will go before I do, my friend," the music critic said. "The moon will need surgeons long before symphonies, and a critic? If we know what's good for us, we critics will all stay down here, where there's so much more to criticize."

Vishnevskiy guffawed and clapped his friend on the back. "Well said, well said, but surely musicians, writers, artists of every stripe should be among the first to walk the lunar landscape. Who better to relay its wonders to the rest of us? The job must not be left to the television cameras, of that I'm sure. The mind reels at the thought."

"We have visitors," said the music critic, suddenly grave.

Roaring up the circular drive were four police motorcycles, sirens wailing. They wheeled to a halt in the gray slush at the foot of the grand staircase.

"Dr. Vishnevskiy?" one of the officers called.

"Yes," he stated. His shoulder ached beneath the clamp of his friend's hand, but he was nonetheless grateful for it.

"You are urgently needed in the operating room, Comrade Doctor. We are here to escort you."

The music critic slumped in relief, and Vishnevskiy exhaled a roiling cloud of breath.

"I thank you, Comrades," he said. "I am ready to go."

Poor Remek, talking so fast he practically stuttered, briefed him through the intercom as he lathered his arms. Vishnevskiy wasted no time asking questions, enough time had been wasted already, but he wondered: How the hell had intestinal cancer been mistaken for hemorrhoids? And why hadn't they halted the procedure, called for help and more equipment, instead of hacking around in him for hours? Then Remek started babbling about the importance to the State of the poor soul on the table, and Vishnevskiy had his answer.

"The Minister," he snarled.

The damned fool didn't even have the nerve to look up as Vishnevskiy ran into the operating room, though all other heads turned. His run to the table became a trot, then a walk, as he looked at the Health Minister, who moaned softly as he worked, and at the others, bloody hands at their sides. Vishnevskiy looked at the patient, closed his eyes, and controlled himself before he opened them again. He reached up and ripped off the mask.

"I do not operate on dead men," he said.

Outside, alone and glad of the cold, Vishnevskiy looked up and thought, ah moon, what do you know of slaughter, and pride, and folly? Better we should stay where we are.

X. Baikonur Cosmodrome, February 1966

At first, Aksyonov pretended he didn't hear the knocking. He figured it was only Shandarin again, with a freshly typed sheet of demands. Shandarin liked to deliver his memos in person so that he could watch his team leaders read them, gauge their reactions, and satisfy himself that his wishes were clear. They were clear to Aksyonov even before the first memo, clear at least from the afternoon of the Chief's funeral, when Shandarin had left the Kremlin wall in Brezhnev's limousine.

The Chief's plan for tanker craft carried into orbit by *Old Number Seven* had been scrapped. Not spectacular enough, not decisive enough, for Shandarin (and not, presumably, for Brezhnev either). Instead, Shandarin's own giant *Proton*, designed to carry hundred-megaton warheads, would blast cosmonauts into a loop around the moon in October 1967; the *Proton*'s as-yet theoretical descendant, Shandarin's cherished G-1, would launch the redesigned *Union* spacecraft toward a moon landing the following year. As for the Chief's meticulous series of incremental test flights to check out the new *Union*'s capabilities one at a time, Shandarin had crossed out most of them, so that a totally revamped craft could be shot into orbit in a year—or less.

When Aksyonov first realized the enormity of what the Chief's successor intended to do, he was too dumbfounded even to be angry. Instead he laughed. Chuckling, Aksyonov spun the dossier down the conference table, so that pages whirled out of the folder like petals, and said, "Impossible."

The folder stopped in front of Shandarin, who sat at the far end of the long table, in what he had wrongly assumed was the Chief's chair. (The Chief had paced during meetings, never sat anywhere, and where the others sat, or whether they sat at all, had never been among his concerns.) "Impossible?" Shandarin snorted. "What nonsense. Have you forgotten, Comrade? Artificial satellites are impossible. A manned spacecraft in orbit is impossible. We have done the impossible for years, Comrade Aksyonov. Now we will do it faster and more efficiently, that's all."

Aksyonov drew from his wallet a clipping from the January 16 edition of *Truth.* Already two such clippings had fallen to pieces in his hands from repeated unfolding and reading and folding again; fortunately, old *Truths* were not hard to find, even at Baikonur. "You read this tribute to the Chief upon his death, did you not, Comrade Shandarin?"

"Of course I read it. You wave it at me every three days; how could I fail to have read it?"

"To my knowledge," Aksyonov continued, "this was the first time the Chief's name ever appeared in print. Think of that. For twenty, no, thirty years he was the guiding genius of the Soviet space program—even before the government knew it *had* a space program. Yet how many Soviets knew his name? How many of the disciples who worked beside him every day knew his name? How many of the cosmonauts who entrusted their lives to him knew his name? And did the Chief care? Did he mind that he was a man without a name?"

"What is your point, Aksyonov? I have work to do today, if you do not."

"I am making no point, Comrade Shandarin. You are the man who makes points—very clear and unequivocal points. No, I just wonder whether your goal is to put a man on the face of the moon, or to put your name on the front page of *Truth,* and how many of us nameless men you will sacrifice to get it there."

Shandarin stood, smiled, gathered his papers, and slowly walked the length of the table. He patted Aksyonov on the shoulder, leaned forward until their noses practically touched, and said in a warm and fatherly voice, "Not so very many years ago, I commanded a far more efficient operation, where I occasionally had my workers shot for

insolence."

"How strange, then, that you didn't shoot the Chief when you had the chance," Aksyonov replied, "since he always knew you to be a tyrant and a fool. I am surprised you were not strong enough to bury his body in the snow of the gulag, and lead us all into space on your own."

And so Aksyonov felt no real reason to answer the door. He just sat on the swaybacked couch, read the clipping again, and let the man knock. Knock, knock! Yet this didn't sound like Shandarin's impatient rap, nor the idiot pounding of the KGB. This was the gentle, incessant knock of someone who would stand there on the porch of the cottage until doomsday, secure in the faith that his knocking was not in vain. Growling, Aksyonov kicked through the litter of dirty clothes (what was the point of laundry now?) and flung open the door.

A woman.

A wide, heavy-set, attractive woman of about fifty, graying hair tied behind in a youthful braid. Large nose and deep brown eyes. She cradled in her arms a bulky cardboard box bound with masking tape. Behind her, at the foot of the drive, Oleg stood at attention beside the car.

Aksyonov blinked at both of them in wonderment.

"Comrade Aksyonov? I apologize for disturbing you so late, but I must return to Moscow tonight. I am Nina Ivanovna Korolev. Sergei Pavlovich's wife. The Chief's wife."

"His wife!" Aksyonov exclaimed.

She stooped and set the box onto the porch at his feet. Straightening, she smiled a thin, sad smile. "You need not struggle to conceal your astonishment, Comrade. I know that my husband never spoke of me here. Far safer, he said, to keep his family as secret as possible."

"His family!" Next the sun and the moon would wrestle for dominion of the sky.

"I am sure I know much more about you than you about me, Comrade Aksyonov. My husband spoke of you whenever he came to Moscow. He said he had more faith in you than in any rocket he had ever designed." She nodded at the box and said, "These are a few of his personal effects. I am sure he would have wanted you to have them."

"Personal effects," Aksyonov said, slumped against the doorway. He felt increasingly redundant in this conversation. "Please, forgive my manners, Nina Ivanovna. Won't you come inside, out of the cold? Oleg, you come, too. Please, I will brew some tea—"

She shook her head. "I am sorry, but I must go. The helicopter waits. Goodbye, Comrade Aksyonov. Thank you for your help to my husband." She moved with remarkable grace for a large woman, and was halfway down the steps before he could react.

"Wait!" he cried.

She did, though she did not look around. She faced the frozen yard, and trembled.

"Please, I don't understand. There's so much I want to ask you, about your family, and about the Chief—I mean, about Sergei Pavlovich. He was such a tremendous influence on me, you see, on so many of us, and I know so little about him. So little. Next to nothing, really. And I could tell you things. I could tell you what he was like here, what he used to do and say, how the cosmonauts all venerated him, you have no idea. You should know all this. Come inside, please. We have so much to talk about—"

"We have *nothing* to talk about," she said as she faced him. "Don't you see? Can't you imagine how difficult it was for me to come here? To see this place that destroyed my husband—that destroyed me? Year after year after year, Comrade Aksyonov, about once a month, with no warning whatsoever, my telephone would ring, and I would answer it immediately, for our apartment is small and I sleep but lightly, and then I would go downstairs and watch my husband climb out of a car full of soldiers—so slowly, oh, so slowly he moved, like an old, old man—I never saw him when he wasn't exhausted. He and I would sit at the foot of the stairs and talk for an hour or more, until he had gathered the strength to climb to the bedroom and go to sleep. And the next morning the car full of soldiers would still be out there, and it would take him away again. Back to this place. Back to all of you. Do you understand, Comrade Aksyonov, why I do not rush to embrace you now?" She walked a few paces into the yard, then added: "When my husband was sent to Siberia, so many years ago, I was like a madwoman. I thought he was lost to me, that he would be in prison for the rest of his life. And I was right, Comrade, I was right."

"Your husband was a free man," Aksyonov said.

"I have no control over what you believe," Nina Ivanovna said. She nodded toward the package on the porch. "I have given you all that I can give you. And now I must go home."

She walked to the car, where Oleg held open the passenger door. Just before she stepped inside, she called out, "Try to get some sleep, Comrade Aksyonov. My husband always worried because you worked so late."

Aksyonov knelt beside the package, rubbed his hands across the smooth surfaces of tape, looking for a seam, as the car sputtered to life and Oleg and Nina Ivanovna drove away. He never saw either of them again.

XI. Baikonur Cosmodrome, 24 April 1967

Aksyonov would not have thought it possible: Somehow the two soldiers who flanked the control-room door, already as erect and expressionless as twin gantries, managed to snap to attention as the prime minister walked in. Every controller, engineer, and technician in the room stood as well, though they had not been trained in it and were far less impressive than the soldiers.

The prime minister wore a well-tailored black suit that looked nondescript beside the uniform of his escort, General Zeldovich, who was splendid in medals and buttons and epaulets. The prime minister nodded at everyone and patted the air. With a collective exhalation, everyone sat and returned to their tasks, except for Aksyonov and Shandarin, who joined the dignitaries in the back of the room.

Aksyonov was aware of the sweaty moons beneath his own arms, of the hair he had neither washed nor combed in more than a day, and he cursed himself for such thoughts. What must poor Novikov look like at this moment? Novikov, who had cooked him *besh barmak*; Novikov, who had told him it was no dishonor to be sick in space; Novikov now was in an orbital hell, somersaulting in vomit and terror.

"This is a great honor, Comrade Prime Minister," Shandarin said, and shook his hand a bit too vigorously. "Your historic contribution to this mission will do wonders for Comrade Novikov's performance."

"Whatever I can do to help, Comrade," the prime minister said, and gently freed his hand. He surveyed the descending tiers of desks and instrument panels, the vast display screens on the far wall, the litter of sandwich wrappers and tea glasses underfoot, the samovar in the corner. His nose wrinkled slightly: The sweat of unwashed men, Aksyonov wondered, or the far worse stink of desperation? "Please show me to my microphone, and tell me the current situation," the prime minister said. "In layman's terms, mind you."

Shandarin rolled his own plush chair back over Aksyonov's toes and gestured for the prime minister to sit. He had cleared his work station of everything but a microphone and a small gold-plated bust of Lenin, which the prime minister pushed aside to open his leather briefcase. Shandarin glanced at Aksyonov, who recited on cue:

"Comrade Novikov is in his eighteenth orbit of the Earth. Because of a failed solar panel, his craft is critically low on electrical power, so that most of its automatic systems are inoperable. He has attempted for some time to manually orient the craft for re-entry, thus far without success. Even now we are talking him through the process."

The prime minister had opened a manila file folder containing many closely typed pages. Aksyonov edged closer, tried to read over the prime minister's shoulder. "About an hour ago," Aksyonov continued, "Novikov spoke to his wife on the radio. Understandably, she was quite upset."

The prime minister glanced around at the general, his papers poised. "The woman we passed in the corridor?"

The general nodded.

"I assumed she was one of the female cosmonauts," the prime minister said.

The general looked uncomfortable and said, "No, Comrade." All the other women cosmonauts-in-training had, of course, been sent home after Valentina Tereshkova landed safely four years earlier. Tereshkova herself had been sent on a worldwide lecture tour, her three-day space career at an end.

"Good," the prime minister said. "I had wondered at such a womanly outburst from a trained pilot." The general tugged at his white mustache as if to say yes, yes, just so. "Proceed, Comrade."

"One more thing, Comrade Prime Minister," Aksyonov continued. "The craft's shortwave radio failed very early in the flight. We have been using the craft's ultra-shortwave backup radio, but because electrical power is in such short supply, even that is beginning to fade. Much of your message to the cosmonaut, in short, may be lost in static and garble."

The prime minister smiled for the first time. "You may know quite a lot about spaceflight, Comrade," he said, "but I know a good bit about speeches. And I assure you, the individual sentences are never as important as the cumulative whole—as Comrade Castro has demonstrated, eh, Comrade General?" He and the general chuckled, and Shandarin, after a pause, joined them. Aksyonov did not. He was scanning the text of the prime minister's welcome-home address to honor Jakov Novikov, in which each reference to the cosmonaut as "he" and "his" had been amended, in a neat and precise hand, to "you" and "your." Then the prime minister laid his hand across the sheet.

"Do you have any questions, Comrade Prime Minister?" Shandarin asked.

"Just one," the prime minister said, looking at Aksyonov. "Does Novikov's wife have reason to weep?"

Shandarin opened his mouth to reply, but Aksyonov was quicker. He said: "The *Union One* is out of control."

The prime minister, the general, Shandarin, all regarded him. The whole room was hushed by this heresy, though none but the nearest tier of controllers could have overheard.

Several tiers below, one man read aloud a list of numbers for another man to double-check. The numbers were long, with many decimal places, and their progress was slow. "Let's just start over," one of the men said.

"I see," the prime minister said, as he rubbed his eyes. He swiveled to face forward, squared the edges of his speech, and said, "I am ready, Comrade."

Glaring at Aksyonov, Shandarin flipped a switch at the base of the prime minister's antiquated desk microphone and adjusted his own compact headset, which had been deemed too complicated for the visitor. "Speakers, please," Shandarin said.

Amplified static filled the room. Aksyonov sat at his reassuringly cluttered station and focused on the blinking

dot that marked Novikov's position on a world map—as if the cosmonaut's border crossings, one every few minutes, mattered to him now.

"*Union One,* this is Baikonur. *Union One,* this is Baikonur, can you hear me, *Union One*?" More static. "*Union One,* this is Baikonur. Please respond if you can hear me, *Union One*."

More static, then: "I'm doing it, I'm doing it, but it doesn't work. Do you hear me, Baikonur? It doesn't work!" More static.

Shandarin raised his eyebrows at the flight director, who said, "We asked him to try the automatic stabilizers again."

Aksyonov shook his head. How many different ways could a man push the same button?

"*Union One,* this is Baikonur. We hear you, and we continue to work on the problem. But now we have another visitor for you, *Union One,* a very important visitor who wants to speak with you. Here beside me is the prime minister of the Soviet Union. Do you understand, *Union One*?"

More static. Then: "The prime minister?"

"Yes, *Union One.* I ask for your attention. The next voice you hear will be that of the prime minister, with a personal message of tribute." He nodded at the prime minister, who nodded in return, leaned close enough to the microphone to kiss it, and shouted:

"Greetings, Jakov Novikov, loyal son of our Motherland, wonderful Communist, courageous explorer of space, comrade in arms, and friend...."

Responding to Shandarin's signals, Aksyonov and the team leaders joined him and the general in the back of the room.

"Obviously Novikov will be unable to maneuver the craft into the best trajectory for re-entry," Shandarin said. "The best he can do is turn the craft so that the heat shield faces the Earth, and then fire the retro-rockets. Discussion?"

Everyone spoke at once, and after one loud instant muted themselves so as not to disturb the prime minister.

"That's suicide—"

"It's such a narrow window, he'll never—"

"He'll be so far off course, God knows where he'll end up—"

"He'll have no way to control the spin as he comes down—"

"You all have considered this outcome already, I see," Shandarin said. "Have you also thought of other options? Perhaps Novikov should press every button in the craft another hundred times, until the radio dies, and we all go home?"

No one replied. A couple of the men shook their heads. All looked pale and sick.

"Aksyonov, you are uncharacteristically silent. What do you say?"

"I just broke a young man's neck, Madam, with a slide rule and the stroke of a pen."

"What?"

Aksyonov pressed the heels of his hands to his forehead. "I am talking to myself, Comrade. I apologize. But much as I hate to admit it, I must agree with you. I see no other option."

"We're trusting to blind luck!" one man said.

"Perhaps so," Shandarin retorted, "but all the luck in orbit has run out. If any luck remains for this flight, Novikov must find it on re-entry."

The flight director lighted a cigarette and ticked off items on his fingers. "Solar panel down. Shortwave radio down. Stabilizers down. Thrusters down. Suppose the retro-rockets are down, too? And the parachute, for that matter?"

"And the ejection seat?" the general added.

The others looked at the floor. "Comrade General," Aksyonov said, as gently as he could, "on *Union One* there is no ejection seat. You approved the design yourself, Comrade General."

The general began to curse, and the others returned to their stations. Shandarin gripped Aksyonov's upper arm so tightly that the younger man winced.

"I will not forget your support," Shandarin said.

Aksyonov wrenched himself free.

The prime minister glanced up from his text, then faltered before he found his place again. "In all future generations, your name will summon the glory of our great Socialist country to new feats—"

Then Novikov's voice, the voice of a man roused from a long trance, ripped from the speakers:

"What is this bullshit? God damn! God damn! Baikonur! Baikonur! This is *Union One.* Help me, Baikonur!"

The prime minister sat frozen, mouth agape. Shoving past Aksyonov, Shandarin switched on his headset. "This is Baikonur, *Union One*. Explain yourself, *Union One*!"

"Explain myself? Explain myself ! Shit shit shit!" More static. "Don't you understand? You've got to do something. I don't want to die. Do you hear me, Baikonur? I don't want to die!"

A fresh burst of static obliterated his next words, but Aksyonov, like everyone else in the room, recognized their rhythms; he himself had sobbed just as uncontrollably at the Chief's funeral.

The cosmonaut's despair seemed to yank something vital from Shandarin. He swayed forward like a falling tree,

slammed his hands onto the desktop, and leaned there, looking at nothing.

With a trembling hand, the general switched off the prime minister's microphone. "Perhaps under the circumstances," he began.

"Yes, of course," the prime minister said, as he swept up his papers and his briefcase. He stood so clumsily that the swivel chair toppled over. The guards, staring at the loudspeakers, paid the prime minister no heed as the general hustled him out the door.

Shandarin slumped against the console. Still Novikov continued to sob. Three dozen faces looked up at Shandarin. Several were streaked with tears.

Aksyonov couldn't stand it. "Say something!" he hissed. "Reassure him. Tell him we have a plan."

He shook Shandarin once, twice. Then he slapped him, a blistering crack that affected Shandarin not at all.

"I... I can't... I don't..." Shandarin's voice was a ghastly, slurred imitation of itself.

The flight director cried, "For God's sake, talk to him!"

Aksyonov strode to the prime minister's microphone, switched it on, and said:

"Novikov. Novikov. Think of the Chief."

Amid the static, a small voice. "...What... ?"

Absolute silence in the control room.

"The Chief, Novikov. What would the Chief do?"

"...The Chief..."

"This is Aksyonov. You remember me, eh? Your upside-down engineer friend? You piloted me into orbit, Novikov, and brought me safely down again, and I complained the whole way—you did it, Novikov. We did it. You and me and the doctor, and the Chief. Do you remember?"

"Yes... yes, Comrade... I remember."

"Listen to me, Novikov. We have a plan, a plan I believe the Chief would approve of. But first, I want to read you something. You remember the note I carried into space? The note the Chief gave me just before launch? You told me then that I shouldn't read you the note until the proper time had come. Well, I have the note with me now, Novikov. I have carried it in my pocket ever since. Let me unfold it now.... Here is what it says, Novikov. It says, 'My friend, I am good at spacecraft design because I know just what cosmonauts feel like. I too have been alone and frightened and very far from home, and surrounded by the cold. Soon you will know how this feels, as well. But I survived, my friend, and so will you, and we will continue to design great things together. Signed, the Chief.' Do you understand, Novikov? The Chief knows exactly how you feel."

A long silence. Aksyonov watched the blinking dot approach Africa. One of the team leaders thrust a printout under his nose and whispered, "The nineteenth orbit is coming up. It's his last chance to—" Aksyonov waved him away.

The cosmonaut spoke. "The Chief... is dead."

"Do you really believe that, Novikov? Do you really for a moment believe that?"

More static, then Novikov slowly and soberly replied: "No, Comrade. No, I don't."

Aksyonov dragged the microphone with him as he sat on the floor. He no longer could see the map, just the Chief's face, laughing in the darkness outside Gagarin's cottage. "I don't either, Novikov," Aksyonov said, and raked the tears from his eyes. He smiled at the men to left and right who passed him calculations and tissues. "Now listen to me carefully. Here's what we are going to do..."

The *Union One* plunged through the atmosphere, tumbled end over end like a boy who has lost his sled halfway down the hill, its useless parachute a braided rope behind.

The final intelligible radio transmission from its pilot was not the despairing

you are guiding me wrongly, you are guiding me wrongly, can't you understand

reported by a U.S. intelligence officer years after the fact, but in fact a later message, a three-word scrap:

Chief is here

Some who have heard the tape do not believe, and say these are not the words.

But the cosmonauts—they believe.

XII. Baikonur Cosmodrome, 22 August 1997

"Excellent!"

"Wonderful!"

"Good job, Peace!"

Cheers, applause, shouts reverberated through the control room. People hugged, kissed, pounded one another on the back.

One of the small, short-haired women—Lyudmilla? No, Lyudmilla had vacationed in Prague, and now sported a half-dozen earrings in her right ear, all the way up, like the spiral in a notebook—one of them, anyway, was swept into the air by that oaf Atkov, who did not even know how to use a slide rule. They kissed with a *smack* audible over the din, and then Atkov handed her to the next man, Serebrov? Shatalov? One of the newcomers. She kissed him, too, and squealed like a child.

Aksyonov watched, and said nothing. The engineers were due some good news, some release, and he supposed he could suffer their enthusiasm. For a while.

Aksyonov stood alone on the topmost row at the back of the room, hands clasped behind. He stood rigid, head tilted. At his left elbow was the big standing model of the Peace, its core module likewise tilted, a few degrees off true.

The official mission control room for the Peace was outside Moscow, of course, in the complex named for the Chief. But the entire Russian space program had been on red alert since the June 25 collision—especially Baikonur, where Earth's lone space station had been designed and built.

Onscreen, the three crewmen—Solovyev, Vinogradov, and Mike the American—crouched over their instruments. The image was blurred, but they obviously were grinning like NASA chimps. Mike the American held up both his thumbs as he grimaced, as if being tortured. This was for television's benefit. Yet the crew had reason to be happy, of course. Askyonov looked at his watch. For another few seconds.

"Confirmed, Moscow," Solovyev said, his voice fractured by static. "All electrical circuits working fine. The new hatch is a success. Repeat, a success. Full power is restored."

A new round of cheers and shrieks in the control room. Aksyonov's lips moved as he counted. Eight. Five. Three. Tolubko strode up the stairs toward him, smiling behind her headset microphone, her heavy eyebrows a single dark swath across her pretty face. He nodded at her, then clapped his hands once, twice, solid reports. He would have clapped a third time, but the room was already silent.

"Gentlemen and ladies," he called out. "To your tasks, please." He disdained the public-address system. His reedy quaver was embarrassing enough these days without amplification. Yet he was heard. Look how they bustled into position. The workaday murmur resumed. The party was over.

Sometimes they forgot that Askyonov's role here was purely sentimental, purely ceremonial. Sometimes Aksyonov forgot it himself. Why did his colleagues always jump when he so much as lifted an eyebrow? He would never understand it, no, not if he lived to be two hundred, and had helped build twenty-five space stations, flying all the flags of the world.

"Moscow wants you to say a word," Tolubko said.

Surprised, Aksyonov picked up and put on his headset, which he had wrenched off in a brief moment of jubilation. He cast an inquiring glance at Tolubko. She nodded and mouthed, "You're on."

"Comrades on Peace, this is Aksyonov," he said. He saw Tolubko frown at "comrades," but he couldn't devote the short remainder of his life to preventing Tolubko's frowns, could he? "You have done well. You have made history, *comrades,* with your indoor space walk." Why did they look so blurred? It was his eyes, Tolubko had assured him. Yet another body part failing. "But now we down here must make some history of our own, if this station is to become fully functional again. Stand by, please. Aksyonov out."

Why bother? He lacked the Chief's eloquence; he always had. Suddenly weary, he peeled off the headset. Tolubko nodded at her second, Merkys, who nodded in turn and began rattling off suggestions to Moscow, reading from a clipboard that others kept sliding papers onto. Aksyonov set down the headset, too close, it happened, to the edge of the desk. His hand shot out to catch it, but missed. The little plastic hoop tumbled to the floor. A dart in his shoulder; he had strained himself again. Tolubko crouched to retrieve the headset, her skirt riding up, and stood beside him again, reminding him anew that she was taller than he was. She touched his arm.

"Evgeny?" she murmured. "Are you all right?"

"I am fine," he said. He knew he didn't sound convincing. He leaned on the back of a chair. "I am a man of iron, my dear." He nodded toward the model. "It is the Peace that is falling apart. Worry about her."

"The Peace has power again. Your turn now. Go to bed, Evgeny. Get some rest. Come back fresh tomorrow, when we're ass-deep in crises again." Her smile was an older woman's smile, knowing and known. "We won't repair everything while you're gone. I promise."

As she spoke, she nudged him toward the exit, her arm around his shoulders, and Aksyonov let her. He did not appreciate being lectured, however gently, but he granted Tolubko many liberties. He knew she realized this, took advantage. What of it? The young had the advantage already.

"I think the Georgians are coming by tomorrow," Tolubko continued, as they neared the door. "You should look nice for them. Put on your other shirt."

"The hell with the Georgians," Aksyonov said. He halted, and Tolubko walked just a little past before compensating. "Don't tell me about the Georgians. If the Georgians hadn't charged us the moon for that automated guidance system, Moscow wouldn't have made us steer the cargo ship in by hand in the first place. No wonder we knocked the station half out of orbit." He waved at the men on the screen. "It ought to be Georgians up there, treading water. Putting out fires." He faltered, snorted. "Georgians!"

Tolubko was smiling. He flushed.

"You have heard all this before," he muttered. "Why don't you interrupt?"

She squeezed his arm. "You told me once, 'No one learns anything by interrupting.' "

"I tell you many things," he said. "You don't have to listen."

The guard held the door open, waiting. He looked terrified—whether of the old man, or of the young woman, Aksyonov couldn't tell. Maybe he feared being blamed for everything that had happened to the Peace this summer, from the collision onward. The guard in the back of the room, yes! He did it! That was no unreasonable fear in the Soviet Union, or in Yeltsin's Russia, either.

"Tolubko," Merkys called. "Come look at these figures, will you?"

"Be right there," she called. "Good night, Evgeny." He hesitated, and she pushed, so slightly it was almost a telepathic pulse. "Good *night*." She squeezed his arm again before striding away. He did not allow himself to watch the back of her head, the sway of her skirt. Ah, Evgeny, he thought. Once you laughed at such follies. Now you, too, are a foolish old man.

As he passed, the guard asked, "May I radio for an escort, sir?"

"No," he replied, more harshly than he meant.

"As you wish, sir. Good night, sir."

He wanted to say something friendly, to make the guard feel better, but could think of nothing. Was this the guard with the young son, the boy with the scar? Fathers love to be asked about their children. Or was that one of the other guards? Oh, the hell with it. The door had closed anyway, and Aksyonov was alone in the corridor.

As he walked the winding incline he had walked for so many years, Aksyonov passed through three sets of guards and five sets of scanners and ignored them all. The guards saluted, and the scanners beeped, so he must have measured up to the Platonic Aksyonov of their memories. Or close enough.

Between checkpoints, his footsteps echoed in the dim, deserted halls. The darkness was a budget-cutting measure. Lights were more critical in orbit, and so four-fifths of the overheads in the old sector, mostly used for storage, had been switched off. Aksyonov's colleagues didn't mind. Hadn't Gorbachev, as a farewell gesture, built them a grand new entrance, with a new elevator bank? No longer any need to pass through this back way, this tilted maze, to reach the surface. Why not leave it to the rats?

But Aksyonov was never in a hurry to reach the surface. He didn't like elevators, either, not since *Sunrise One*. And he was secretly pleased to walk through space that others shunned. For people claimed strange experiences down here, in the old sector. To have seen people who, in the next instant, weren't there. To have heard voices. The guards had petitioned for fewer checkpoints, consolidated shifts. (And, needless to add these days, more money.) Everyone was uneasy—except the scanners, which never saw anything odd, and Aksyonov, who had roamed these corridors for decades, and who wasn't about to stop now. He hated agreeing with the scanners on anything.

He *was* walking a little faster these days, though. For the exercise.

He passed the last checkpoint and emerged into a full-face breeze on the north side of the windswept plaza, in front of Brezhnev's hideous cafeteria. Aksyonov stood in the round mouth of the tunnel, breathed deeply, and stretched his arms, his habit whenever reaching the surface. A foolish habit; there was just as much room for stretching underground. He swung his arms back and forth, hugged himself three times, clap clap clap. Too cloudy for stargazing, but the night was warm, and the breeze was pleasant with the distant scents of wild onions and new-mown hay—a reminder, Aksyonov realized with a scowl, that there had been no launches in, how long? In the old days there was a fine, constant stench. He ripped a tuft of grass from a crack in the pavement, let the blades sift through his fingers. The weeds beneath the plaza survived every attempt at eradication. One night Aksyonov would camp out here, and watch them grow.

He walked across the deserted plaza, his footsteps still echoing. An acoustical trick. His path took him past that rare thing in the former Soviet Union, a new statue. Hands on hips, a rolled blueprint under one arm, Sergei Korolev stood stiff-legged and looked at the sky. As Aksyonov approached, he thought once again: a poor likeness. It favored Lenin. As how could it not? The sculptor had done only Lenins for thirty years.

As he approached the marble Chief, he began to smell the flowers. More than usual, judging from the smell and from the dark heaps at the base of the statue. At dawn the Kazakhs would clear away the oldest bouquets, but enough would remain to give the plaza its only color, its only mystery.

The Kazakhs picked up just the flowers, and left the rest. Space photos clipped from magazines and crudely framed. Children's plastic toy rockets. Boxes of the shoddy East German pens the Chief had used—as if he had had much choice. About once a month, Aksyonov fetched a crate from the cafeteria and collected them all, carried them to the lost and found. A silly chore, beneath his dignity; he could easily ask the Kazakhs to do it, or anyone else at the complex, for that matter. But Aksyonov had never spoken to anyone at Baikonur about this—this whatever-it-was—this *shrine*. And he never intended to. Not even to ask who in the devil kept piling up the stuff in the first place. One toy space station, he knew, he had carted away at least three times.

No one ever offered to help him, either.

As Aksyonov passed the statue, he saw a new shape on the ground. What—? He stopped and gaped, sucked in his breath.

The shape reared up, and Aksyonov cried out. A man was scrambling to his feet.

"Apologies, good sir," the man said, in Kazakh. "I did not mean to frighten. My apologies."

The man already was trotting away, dusting himself. He might have looked back once, but then he was lost in the darkness of the plaza.

Exhaling, willing his heart to slow, Aksyonov peered at the base of the statue. Had the man left some token of esteem? Aksyonov was quite sure he had interrupted something.

Had the man really been on his knees, prone on the pavement, facing the statue? Had he really been in the Muslim attitude of prayer?

Aksyonov hurried across the pavement to the blank-faced Khrushchev block that housed his rooms. On the stoop, he fumbled for his keys.

Aksyonov had read that in Paris, grieving tourists piled sentimental litter atop the graves of movie actors and pop stars. One expected such things of Paris.

But this was Baikonur, sobersided Baikonur. There were no tourists, no adolescents here. The cosmonauts, yes, they were a superstitious, childish lot, always had been—the stories they brought back from the Peace, well! Really. But the engineers, computer programmers, astrophysicists, bureaucrats?

Absurdity—the Chief a pop star!

Unlocked, the door proved to be stuck, as usual; he shouldered it open. Another dart of pain.

Who prays to a pop star?

He closed the door behind him and groped for the switch. With typical foresight, Khrushchev's electricians had placed the switch more than a yard away from the door, and at a peculiar height. It was always a bit of a search.

The cafeteria light was easier to find. Once, Aksyonov, restless in the middle of the night, had walked into the darkened cafeteria, flipped on the light, and startled a group of fifteen or so engineers, all young, huddled around a single candle at a corner table. They looked stricken. A dope orgy, was Aksyonov's first thought. Thrilled and mortified, he fumbled an apology, turned the light back off, and left, never to raise the subject with anyone. It was none of his business. He never asked Tolubko what it was that she whisked off the table, and hid in her lap. It had looked, fleetingly, like a photograph.

Aksyonov did not encourage his colleagues to share the details of their personal lives. Only the details of the projects they were working on. And they did that, he was sure.

Pretty sure.

Where was that damn light? His fingernails raked the plaster.

A space program as *jihad.* Imagine.

When they pray to the Chief, does he answer?

He answered Novikov.

"Novikov," Aksyonov muttered. Old men were allowed to talk to themselves, weren't they? "I put the Chief in Novikov's head! Just to calm him down, make his last moments less horrible. If anyone helped him, it was not the Chief. It was I. I, Aksyonov."

His hands slid all over the wall. This was embarrassing. Would he have to call someone, to cry out, Tolubko, please come over here, turn on my light for me? She'd think it a ruse, a ploy to entice her into bed. He laughed, then began to cry. He would never find the light. He was an old, old man, and there was no light. He leaned against the wall and slid down. He sat on the floor, sobbing in the darkness.

Stop it, Aksyonov. Stop it.

He closed his eyes, wrapped his arms around himself, clutched himself. He felt the trembling worsen. He bit his lip, fought a scream.

He was not alone in the room.

This was helpful, a fact to hold. The trembling in his arms gradually eased, and he relaxed his grip. His upper arms and his fingers were sore. Stiff tomorrow. He breathed in through his nose, out through his mouth, as his mother had taught him long ago. He did not open his eyes, but he knew that if he did...

He knew.

"Ah, Chief," Aksyonov said. "Lurk around here all you wish. I will never worship you. I know you too well, and I love you too much."

He woke up, sitting against the wall. He ached everywhere. The lights were on, and it was night outside. Beside him was the telephone table. Good; it was sturdy enough. He hauled himself up, holding on, groaning only a little. He stood, rubbed his arms and legs, wondered why on earth he had fallen asleep in such a position. He answered himself, I am an old man, and then sought other problems. With some trouble and trembling he unbuttoned his shirt, absently switched on the drafting-table lamp. He looked down at his designs and was immediately engrossed, lost in his work even as he sank into the creaking chair.

And if while working he sometimes vocalized his thoughts, as if comparing notes, airing ideas—yes, even arguing—with an old friend, well, what of it? He was no cultist, no kneeling Kazakh. He was an engineer.

"Here's the problem, Chief," Aksyonov murmured. "Here, *this* is the best design for the solar arrays, in terms of fuel efficiency. Mounted like so, on the service module. So far, so good. But there are other considerations. For

example..."

Aksyonov's papers slid one over the other. His chair creaked. Tight-lipped, with ruler and pen, he drew a true line. He laid his plans all through the night, until dawn.

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MAGIC'S PRICE

Bud Sparhawk

Jacob could hardly contain himself as he followed his family toward the winter festival where, he hoped, he would finally see a magician.

Until this year, it seemed that there was always some reason for missing the magician. Sometimes the magicians did not come to the festival. In other years they came without warning, passing through the town so swiftly that, by the time Jacob learned of them, they had already departed. Three times they had arrived after the family had left, and once the entire family had been so sick that they had missed the festival completely.

But maybe this year would be different. Maybe this year he would finally be lucky.

Jacob wondered if even a magician would be able to find his way through the town's dimly lighted streets. This older section of the town was a confusion of close-packed buildings and immense ancient devices, most of unknown purpose.

Perhaps the magician had no need to traverse the narrow streets. Perhaps he would descend from the sky on lightning bolts, amid claps of thunder. Maybe he would suddenly appear in a flash of light or through some more mysterious, magical method. But no, these were childish fantasies. The magician, if he arrived, would probably walk the streets like any other man.

The villagers had decorated the square with orange, red, and blue lanterns for the winter festival. The colored lights shadows in every direction. Jacob toyed with his own shadow for a few moments, observing the way its colors changed as he shifted position. Why, he wondered, were some of the shadows green instead of black? After a few moments' consideration he realized that each shadow's color was the complement of whichever lamp threw it. Not only that, but it varied in intensity with the distance from each lamp. He moved back and forth, fascinated by the changing colors.

Evangeline, his older sister, rudely pulled him back into reality and an awareness of the crowd. She glanced around to see if anyone had been watching his antics. "Why are you doing that? Dancing around like a fool," she scolded. "Act your age for once, would you?"

He started to explain but stopped. Ev was smiling over his shoulder, no longer paying him a bit of attention. When he turned he saw that Lars Torfsen had captured her attention. Just as well, Jacob thought; Ev would never understand about the lights. Even if she did, she'd probably dismiss it as of no practical use.

He watched her walk toward Lars with that peculiar swaying motion she had adopted of late. "Huh, and she thinks I looked silly," he muttered.

The crowd's din assailed Jacob's ears. Everyone was in a festive mood. The group at the kegs Toasted one another and each passerby with raised mugs and shouts of recognition. The more sober among them were scarcely more restrained than those well into their mugs.

People pressed in on Jacob from every side, so close that he could smell their sweat and foul, malty breath. He couldn't understand how anyone could enjoy being so jammed together. But he would endure it for the chance to see a magician.

His family's arrival caused no little commotion. People crowded around them, shouting and extending hands to be shaken and presenting cheeks to be kissed. A bustle of women greeted his mother and Pam with shrieks and embraces, then led the two away, all jabbering at once and so swiftly that Jacob couldn't understand a word they said. Nor did he want to.

Jacob winced whenever one of the villagers pinched his cheek or remarked about how tall and handsome he had gotten. He bridled at their constant observations on his red hair and striking lack of resemblance to his father. He held his tongue, wishing the whole while that he could escape.

He looked around, alert for any sign of a stranger, for a glimpse of the bearded face that his father said always marked a magician. But how could he tell if a stranger was a magician? Most travelers, and many of the local farmers, wore beards. Would the magician be taller—larger than life? Would he be handsome or ugly, young or old? Would his hair be silver or gold? How would his appearance differ from the too-familiar faces of these people he'd known all his life? What would his clothing be like? How would he speak, walk, or laugh?

Jacob's imagination ran rampant, building a mental picture that changed with every random supposition. Perhaps the mage would come as a giant and loom over the town like a storm cloud; lightning bolts for his hair and thunder for his voice. That startling image came from a childish fantasy that he had long ago thought he'd

outgrown.

While the carpenter was droning endlessly about how his son was about to become the mason's apprentice and asking how soon Jacob was to be apprenticed to the town's tinker, there was a commotion on the far side of the square. The crowd parted. Three strangers walked to the middle of the square. From the way everyone kept their distance Jacob knew that this had to be the magician. But why were there three? He supposed that a magician always traveled alone.

The three were like nothing he'd imagined. None were giants, nor was their appearance out of the ordinary, at least at first glance.

The tallest threw back the cowl of his frayed and tattered, travel-stained cloak to reveal a face the color of dark leather, in sharp contrast to his white beard and hair. Small white marks, as if he'd been burned with a brand, marched across both cheeks. There were deep creases around his eyes and mouth, as if he'd spent a lifetime peering into the distance. His hands were as dark as his face, and as callused as a farmer's. His erect posture and quick movements were at odds with the signs of age. There was such an air of authority, of competence, about him. This was not a man easily ignored.

The shorter, stockier magician on white-beard's right wore a dull brown cloak that was only slightly less travel-worn. His beard was black as night and trimmed closely to follow the curve of his jaw. His eyes were hidden behind mirrored goggles that reflected the square's colored lanterns in miniature. His head swiveled from side to side, watching the crowd. Only one of his hands was visible, for he kept the other tucked deep inside his cloak.

The third magician was slight of frame and had a long cascade of bronze hair that spilled from the back of a red cap. It was a woman, Jacob realized with a start. Somehow he had never imagined that a magician might be a woman! As she turned her head to glance in his direction, he noticed that her eyes were very large and a wondrously luminous green. Even from this distance he could tell that those bright eyes were sprinkled with tiny golden flecks, much like his own. A slight smile played on her lips. Her movements were fluid and graceful, as if she were dancing to some languid, silent fiddler. She was the most beautiful woman Jacob had ever seen.

"Who speaks for the town?" the older magician asked quietly, but with sufficient force that his voice could be heard clearly throughout the square.

William Moore, the village headman, was roughly propelled into the empty space surrounding the threesome. He stumbled for a bit, as if he'd not expected to be so rudely presented as spokesman. To his credit he recovered quickly.

"Who be you?" he boomed. "And what be your reason for coming to our town?" He smiled, a darting, nervous, insincere little twitch at the corners of his fat mouth that disappeared in an instant.

"I am Arthur Thomas," white-beard answered as forcefully. "I am a magician and in your service." His tone made the bland statement sounded like a rebuke for the chill greeting. "I hear there is a tower on a farm nearby. Where can I find the owner?"

"There!" William Moore pointed directly at Jacob's father. "George Kettleman, over there, the demon's tower's on his farm." He did not sound pleased that anyone would want to see the tower. Like most villagers, he felt that such a mystery was better left alone.

The woman with the magician casually glanced where William Moore had pointed and then jumped as if a thorn had pricked her. She started to open her mouth, and then closed it. Her hand darted nervously to the arm of the white-bearded man like a bird seeking a branch.

What, Jacob wondered, had so alarmed her? White-beard brushed her hand aside and strode purposefully toward them. The dark man with the hidden eyes stayed by his side, one hand still hidden beneath his cloak, his head still making that constant, sweeping motion.

"Kettleman? Is that your name?" Arthur Thomas asked with authority. When his father nodded the magician turned and motioned for the woman. "This is Tash Pallas, my, uh, assistant," he introduced her. "And the other is Blade. Just Blade."

Arthur Thomas. Jacob was amazed that the old magician should have such an ordinary name. The woman's name, on the other hand, was mysterious, strange, exotic and quite what one would expect of someone with magical powers. Blade's name was as menacing as his appearance. A shiver ran through Jacob. These were obviously people of power.

"I am," Jacob's father replied to the magician's query, "and this is *my* son." He put a protective hand on Jacob's shoulder and squeezed hard. Jacob wondered why his father was making such a point about him.

Arthur Thomas barely nodded, but said nothing. The lovely Tash was still tugging on his sleeve, trying to get his attention. The magician, clearly becoming annoyed, turned and spat out a string of harsh, angry syllables in a foreign language.

Tash Pallas replied softly in the same language. Unlike Arthur Thomas, her lips produced a flow of sweet, musical words.

Arthur Thomas` eyebrows rose and he glanced in their direction as Tash Pallas spoke. Only when she finished did he speak. "I think we shall stay here overnight to see what services the town might need. After our work here is finished we'll want to examine the tower. I would appreciate it if you could accommodate us. We will pay or work

for our keep, if necessary."

Jacob felt a thrill run through him. Magicians, three of them, were going to come to his farm. He would be able to watch them, talk to them, and be with them. It was more than he could have hoped for, more than he had ever expected. He would never forget this priceless moment.

But his father hadn't answered. He was staring at the magician in stony silence, taking the measure of the man.

"George," mother said as she laid a hand on Jacob's shoulder. "George." There was a note in her voice that Jacob had not heard before.

His father glared at her. "For your sake, then. All right, magician. I will see what we can provide."

The magician nodded knowingly and turned away. "William Moore, I'm starved! Can we get something to eat before we look around to see what's needful?"

"There's much in the town that you'll declare needs your attention, I'm sure," William Moore answered dryly as Jacob's father headed for the kegs. His mother remained where she was, looking after her husband with a forlorn look on her face.

Perhaps, Jacob thought as he followed the magicians, he could acquire magical skills by copying the magicians' behavior. He tried to emulate the way Blade kept his right arm hidden and to gesture with his stiff left fingers as Arthur Thomas had done. By evening's end he was even squinting to give his eyes a creased, learned look.

"Are you sick or something?" Ev asked when they finally met back at the stable. "Why are you scowling like that?" Her favorite scarf was in her hand and she appeared flushed. She fidgeted as she adjusted her clothing inside her cloak. She brushed a few strands of straw from her hair.

And she thought his behavior strange.

"Jacob, did you hurt your arm?" his mother chimed in when she noticed the way he was holding himself.

Jacob sighed and shook his head. "No, I'm fine." The terribly ordinary women of his family would never understand the ways of magicians. Neither of his sisters would ever be as worldly as the wondrous, beautiful, and mysterious Tash Pallas.

For as long as Jacob could remember he had wanted to learn magic. He had never felt comfortable around his dull, shallow, and unimaginative classmates. Not a one of them shared his interest in the ancient machines, and all wondered what he found so interesting about them. Despite their taunts he maintained his burning desire to learn the mystic arts, a desire that set him apart. "Weird Jacob," they'd say and shrug, "But then, what can you expect?"—the last part no doubt overheard from their parents.

He'd gotten and given many a black eye after he learned what that oft-repeated slur implied about his dark-haired father and even darker-haired mother.

But, he sometimes wondered, perhaps there could be a kernel of truth in those veiled accusations. Could there have been a magician among his ancestors that had endowed him with this red hair? Maybe that would explain why he was so attracted to the old machines that lay scattered about. None of his classmates seemed to care about the mysterious forces that powered the mill, that heated some homes but not others, and that provided heat and light to a few. No one asked about the silent machines in the fields that refused to rust. They accepted all this without question, and went on with their dull, daily lives.

The old tales spoke of a time when those machines surged with power, letting a single man farm thousands of acres. The Kettleman tractor was one of the few machines that continued to function, and that fact was viewed with suspicious awe.

Dead or not, all of the old devices fascinated to Jacob. He'd often imagined himself a magician as he probed the machinery's innards. When he was much younger he'd tried to restore a broken grinder with a wave of his hand, to fix a broken plough with a touch of his little finger, and to bring a blackened lamp to life with a single intense stare. But none of these actions produced any result, no matter how hard he tried. Perhaps it took more than skill and desire. Perhaps it was a magician's inherent ability.

As he grew older and wiser he learned how to fix simple mechanisms, such as the broken linkage on the heater, which got him an extra large slice of warm apple pie. When simple repairs of household things no longer held his interest he turned his attention to the more complex devices stored in the barn, where they had been dumped for lack of a better place. Who knew, his father often said, but they might someday prove useful.

His attempts to study these ancient devices were frustrating. There were strange boxes that, when opened, revealed small cities with brightly colored houses and silver trails. The boxes were connected with solid pipes through which nothing could flow. And what was one to make of the heavy disks?

He often wondered what forces might lurk inside those tiny, closed, multicolored dwellings, what mystical creatures hastened along those silvery avenues on their magical tasks, and what functions were performed when they reached their destinations. Despite a lack of revelations from his probes, he nevertheless dreamed of someday harnessing the inhabitants to do his bidding. But that day would have to wait; any attempt to remove and inspect the tiny towns was to risk the wrath of his father.

"Best to leave alone what you don't understand," his father had scolded when he first came upon one of Jacob's exploratory surgeries. He had been sitting in the barn, surrounded by arms and levers, knobs and buttons, linkages and motors; the scattered entrails of his mechanical patient.

"But," Jacob wailed after his spanking, "how can I ever understand if I leave everything alone?" His father's silence was answer enough, so, ever since, he'd confined his studies to those times and places where no one could discover him.

His father had been harsh, no doubt because he himself was so often suspected of being not entirely unskilled in the arcane arts. The still-working tractor and the mysterious tower on the farm supposedly lent credibility to this belief. To imagine he was in concert with the demon was not such a large leap of belief.

The tower stood taller than any building in the area, nearly three times the height of their silo. Thick glass surrounded its topmost section. The tower was so hard that not even a nail could scratch it. There was a ladder on one side and, by climbing it, Jacob could peer through the glass and see a bank of instruments just beyond. Once he'd seen them flash red and green. Once he'd pressed his ear close to the glass and heard a distant rumble, like the noise the tractor made before he put it in gear, which made him wonder if there was a mighty engine buried inside. Or was it the snoring of a sleeping demon? Jacob never mentioned the flashing lights or the grumbling demon for fear his father would suspect him of meddling.

But all that had been years before, when he was a child. Now he was almost fully grown—soon to be a man—and had to make a decision about being the tinker's apprentice. But that was later, after the harvest passed. Now he would be able to watch the magicians repair a broken machine or restore life to a dead building and, by watching them work, perhaps learn enough simple spells and magic to free himself from ignorance.

Jacob's father was muttering to himself, but loud enough so that all could hear during the long ride home. "Put them in the barn, damn meddlers." Too many draughts from the keg slurred his words. "Should have said no. Nothing but trouble they'll be."

Jacob's mother softly corrected him. "They'll sleep in the house like proper guests, George. We'll not treat them otherwise. Pam and Evangeline can double up, and Jacob can sleep in the loft. We'll put the men in Jacob's room and the girl can sleep in Evangeline's room."

"Why can't she use Pam's?" Ev pouted. She knew who would have a pallet on the floor for a mattress. But there was no arguing with mother once she decided. Even his father knuckled under to her decision with a gruff, "Damn lot of trouble for nothing."

Mother continued planning aloud, unmindful of his father's bitter comment. "We'll need to bring in extra food. George, you'll bring up the meat from the smokehouse, a hock and some lamb I think would be best. Then we'll need extra wood and the cistern will need filling. Oh, there's so much we have to do to get ready for our guests."

"You don't have to be so damned friendly," his father growled. "Isn't like they were family." Jacob detected a note of uncharacteristic anger in his father's voice, but couldn't determine if it was directed at the situation or at his mother. "Jacob can get all of that for you. I have to be out early to work the valley fields."

As soon as they reached home Jacob began gathering the things his mother had enumerated. He lugged hunks of meat from the smokehouse and hauled boxes of dried fruit and preserved vegetables from the root cellar.

His mother fussed about, too wound up to sleep. "I do hope they won't be disappointed with dried and canned fare," she fretted. "No, I'm sure they'll understand that it just isn't possible to have fresh food this season." She produced two apple pies she had baked a day earlier and examined them as if they were to be entered in the contest at the annual harvest fair. "I think I will serve these." There was nothing better than mother's pies. Neither Pam nor Jacob objected to the idea, but Ev did, and got a small slice for herself. Mother always spoiled her.

Hours later, exhausted by the excitement of the long day and the night's work, Jacob fell into bed and closed his eyes, waiting for sleep's sweet embrace that did not come. How could he sleep when in a few hours the new day would break, the day the old magician might arrive to perform his magic? In a few hours the beautiful could be here. He didn't know which prospect excited him the more.

She had smiled at him.

When Jacob jerked awake. he discovered that a cold mist had shrouded morning to gray unfamiliarity. He quickly bundled against the damp and set out to feed the chickens and see to the other animals' needs as they huddled in the barn's warmth. Dan and Brandy stamped their hooves, impatient for their morning ration of oats and dried apples. Throughout the day Jacob kept watch to the east, hoping to be the first to sight the magicians.

By nightfall the mist had turned to a light, drifting snow. His father stared at the wintry scene. "Better check the fences near the tower tomorrow."

Jacob nodded. He'd already assumed that had to be done. His father wouldn't want even a magician to think they were remiss in maintaining their fences. The tidy farm was a point of pride with him, a sign that he was properly husbanding the land, as did all of the farmers hereabouts.

Jacob enjoyed riding Dan along the fence line. It gave him a sense of pride to see the newer fence rows he and his father had added to those of his ancestors. He slowly rode Dan along the tall rock wall that formed the eastern boundary and turned at the copse of trees that marked the northern edge and the beginning of the stack pole fence. Noticing that some of the cross poles had become dislodged, he let Dan graze while he put them back in place.

On the western line he found a section of older wooden rails from his grandfather's time missing. It looked as if a herd of mos-ox had blundered through. The rails were probably buried under the snow nearby. He tramped around and, as he located them, pried them free and worked them back into place. By the time he was through, his

boots, jacket, and gloves were caked with mud.

He was halfway to the southern boundary of the field when he noticed a small figure kneeling down and looking at the edge of a pillar she had cleared of snow. It was the woman magician—Tash Pallas.

Tash stood and waved at him. Jacob waved back and turned Dan toward her. "What are you doing out here?" Tash asked. She pointed at his jacket. "You look like you've been working hard." She had a strange, lilting accent.

"Checking and fixing the fences," Jacob replied as he dismounted. "Can I ask what you're doing?"

Tash laughed. "You can. It's a fair question. I'm just checking a subsystem."

Jacob liked the way she laughed—a musical sound that ran up and down a scale, quite unlike Ev's raucous bark or Pam's high-pitched giggling. This close, the bronze-haired beauty didn't appear as old as he'd first thought. As a matter of fact, she looked close to his age, but so much more worldly, so much more sophisticated, and so very, very beautiful.

He came abruptly to ground when he recalled that magicians had the power to be any age they wanted. He could make no assumptions about Tash's age. She was no mere girl; she was a magician and that alone demanded respect. "I didn't mean to pry, ma'am," he said apologetically.

Tash laughed again. "You weren't. Most people I've met wouldn't have asked anyway."

Jacob coughed. "Yes, that's what everybody says, that I ask too many questions. It's like those old machines I keep trying to understand..." He stopped. Babbling was one of the things he hated about himself.

Tash raised an eyebrow. "You want to know how the machines work? Is that it?"

Jacob blushed. He knew he shouldn't have mentioned it, but it was too late to call back the damning words. "Yes, ma'am," he replied quietly. "I do."

"Stop that ma'am business," Tash snapped. "Why do you want to learn about them?" She leaned close, quite close. He could smell the warm aroma of her, practically tasting her sweet breath.

She didn't appear to be angry. "I don't know," Jacob said. "I just want to see what makes those machines work." He grinned. "I even got one of them to start moving... for a little bit, anyway."

Just a few years earlier, when he'd barely a hair on his chin. It had been the big, dead harvester that stood next to the town's common stable. He had been messing around in the cab when he jiggled a key on the panel to see what would happen. Every kid in the town had done that at some time in the past, but never before had anything happened.

This time, however, he heard a soft click and, before the sound registered, the harvester lurched forward and threw him backwards. Before he could climb back onto the seat the prow of the harvester had smashed through the side of the stable. There was a crash of timber and a storm of falling hay as the harvester ground forward, crushing all before it. Bales of hay tumbled from the loft on either side, sacks of feed hit the ground and split open, and the two horses suddenly freed from their stalls bolted and ran, terrified, through the town.

Onward the harvester pressed, crushing two wagons under its massive tracks, until it came to rest against the stable's opposite wall, which teetered, creaked, leaned, and then fell to earth with a roar of splintering wood. When Jacob climbed down from the cab the entire building was nothing more than a jumbled heap of lumber and assorted debris.

"Thank God you're safe," the first person to arrive said when he saw Jacob climbing from the wreckage. "What happened?"

"I don't know," Jacob lied quickly. "I was feeding one of the horses when..." he stopped. The man was staring at the object in Jacob's hand. It was the key to the harvester.

The destruction of the old stable was a serious matter, but this was of less importance to most of the folk than the fact that it had been the red-headed Jacob who had managed to bring the machine to brief, if destructive, life.

"For certain," everyone whispered, "he does have magician's blood." Then they would smile, as if his actions had confirmed their worse suspicions. The resurgence of this cut his mother deeply, although she tried not to show it in public. His father glowered when he heard, and perhaps that fueled the anger that warmed Jacob's seat for his part in the demolition.

The pain he had caused his parents was partially offset by the reaction of the other kids. Every youngster in town rushed out to jiggle the keys and switches of the dead machines in hopes of repeating Jacob's actions. He became a hero of sorts, at least for a few weeks.

Jacob stopped speaking. Why had he told her about that episode? As usual, his mouth had moved faster than his brain.

Tash closed her eyes. Without warning she spat out a series of words; "Seek, unknown, problem, logic, number." With each word her facial expression changed, quite at odds with the words that continued to roll so quickly off her tongue.

Jacob became confused by the torrent of words pouring from her lips, so close to his ear. He tried to figure out why she was spewing such nonsense, but, before he could concentrate on one word, she had said another, and another. "Basic, failure, inside, twisted, puzzle." On and on they came until Jacob's mind was swirling in confusion.

Finally the torrent of unrelated words stopped. Tash opened her eyes and turned her head so she could look straight into his eyes. "Tash," she said simply. Then her face bloomed with a smile so bright that he felt as if the sun

itself had suddenly blazed through the clouds, bathing him in its radiance.

He couldn't help but smile in return.

"Sorry," she said, her smile quickly fading. "That last was pretty unprofessional."

Jacob had no idea of what she was talking about. "Never mind," she continued, taking his arm and leading him away from the pillar. "Let us talk of other things. Tell me of this farm, this place where you live."

"It would be better to ride," he suggested. The thought of being so close was quite appealing. He mounted Dan and extended a hand to help her up. Instead of taking his hand Tash placed one hand on the saddle and vaulted astride the horse. Dan snorted and jumped at the sudden addition, but calmed down after a tug on the bridle. Tash casually put her arm around Jacob's waist as Dan ambled forward.

Jacob spoke in brief bursts as they rode. He described the town, the locations of every dead machine and ancient device. "People say all these things came here on a ship, but I think that it had to be a wagon because our river's too shallow for a ship."

Tash gave him another smile. "Indeed it was a ship, Jacob. A ship the like of which you've never seen. I saw it two years ago, sitting on the plain, far to the west. Larger than the biggest building you can imagine. Made of metal so hard no tool can cut it. Neither had the weather rusted it. A marvel it was. A wonder."

He tried to imagine a ship of that immense size and wondered about the oars it would need. "A ship," Jacob whispered. "Tell me more, please."

"And of what interest would that be to a farm boy such as you?" Tash teased. "I would expect you to be more interested in the crops I've seen and of the ways of other towns and people."

"I don't give a damn about that," Jacob spit out. "Tell me more about the ship!"

Tash jerked back. "My, you certainly are intense. Well, that's no surprise. I will tell you about the ship, Jacob Kettleman, but only after you tell me about yourself. But don't talk of old machinery or boring townsfolk. Talk instead about yourself, your place in the world."

Jacob couldn't believe that Tash would have any interest in his dull and uneventful self. Still, he could not refuse, not if she was going to tell him more about the mythical ship and who knew what other wonders of the world.

He stumbled at first, not knowing where to start. She blessed him with another smile and Jacob began to speak in earnest of his life and dreams. Then he heard himself saying, "and that's when I wanted to learn how to do magic."

Jacob clapped hand to mouth, half afraid that she would laugh at his unseemly ambition, half afraid that she would strike him down for having the temerity to aspire to such heights. He cursed his pride. How pathetic she must think him to be.

"No, that's wrong," he apologized. "I just want to be a tinker," he declared suddenly. "Not a magician. Just a tinker!"

"No, I don't think so," Tash said quietly. "Jacob Kettleman will never be a tinker." She abruptly jumped down to the ground as Dan continued to plod forward.

"Forget what I just said," she shouted. "It was foolish of me to mention it." Jacob watched in disbelief as she raced across the field. She was indeed a magician: No ordinary human could run through the snow that fast!

He was heartsick for the rest of the day and finished the tour of the fences in a slough of despondency. Surely Tash would tell Arthur Thomas of his boastful words, of the foolish pride that made him unfit to be a tinker, of his arrogance in thinking he could actually learn magic. His life was ruined. Ruined!

He took a long time wiping Dan down and cleaning the ice from his hooves. He knew he was just trying to forestall the inevitable, and think of some way he could avoid the embarrassing confrontation to come.

Jacob finally screwed up his courage and entered the house. Everything appeared normal. The women were doing their chores—mother preparing dinner, his sisters at their lessons (Ev secretly reading a note hidden behind her book)—and his father glowering over the tractor's crumbling maintenance manual. Neither Arthur Thomas nor Tash Pallas was present; nor was Blade, the dark one.

"Where are the magicians?" Jacob asked casually.

"Stowing their belongings, I imagine. Arthur Thomas said the others will be in later," his father growled. "Damn it, I can't remember what all these words mean." He was struggling with the pile of crumbling paper held together with stitches and glue. "I'm glad you're going to learn the tinker's trade. Maybe you'll be able to translate this for me."

Jacob's heart stopped. If he hadn't spoken so boastfully maybe he could have looked forward to helping his father. But Tash had declared he'd never be a tinker.

The remainder of the evening passed in silence. Jacob sat still, dreading the magicians' arrival, but most of all anticipating the pain on his father's face when they informed him that his son, the boastful Jacob Kettleman, could never be more than a simple farmer like himself.

He wished he would die now and be spared.

Neither Tash nor Blade accompanied Arthur Thomas. The elder magician graciously thanked them all for their hospitality and singled out Jacob's mother with praise for the fresh apple pies, praise that brought a warm smile to her face but obviously sat poorly with his scowling father.

"I have a warning for you," Arthur Thomas said casually and Jacob leaned forward, fearing it might be about

him, about what Tash had said. "Spring is advancing from the south much earlier than usual. You should soon be experiencing a line of storms."

Earlier, did he say? How could he know so much? Was he the creator of the warmth, or merely the oracle?

"Spring storms aren't due for another month at least," his father said firmly. Everyone paid close attention to the changing seasons because the growing season was so short. The spring thaw in particular was reason for concern. The storms that accompanied it loosed the water trapped in the mountains and made the river flood. "Storms always follow the sun's passage to the north."

The magician did not contradict his father's declaration, not directly. "Nevertheless the storms are coming, but we shall talk of that later. I've come to speak of other things, private things, George Kettleman." He gestured with his left hand, a dismissing fluttering of fingers, for the rest of the family to leave.

Fear clutched at Jacob's breast and, for a moment, he couldn't breathe. He desperately tried to think of how he could avert what must surely be coming.

"Come, Jacob," his mother called softly as she led Pam and Ev into the kitchen. She glanced back at the magician with an expression that Jacob had never seen before—apprehension, fear, worry?

Jacob took one slow step as he furiously tried to devise a delaying strategy, but then reluctantly followed the women.

"I'll bet they're talking about you," Ev said loudly as soon as Jacob shut the door. "I'll bet you messed up something, just like you always do."

His mother shook her head. She appeared preoccupied. "What? Oh no, I am sure this has nothing to do with my Jacob. Nothing at all." That was his mother, always the optimist.

"Weird Jacob. Weird Jacob," Pam giggled.

"I'd better check the barn just to make sure everything's all right," he said, pulling his cloak from the peg near the door. His mother smiled as he marched into the dark night. No doubt she thought his departure was due to embarrassment—or did she suspect something more?

He climbed the ladder to the barn's roof as quickly as he could so he wouldn't encounter Tash Pallas or the dark man.

The fields were serene and quiet under the light of the lesser moon. In the distance he could just make out the dark form of the tower and its hidden mysteries, the mysteries that he had hoped one day to discover. But that was not to be. He had surely destroyed any chance he might have had. With those dark thoughts he sat and put his head in his hands. What would he ever do with his ruined life?

Long after the house lights dimmed and everyone else had certainly gone to bed, his father climbed the ladder. "Lonely up here," he said as he settled beside Jacob.

"Good for thinking," Jacob answered. "Helps me figure out problems without somebody interrupting."

His father started to get up. "Sorry, son. Didn't mean to..."

Jacob reached out to touch his father's hand. "Sit down, Dad. I... I need to talk to you about what I said to Tash Pallas. I was just bragging, trying to impress her. You know. I didn't mean any harm."

His father smiled. "I know how it is," he said quietly. "Good-looking girl, that, for all her strangeness." He paused, "Ah, what *did* you say?"

"Didn't Arthur Thomas tell you? I thought that's what the two of you were talking about." Then he couldn't hold back and poured out the whole story; all the stupid idiotic things he had said, all of the rambling dreams he had blurted out, all of the boastful statements that made her think him unfit for the tinker's trade.

His father said nothing for a long time. A strange, bemused smile continued to play across his face. "Sounds to me like the act of a boy who's a bit smitten," he said at last. "Listen, trying to impress a pretty girl isn't a sin, Jacob. Done more than a bit of that in my own time," He flashed a quick, embarrassed grin. "Just like you, I regretted it after, but that's normal. Wouldn't worry about it if I were you."

Jacob was beside himself. He couldn't understand why Arthur Thomas had failed to deliver the bad news. Hadn't Tash told him of his prideful boast?

"Arthur Thomas did mention you," his father drawled. "Said he'd like to talk to you a bit more about the test—find out what it is that you *really* want to do."

Jacob was startled. A test? He hadn't taken any sort of test. All he'd done was talk to Tash. Could that string of words she threw at him have been a test? If so, it was the strangest test he'd ever taken, one in which he'd given no answers at all.

Maybe Tash had been able to read the expressions on his face to see how he reacted to her words. No, her eyes had remained closed the whole time. Besides, what could she have learned from his dumfounded look of total incomprehension and confusion?

"When does he want to see me?"

"Tomorrow, after he finishes meddling with the tower. Says to stay away, doesn't want us at risk, but I think it's just an excuse to keep us from learning what he's up to." His father stood up. "Well, time I got some sleep. Damn magicians making too much extra work for all of us."

Jacob felt numb. Things were not as bad as he'd imagined. Tash Pallas' declaration seemed of little consequence

to his father and the old magician wanted to speak to him, alone. It was more than he could comprehend.

"In the morning you'll have to haul snow," his father continued. "With three more drawing on the cistern we'll soon run short."

Jacob nodded. The hard work of hauling clean snow to the cistern was the furthest thing from his mind at the moment. He had been granted a reprieve and that was enough. He followed his father back to the house with the glowing ember of hope in his heart.

The magician wanted to talk to *him*.

Jacob dumped another cubic meter of snow, which would produce less than a liter of water, into the cistern as the clouds of an approaching storm gathered. Perhaps it was one of those storms the magician had warned about, but more likely just another of the many winter usually brought.

All day he had been carrying snow to the cistern. It took the time for Jacob to carry the next load for the previous load to melt. The cistern's ability to melt snow was part of the farm's residual magic that made the townsfolk so suspicious.

On one of his forays Jacob noticed activity at the base of the tower. He wandered over to see what was happening and saw that it was the two magicians.

Arthur Thomas and Blade were struggling to open a heavy panel at the side of the tower by using a pry bar they'd taken from the barn and their straining muscles. Jacob lent a hand even as he wondered why they weren't using a mystic spell instead of brute force. As he was about to ask, the panel gave way with a screech of tearing metal.

The opened panel exposed a complex of pipes and cylinders, the purpose of which was beyond Jacob's comprehension. Arthur Thomas said something in a strange tongue to Blade. The dark man responded in the same tongue and stepped back. Arthur Thomas then tugged on a red handle nestled among the confusion.

Nothing happened.

"Take this back to your father," Blade barked abruptly as he handed the pry bar to Jacob. "We can handle it from here, boy." Jacob felt his temper flare, but held his tongue. He understood dismissal when he heard it.

"Thank you very much for your help," Arthur Thomas added as he glared at Blade. Jacob took the bar and headed back to the barn.

He'd loaded another hundred cubic meters of snow into the cistern when he heard a shout.

"Look!" his father yelled from the upper level of the barn as he pointed. "That old man's done something! The snow's melting around that devil tower."

Even at this distance Jacob could see exposed ground around the tower's base. This was certain proof of the old magician's power. If he could make the snow melt then he could probably control the storms, the weather, and even the sun and stars. Jacob felt very humble. He would never be able to learn magic this powerful.

"Nothing good will come of that," his father shouted.

Jacob looked forward to his appointment with Arthur Thomas with fear in his heart. After discovering their ability to melt cold snow in the depths of winter his dream of someday managing the inhabitants within the machines seemed a pitiful, trivial goal; one hardly worth considering.

Arthur Thomas sat at the table with a cup of steaming milk before him. He was dressed in a simple coverlet that left his arms bare. Jacob was fascinated by the designs he saw written on the old magician's biceps. Some of the arcane patterns might be words, but they were in a script that he could not decipher. There were images of magical creatures the like of which he'd never seen; sinuous creatures that coiled around the magician's forearm like a rope and had teeth like daggers.

"Sit down, boy." Arthur Thomas gestured at the chair on the opposite side with his left hand. "Tash believes you to be a young man of promise."

Jacob felt a start of surprise. Clearly Tash Pallas had powers beyond those of ordinary women if she'd learned something promising from his jumbled, rambling, boastful speech. "She does?" he replied stupidly.

"I'm starting to think otherwise," the old magician smiled. "Tell me why you want to know about machines so badly that you'd disobey your father and endure the taunts of your classmates."

Jacob gulped. "I don't know where to begin, sir." Clearly he must have been more candid with Tash than he realized, although he couldn't recall telling her about those specific aspects of his life. Maybe his family had been the source of the old magician's knowledge—Ev, in particular, was ever with the story about his misfortunes and he'd spotted his mother speaking quietly with the magician when his father wasn't about. Even so, he was embarrassed that Arthur Thomas knew what an outcast he'd been.

Arthur Thomas sat back and sipped on his drink. "Just start from the beginning, lad. Let's see, I understand you destroyed your mother's oven when you were only six or seven. Why don't you start there?"

Jacob felt his face glow. "How did you... ?" he stuttered and then took a deep breath. "I wanted to see what made the oven so hot," he began and then, put at ease by Arthur Thomas` calm, uncritical attention, related the rest.

He withheld nothing as he spoke of his burning desire to know, to understand, to control the old devices. He spoke as if Arthur Thomas was the friend he'd never had, a person he could confide in, someone who provided steady, uncritical acceptance of everything he said.

Jacob had blurted out his entire life story, including the embarrassing incident with the harvester, before he realized that he had never been this talkative, this open, with anyone. Had Arthur Thomas cast a spell over his ever-loosening tongue? First Tash Pallas and now Arthur Thomas. What was it about these strangers that made him expose himself so deeply?

Jacob's speech tailed off as Tash Pallas walked across the kitchen. She was barely clothed. A short shift exposed long, gorgeous legs and its clinging fabric hinted at the ample figure that lay beneath. He could hardly take his eyes off her as she moved cat-like to pour a glass. As she did so she glanced sideways and blessed Jacob with another of her radiant smiles.

"That's enough of that, girl," Arthur Thomas said sharply. Tash's smile disappeared immediately. "Play your games some other time. I'm trying to focus the boy's attention."

Tash snorted and sent a venomous glance at the old magician before stalking haughtily from the room. Jacob couldn't understand why she had become so angry at the magician's words. What had he meant by "focus" and did that have anything to do with why he'd been so talkative?

Arthur Thomas leaned forward. "I will consider what you've told me, Jacob Kettleman. You are clearly unsuited for this place and time. Tash might think you show promise, but I'd like to understand you more before I make a decision. You may go now."

Jacob remained seated. "What decision? Can you tell me what this is all about?" The magician said nothing. "And why did Tash get so mad at you?"

Arthur Thomas stroked his beard and, with the long fingers of his left hand, untangled the hairs where drops of milk had stuck them together. "In answer to your first question, I would rather not say right now, but I understand your impatience, Jacob Kettleman; that's one of your less endearing characteristics. Never fear; I will let you know when the time is right.

"As to Tash's behavior, I can only say that it has little to do with you, directly. No," he said wistfully, "it has more to do with my displeasure over her impulsiveness. But for all that she has been a wonder. Far more accomplished than my... her predecessor." The magician grew silent and remained so, his thoughts obviously elsewhere. Jacob watched a tear roll down the old magician's face and disappear into the gray beard.

Embarrassed, Jacob left him there, staring into his cup.

Tash was standing beside the cistern, not far from where Jacob was working. She was wearing a small pouch and, when she opened it to retrieve something, Jacob saw that it was filled with hand-sized devices. "Diagnostic tools," she explained. The words meant nothing to him. She knelt and waved a fist-sized box with a flashing light back and forth.

"Can I watch you?" Jacob asked timidly.

Tash gave him a smile. "I'm going to check the power unit first, which probably means nothing to you, but sure. Why not?" She straightened and put the little box into her pouch. Then, with a touch of her fingers, the side of the cistern opened, an opening that Jacob had never suspected. Jacob felt his excitement grow when she withdrew a panel covered with silvery roadways. Now he could see how a magician tamed the tiny creatures.

An hour later Jacob reluctantly admitted that Tash had been right. He barely understood a thing she was doing, like moving a rod across the roadways and watching a blinking light on its end. Tash behaved as if she was doing something quite ordinary, like checking the water level in the cistern or making certain that the tractor had enough oil. The only thing that kept her activities from becoming boring was her casual conversation.

Tash spoke of where she'd been born, thousands of kilometers to the south. According to her, it had a warm climate the winter's snows never touched, so crops could be harvested throughout the year. She spoke of swimming in warm seas quite unlike the icy brooks and rivers he knew. It sounded so much like an idyllic paradise that Jacob wished he'd been there, beside her.

But then she started to describe the rampant diseases that had taken her family when she was hardly more than an infant. She spoke of how the land grew infertile every few years and forced her people to move. She spoke of beasts aplenty that made it dangerous to go alone at night; the worst being the night stalkers who were larger than a man and would leave only the gnawed bones of their victim behind in the morning. Suddenly Tash's girlhood paradise sounded more like hell. Until then he'd thought their summer mag-wolves the worst predator imaginable.

Tash swore when the light on her rod glowed red instead of green. She removed a tiny disc from her pouch, affixed it to a roadway, and then continued her steady progress. By dinnertime she had placed four disks. "I'll have to finish this in the morning," she remarked without further explanation.

Jacob glanced toward the tower as they walked back to the house. In the failing light he could barely make out the distant forms of Arthur Thomas and Blade. The exposed ground now extended from the tower's base to the hills. He wondered what they were doing. Melting snow seemed so pointless.

An entire day had gone by and he'd not seen the magicians do anything magical, which was not at all what he'd expected. They'd probably do it tomorrow, when he was at lessons, he thought with regret.

The warming effect around the tower was remarkable. Jacob wandered over to examine it before taking his sisters to lessons. Despite a flurry during the night the huge circle surrounding the black tower remained free of snow. When he felt the ground it was far warmer than the surrounding air, which was only *slightly* wondrous and

not at all dramatic. This was subtle magic and unlike anything he'd expected.

At the weekly lessons Jacob and his sisters became the center of attention. Everyone, including those who normally shunned Weird Jacob, fought for their attention. They all wanted to know what the magicians had been doing and if the Kettlemans had seen any actual magic being performed.

"There isn't any such thing as magic," Eric Larson, one of those who had teased Jacob when they were younger, declared defiantly. "The strangers are just putting on an act to get free food and a place to stay." Jacob wasn't surprised at the remark. Eric was getting to be just like his cynical father. Some of the other boys nodded agreement, indicating that they held that opinion themselves or, more likely, had heard it voiced by their own parents.

The younger children had a different attitude. Had he, they asked in whispers after the scoffing older boys had left, noticed the magicians conjuring strange beasts, flying through the air, or changing their appearance? Had he noted anything at all out of the ordinary, they asked with doubt, fear, and fascination. Obviously, most had heard their parents' denial but wished the facts proved otherwise.

When Jacob admitted that he'd not seen them doing anything magical, they were obviously disappointed: Mysterious happenings would make the town a lot more interesting.

"They're making the snow melt from the around the old tower," he volunteered at last. The children acted disappointed. That particular feat wasn't quite wondrous enough to satisfy them.

When he returned home from lessons Jacob found that the horses had managed to nose open the gate and wander away. He grabbed a handful of leads and trudged through the snow, following their tracks to the lower pasture where he found them snorting angrily at the snow that covered the sprouting grass they expected to lie beneath.

He bridled both, then mounted Brandy, the mare, and led Dan, the brown gelding. Both resisted, but grudgingly gave up their fruitless search for sprouting grasses. Jacob decided that, since he was already out, he might as well give them some exercise. He headed into the hills, following the small stream that ran along the valley's bottom.

Along the way, Jacob noticed the snow was caving in on itself along the stream bed. It looked like the snow had turned to wet slush for meters on either side of the stream. He swept away the snow and saw that the stream was no longer frozen. He followed the stream upwards to where it emerged from the large snow cap that covered the high hills. At that point, the water was so warm that it steamed into the crisp air.

Jacob traced the stream in the opposite direction, toward the river. An ice dam had formed where the stream bed narrowed and water was making a small lake behind it. The water here wasn't warm enough to melt the dam, yet not cold enough to freeze. He watched the flow and estimated that within a day or two the water would rise, overflow the dam, and pour into the river.

After he returned the horses to the barn he described the warm stream to his father.

"Strange that the snow should be melting like that. Best we keep an eye on it. If that storm Arthur Thomas warned us of ever arrives it might bring rain instead of snow. That could cause a flood." His father thought for a moment more. "We'll warn the townspeople when we go for supplies, but first help me finish stacking these bales."

His father set out to find William Moore shortly after their arrival in town. At the same time Jacob began to collect the items on his mother's list. His first stop was Olaf Jorgensen, the miller.

"Be those sorcerers weaving their mischief at your father's place?" Olaf asked as he filled a sack with freshly ground flour. "Asked them to cast a spell on my house to get it to warm again, but they refused. Said I'd not the proper keeping of the cistern—but I can't see how they could know whether I did or not. Wouldn't matter anyway, never use the damned thing and I have better things to do with my time than keep it full of water. If you ask me they either didn't know what to do or just didn't want to be bothered."

"The magicians can tell all sorts of things without you saying a word," Jacob answered. "They know everything. I'm sure they would have fixed it if they could."

"Huh! They didn't help William Moore either. Told him his tractor was beyond help, and that after he'd fed them and let them spend the night in his own home. Bunch of liars and charlatans, he says. You know, if it weren't for their tracks I'd suspect they don't have any powers at all."

"Tracks?" Jacob was puzzled. "What do tracks have to do with anything?"

"Eric rode out the way they came. Followed their tracks up to the hills, he did, to where they stopped." Olaf leaned forward and whispered. "Right in the middle of nowhere those footprints started, like they'd dropped out of the sky. I tell you, boy, them is magicians for certain."

"So they do have powers," Jacob replied and described the melting snow around the tower.

"No good will come of that," the miller replied grimly. "No good comes of meddling in things best left alone. The tower's demon going to get you, boy," he laughed, but nervously.

Undaunted by the miller's grim prediction, Jacob went on. "Tash Pallas said that they've been all over the world. She told me about things that we've never seen. She said she even saw one of the ships that brought us here."

Olaf Jorgensen snorted derisively. "Aren't you a little old to believe those children's tales? Watch it, boy. She's probably going to use that lie to cheat you."

"The magicians aren't here to cause us any harm," Jacob protested. "Tash wouldn't do that."

"Oh, so it's Tash' now, is it? Clear to me that you're smitten with her, youngster. I'd advise you to steer clear of

that wizard's imp. She'll take your soul and leave you cursed, she will," he cautioned. "Lad like you should be more careful with his heart—keep to ordinary folk and forget them wanderers."

"I'm not smi..." Jacob paused. How could Olaf, not the most intelligent man in the town, know how he felt about Tash? Was he that transparent? He'd said nothing, done nothing to indicate his feelings. "Why did you say that?"

Olaf grunted. "Plain to see the way you gawked at her that night at the fair, the way you talk about her, like she was really human instead of some devil's sprite. Were I you, I'd be feared of why the old magician conjured her to tempt you. Very afraid."

"You're wrong. She's just as human as you and me." Jacob felt a flush of anger, but then stopped. Olaf could be partly right. Tash was more than ordinary, with those beautiful eyes and graceful movements. But did her marvelous attributes necessarily mean that she wasn't human, that she was merely a construct of the magician's art? Could that mean that he was under some sort of magician's spell?

No, he couldn't believe it. He was certain that he felt no different than before. There were no changes in him, although he did think Tash had something special, something he wanted to share, something to which he would willingly surrender his heart and soul.

His train of thought came to an abrupt halt. His *soul*. That was what Olaf Jorgensen was talking about. Suddenly he wasn't so certain that he was completely in control of himself, of his emotions. He felt the stirring of fear, a twinge of fright. Had Tash cast a spell to make him feel as he did? Had she thrown a net of deception over his thoughts? Was this what had earlier loosened his tongue? The doubts came faster than he could handle. How much did he really know? That uncertainty plagued him as he gathered the remainder of goods on his list.

As soon as the sleigh was loaded he searched for his father and finally found him in the inn with the headman.

"It's against nature for spring to come this early," William Moore was stating flatly and loudly when Jacob arrived. "No one can predict the weather. How could someone know of storms days in advance? I tell you, George Kettleman, these people are preying on your gullibility. Most likely to keep you feeding and housing them," he added with a snarl. "Cheated me fair, they did."

"Why don't you come out to our place? You can see the melting snow for yourself," Jacob interrupted quickly. "You'd have to believe their power then, wouldn't you?"

William Moore snickered. "I wouldn't believe anything I saw where them so-called magicians are concerned, what with all their damned magical tricks."

Jacob held his tongue over William Moore's obviously conflicting opinions about the magicians.

"If these magicians can melt snow in this cold weather then they certainly ought to be able to stop a storm," the headman continued. "Tell them that, George Kettleman. Tell them to make the weather behave." His final words exploded into guffaws.

"I will ask this of them," his father replied seriously. "But, just the same, you'd better prepare."

"Oh, yes," William Moore said, barely concealing his laughter, "We will certainly prepare for the storms, but in a month or two, as usual. That's when they'll come, as they always have."

The reaction was much the same with the other townspeople they tried to warn. Even those who took Arthur Thomas` warning seriously would not believe that the snow was melting, neither would they trouble themselves to take the long ride out to check the facts. "Impossible," they'd remark smugly, dismissing the idea out of hand.

This infuriated Jacob. "Why won't they listen? If that ice dam gives way, the flood surge could destroy the dam."

"Best not to press the issue, Jacob," his father replied. "Done our part to warn the town. I'll ask the magician if he can do something about the weather, as William Moore asked. Let it rest there."

Jacob fretted throughout the day and, after dinner, rode Dan across the fields to check the snow cap. They had just crested the hill when he encountered Blade, who waved Jacob to dismount.

"A word with you, boy," Blade said, taking Jacob's arm in an iron grip. Jacob tried to pull free but the pressure of Blade's fingers only increased.

"Word of caution, boy," Blade bit out. "Best you keep to your own."

Jacob found the grip becoming painful. "What do you mean?"

"Better you not get *ideas* about Tash Pallas. She's not for your kind."

Jacob's fingers were starting to grow numb. He unsuccessfully attempted to pry the dark man's fingers loose. "Why not? We like each other."

Blade laughed, but with a singular lack of amusement. "Think someone fine as her would care about a simple fool like you? She's toying with you, boy. You're just a bit of amusement to her." Jacob doubted this, from the way she'd acted toward him. Her concern for him couldn't be an act.

"Now listen to me well," Blade continued through clenched teeth, "you stay away. You hear me, boy? Stay away!" He released Jacob and turned to go.

"What if I don't?" Jacob said defiantly as he felt the numbness receding.

Blade quickly spun about. Jacob didn't have the time to even lift a hand to ward him off as Blade clutched Jacob's cloak and yanked him forward.

"What if I don't?" Jacob repeated defiantly, but his voice quivered with fear.

"Then I will see to you," Blade replied venomously. He pushed Jacob backward. "I will see to you myself."

Jacob was shaken. He considered returning home, but what could he do? Complain to his father like a child tattling on a bully? Tell Arthur Thomas or Tash? No, that would be a coward's way! He climbed back on Dan and continued up the wash, as was his original intent. He knew that he would have to deal with Blade on his own.

A cold knot of fear grew in his belly over what Blade might do. The man was terribly quick and strong—witness the strength of his grip—so Jacob knew that he'd be no match in a fair fight. And there was no guarantee that he would fight fair. No, Jacob would lose in any direct confrontation.

At the same time he was furious that Blade would order him to stop speaking to Tash, stop this relationship with the most beautiful, wonderful woman he'd ever met.

That thought gave him pause. Yes, Tash was all that, but what was he? He had nothing to offer her, was ignorant of the wider world with which she was so familiar, and knew nothing of magicians' lives and ways. Could Blade be right? Was Tash only amusing herself? Was he no more than a diversion before she moved on?

No, that could not be true, not the way she smiled at him, the way she spoke his name, the way she welcomed his presence. Surely she felt something for him.

But the seed of uncertainty had been planted and he felt it growing. How could he discover the truth, and still avoid whatever Blade might do?

Just as he had predicted, the melting water from the snow cap was starting to overflow the dam. There was a bare trickle flowing over the rim faster than new ice could form. A glance at the hill told him that the lake would fill even faster if the melting continued. How much had that cap already been undercut, he wondered, and what was causing it?

That night there was a sudden storm, the snow gradually changing to rain as the wind increased, and finally becoming a deluge. The pounding rain awakened Jacob from a troubled dream where he was being beaten by Blade. Tash had been standing to one side and patiently watching, as if she were judging the two.

Jacob wondered what this dream might mean as he listened to the rain. The old magician had been wrong. The storm had come much earlier than he'd predicted so, perhaps Arthur Thomas was fallible after all. But he did say the storm would be heavy, which meant there was more to come.

Rain! Jacob bolted upright. He could picture how the rain would be pouring down from the hills, adding to the lake. It would melt more snow, increasing the overflow or, worse yet, causing the ice dam to fail. Then the river would rise and the town would flood.

He had to open the gates of the town's dam to relieve the pressure before the surge hit. He dressed quickly and mounted Dan. There was no time to spare.

The water had visibly risen when he reached the dam above the town. Opening the gates halfway might relieve enough pressure without serious flooding. Then he could ride into town and warn everyone.

But first he had to open the gates.

He took hold of the big wheel that controlled the gates and struggled to turn it. No matter how much he strained, it would not budge. Something was jamming the gates.

Jacob walked to the edge of the dam and looked down. A thick layer of ice coated the gate. He thought for a moment and decided that if he applied more torque he could overcome the ice's resistance. He removed a long steel bar from the rail, shoved it through the spokes to give him leverage, and pulled with all his strength.

The wheel moved a little. It was working, but the bar began to bend. Jacob threw all of his weight against the bar and, with a sickening snap, the wheel broke from the shaft, clattered on the stones, and then splashed into the water. At the sudden release of pressure Jacob tumbled forward to within a handbreadth of the dam's lip and narrowly averted an icy plunge.

Jacob pulled himself to his feet and examined the broken shaft. There was no way he could fix it, especially with the wheel far below the surface of the ice-cold water.

He used the bar to pry up the cover plate surrounding the shaft and looked inside. The lower portion of the shaft was a worm gear that drove a toothed gear attached to the long lever that lifted the gate. Maybe if he could just release the lever from the gear, the gates would move.

He shoved the bar into the gap between lever and gear and applied all the force he could, but it did not budge. He tried again and again with no result. Finally, in frustration, he jumped and landed on the end of the bar with both feet. The bar bent and then flew free. There was a satisfying snap as the lever broke loose, followed by the gate's creaking and the sound of rushing water. He'd done it!

Suddenly, with a thunderous roar, the gates flew completely open and the lake poured out. Jacob watched with growing horror as a wave of frothing, foaming water rushed toward the town. The water was rushing out far faster than he had anticipated. Instead of saving the town he had created a dangerous flood!

He jumped on Dan and drove him as hard as he could toward town. He had to warn them! Thanks to Dan's speed he might just get there before the flood waters.

But the torrent was rushing ahead of them. It had already washed away the first bridge and that forced him to head toward the next. Luckily the river widened between the two bridges and that slowed the surging flood. But that would change where the river narrowed as it passed through the town.

He rushed across the remaining bridge, pulled Dan to a halt, and leaped off to race through the streets. He could

imagine how the flood was already overflowing the banks. He screamed as loudly as he could. "Flood! Flood! The river's flooding!" Jacob shouted even as the proof of his warning began lapping at the doorway of William Moore's house.

Sheila Moore opened the door and screamed when the cold water touched her feet. "My rugs!" she screamed. "My furniture!" She slammed the door closed.

But Jacob had no time to spare for her belongings. He had to warn the folk inside of the advancing flood. He began banging on the doors of the other houses that lined the river bank.

It was a long night.

William Moore looked over the flooded town as day broke. The river was now flowing a foot above the lintel of his house. Thankfully the rain had subsided to a dismal drizzle. "Apparently your father didn't ask the magicians to stop the storm," he said dryly. "Damn meddlers—look what they have brought on us!"

Jacob gulped. It wasn't the magicians who had caused the flood; it had been his own meddling.

"You are a hero, Jacob Kettleman," William Moore said, throwing an arm across his shoulders. "Without your warning more might have been lost. Your family will be proud of you."

"Er, I have something to say," Jacob began. He started to explain what had really happened, but was interrupted by a shout from the road. Someone was running toward them and screaming. He couldn't understand the words at first and when he did he felt his heart stop.

"Someone's damaged the dam; broke the wheel and opened the gates. It's nothing but vandalism!"

"I can't imagine who would do such a thing," William Moore began. "Unless... " He turned to Jacob. "How did you know about the flood before anyone else?" he demanded. "Did you..."

"It was an accident," Jacob said before the headman could complete the damning sentence. "I was just trying to lower the water level so the coming surge..."

A dark look came over William Moore's face. "You caused this? You flooded the town, washed us from our homes, and destroyed..."

"My rugs!" screamed his wife. "My furniture!"

Jacob didn't know what to say. "I'm sorry," he said earnestly. "I was just trying to help." He tried to explain the chain of events without sounding like a complete idiot but, to his own ears, that was exactly how he sounded.

"I will deal with you later," William Moore promised in a voice drained of emotion. "Right now I need to find places for those who were flooded from their homes. I'd not think it wise for you to stay, Jacob Kettleman. Best you go home and await our judgment."

Jacob left quickly. He had never seen the headman so angry.

His father was standing in the rain when he reached home. "Where have you been all night?" he shouted, but not as angrily as when Jacob tried to explain. "Have to repay the town for the damage you've done," his father said at long last, after he stopped cursing and muttering incomprehensibly about magicians, bastards, and responsibility. "Have to make amends for your mistake."

"I was just trying to help."

"As usual," his father sighed. Then he patted Jacob's shoulder. "Admire your efforts to save the town, son, but that's no excuse for the destruction you caused. Take years to pay, this will. Years!"

Jacob wished that his father had vented his displeasure in a way that would make him feel that he was paying for his errors. This quiet assertion that the family would bear the burden made him feel worse than he had. Guilt weighed heavily on his shoulders. Perhaps the townspeople would come to yell and beat him. That abuse, painful as it might be, might provide some feeling of absolution.

When William Moore and the townsfolk did not arrive the next day Jacob began to fear that they would not come until they had decided what to do with him. Yes, they were no doubt inventing a suitable, sufficiently horrible, lingering punishment.

The rain continued through the day, a steady drizzle that did nothing to dispel his gloom. It was disappointing that this pitiful rain was far less than the fierce spring storm the magician had predicted. Jacob decided that, when it came to the weather, Arthur Thomas was no more reliable than anyone else.

That night the storm Arthur Thomas had predicted struck with deadly ferocity. All night long the rain pounded the roof, driven hard by a warm wind that bent trees to ground and shook the house.

The water continued to pour down the next day and the following one, coming so heavily that even their well-drained yard began to flood.

Jacob worked with the rest of the family to erect an earthen dike, first to protect the barn and then the house from the rushing water. Even the three magicians helped, shoveling and hauling the half-frozen dirt. Jacob was so tired when they finished that he didn't think to question why they hadn't applied their magic arts to ease the task. At least they could have thawed the ground enough that he could shovel it instead of having to swing the mattock until his arms felt they were about to fall off.

When he awoke the following morning the sound of rain had ceased. The storm had passed, leaving behind a glorious crisp day so clear that every color seemed vivid and intense. Here and there, in places where the unseasonably warm rain had melted the snow, stood exposed blades of emerging spring grasses. Jacob led the

horses from the barn so they could browse on the fresh growth. It was a glorious day, but even that did not dispel his feeling of impending doom.

Just before dinner a delegation of men arrived at the farm. William Moore's black buggy was among them. All the men looked dirty, disheveled, and exhausted.

"We are here to see Jacob Kettleman," the headman announced when Jacob's father went out to greet them.

"You've no need to see my son," George Kettleman replied calmly. "The family will make amends. We'll do all we can to make good your losses."

William Moore was taken aback by the remark. "That's quite generous of you, but we still want to speak to Jacob."

"It's all right," Jacob said as he stood beside his father. "I have to take responsibility for what I did."

"What you did—" William Moore began and then stopped as Arthur Thomas and Blade stepped from the barn.

The headman glowered at the magician. "It's all your fault!" he exclaimed as he pointed an accusing finger. "You brought the storm, you made the snow melt, you're the cause of all our problems!"

One of the men made a move toward Arthur Thomas but, before he could take a second step, Blade had placed himself between them. His hand was halfway out of his cloak, enough that Jacob could see that he was gripping some sort of metal tool.

"I'd not do that," Blade growled with such menace that the townsman took a step back.

"I cannot control the weather, despite what you may want to believe," the old magician said wearily. He acted as if he'd taken no notice of the man's implied threat nor of Blade's response.

"We warned you of the coming storm," Jacob's father said defensively. "Had you heeded the magicians' warnings none of this would have happened. You have no reason to blame them."

William Moore didn't look convinced. "If it hadn't been for your son Jacob we would have lost the dam. If the gates hadn't been opened the flood waters would have destroyed it. The boy's meddling accidentally saved the town from worse damage."

Jacob couldn't believe his ears. Weren't they going to punish him?

"We want you to leave," William Moore continued, addressing the old magician. "We don't need your sorcery ruining our town and imperiling our lives."

"But all they did was predict the storm!" Jacob said. "And they are the only ones who know how to repair the old machines. You can't make them leave." The last thing he wanted was to have the magicians, especially Tash, depart.

William Moore dismissed his protest out of hand. "They've already told us most are beyond repair. But that doesn't matter. We can get along just fine without them. You hear me, magician? We want you to leave!"

Arthur Thomas acted amused by the remark. "I understand what you are saying, but our few repairs were only incidental to our visits—a courtesy, as it were, a way of gaining food and lodging on our journey. No, headman, we came to examine the tower and we shall not leave until that is done."

William Moore spat on the ground. "Bigger fools you for meddling with that demon tower. All right, see what you will and then be gone—just leave our town alone. We want no more magic.

"And you, George Kettleman, it's no surprise to me that you are so friendly with these people. I should have expected it." He smirked as he nodded at Jacob. "Seems your family's always been friendly with their kind." With that parting shot he turned and climbed into his buggy. In a moment and without another word all the men were gone.

Jacob's mother was crying and his father's fists were clenched so tightly that his knuckles were white.

"Fools!" Blade spat.

If Jacob arose earlier than normal and did his chores quickly, he would have time to watch the magicians. The first thing he had to do this particular morning was to climb into the loft and make a replacement strap for Dan's bridle, since the mischievous gelding had chewed the old one in two. As he was cutting the strap from the long skein of tanned hide he heard voices below.

"That was an ugly scene yesterday," Tash remarked. "Why are these people so angry at us and the Kettlemans? It was their own fault for not listening."

"They are ignorant fools," Blade said sharply. "Can't trust a settler."

Arthur Thomas sighed. "They're just people, ignorant from too many years of neglect, too many years of declining technology, too many details of survival. It's no wonder they're suspicious of us—we represent the unknown, the unknowable, the mysterious skills that they've lost."

"But we could have tried to explain..." Tash protested.

Arthur Thomas sneered. "What, how would you explain balancing Wilson tuners, scanning beacon scripts, firing up a pile, or awaring an AI from the archive? How would you do that without first giving them a thorough background in the physics, mathematics, and engineering involved? Perhaps you believe we could tell them how we plan to activate a daemon, as we hacked the tower's power bridge, without having them howling for our heads."

"But we could have explained what we want to do in simple ways that—"

"It's been tried in the past and failed," Arthur Thomas said sharply. "My..." He stopped abruptly, coughed, and cleared his throat. His voice was raspy when he continued. "Your predecessor tried that route, much to my regret.

No, dearest Tash, I've learned through bitter experience that it's better protection to cloak ourselves in the aura of mystery, even if it does feed their suspicions."

"Can you imagine how these dullards would react if they heard what we want to do?" Blade sneered. "Probably want to hang us all."

"But we are just..." Tash protested, her voice fading as they moved away.

What Jacob had overheard puzzled him. If he understood correctly, then magic must have once been common, something that people had lost over the years. That implied that magic was a skill, not some inherent faculty that blessed a few individuals. He became very excited, for that meant that he too could acquire the skill with the proper training. He might be able to learn magic if he paid even closer attention to the magicians.

Arthur Thomas was still working at the base of the tower as Jacob passed by on his way back from exercising the horses. The magician was attacking a large box with a hammer and chisel he'd fetched from the barn. Jacob heard him mumbling a spell, but not too clearly. From what other words he could make out, the spell seemed to include a lot of profanity. He continued on to the barn thinking that the old magician sounded a lot like anybody else when they became frustrated.

After he'd put the horses away Jacob peered out the back of the barn and saw Tash again working near the cistern. He stood in the shadow of the doorway and unobtrusively watched her.

She was apparently finding fewer problems this day, judging by the sound of her incantations. She spoke barely above a whisper, but certainly with power, for the instrument in her hand sparkled green, green, and green as she moved across a small, hand-sized panel she held.

Then the instrument in her hand sparked red. Tash removed a small knife from her pouch and pried at the cover on the panel. Even from this distance Jacob could see the silvery writing on the board as she removed it from its case. She turned it this way and that for a moment, and then chipped away a fleck with a fingernail before replacing the board. She wiggled it a few times to ensure a tight fit and then closed the lid. "Good," she muttered when the thin instrument glowed green again.

Jacob stayed within the doorway, watching the graceful movements of Tash's arms as she carefully and methodically worked the mechanisms she removed from the cistern.

What did she really think of him?, he wondered as he watched. He'd not had a chance to speak to her since that day Blade had given his chill warning. Should he confront her, or should he try to find out her true feelings in a more underhanded way? The question worried him speechless.

Tash must have finished her work, for she stood and stretched, placing her hands in the small of her arching back and parting her legs to brace herself. It was a long, languorous stretch.

Jacob's eyes followed the line from her ankles, up her legs, across the swelling of her buttocks, past her tiny waist, and stopped where her breasts thrust forward to strain against the fabric of her blouse. He felt himself responding strongly, yet he hardly dared breath lest she detect him. Gods, she was so beautiful. Blade must have been right. She was far too wonderful for a simple farm boy like him.

She held the pose for long minutes and then turned to look straight at where he was hiding. "You can come out now, Jacob. I'm pretty much finished with this module."

Jacob drew back, embarrassed that she had caught him watching her. But since she now knew he was there, he could not avoid her. As he stepped forward he had a sudden thought. If she knew he was there, then all that she had done could have been an act for his benefit, which implied that she really was toying with him, manipulating him. It was just as Blade had said.

"What were you doing?" he asked innocently.

Tash grinned. "I was running diagnostics to see which units were still good. Most of these appear to be in fair shape, although I was worried there for a second. Replacements are hard to come by, you know. Our spares are pretty low."

"Spares? Replacements? Diagnostics?" Her words were a revelation. In an intuitive flash he realized what it all meant. "You aren't doing magic, are you?" Jacob declared in a rush. "You're just repairing the machines, just like I repaired the tractor. It's just a different kind of mechanics."

"Not exactly, but you're right in the ways that matter, Jacob." She smiled. "I knew you were a clever boy."

Jacob shrugged off the compliment. Now that he realized what she had been doing, the wonder of it disappeared. It was a bitter truth, a fruit he regretted tasting.

"You're very perceptive, Jacob," Tash continued with a grin. "I told Arthur you would figure it out. No, there's no magic here, just maintenance of some old technology that almost everyone's forgotten about. Your tower is one of the few that remains of the landing control system the original settlers put up. We've been hoping for years to get one of them operational."

"But why? What use is the tower?"

Tash sighed. "Arthur Thomas hopes that there are still some supply ships in orbit." Seeing his puzzled expression she continued; "Up there, above the clouds!" She waved a hand toward the heavens. "Oh dear, I guess we will have to educate you, won't we?"

Quickly she explained how a ship could be parked in orbit, and called to the surface once a tower was

operational. "If it exists, which is highly doubtful, then maybe it will contain some knowledge we can use—maybe data we could use to restore some of our older equipment's functions. Then perhaps we can get ourselves back on the road to civilization after whatever happened to set us back."

"I don't understand," Jacob said.

"Something happened many years ago," Tash explained. "Somehow we lost most of the knowledge of who we were and where we came from. You know, the myths and legends. It was a long time ago."

"But after so long..." Jacob began. He didn't really believe that there could be something as large as a ship floating above the clouds, but if it was true and a lot of years had passed, it wouldn't do anyone any good. Old equipment died—that was the rule.

"Your tower might be the last chance we have, Jacob," Tash said. "There are only a handful of people like Arthur Thomas left, people who still understand some of this technology. He learned some from his father, who learned less than *his* father. Each generation we think we lose a little of the old tech. That ship," she pointed at the sky, "could do so much to restore what we've lost."

"If it still works," Jacob said. "If it exists."

"If it exists," Tash agreed. "It's all we can hope for. Arthur's tried to teach me what he knows, but there's so much to learn and so little time. I don't even have the basics, so all I can do is simple mechanical checks; idiot stuff, really. Arthur has to do the real work."

"And Blade?" he asked.

Tash shook her head. "He's not one of us—lacks the skill or the will, I think. But he has other talents that are just as useful."

"Such as protecting Arthur Thomas and you? That's what he is, isn't he—a guard. He's supposed to keep people away from you so you can concentrate on whatever you are trying to accomplish." He tried to keep the hurt out of his voice.

A look of consternation crossed Tash's face. "What did he tell you?" she demanded. "I swear, if he stepped out of line I'll... Never mind. What did he say?"

Jacob scuffed the dirt with the toe of his mud-encrusted boot, the boot of a farm boy too ignorant to play magicians` games. "He said that you had no interest in a farm boy like me." He looked at her expectantly and, when she failed to respond, continued. "He said you were just using me to amuse yourself. I... I guess he was right." He turned to go back into the barn.

Tash grabbed his shoulder and turned him about so suddenly that he nearly lost his balance. "You fool," she whispered. Her lips were scant centimeters from his face, so close that he could feel her breath on his cheek, so close that he could fall forever into those eyes. "Can't you tell how I feel? Don't you freaking *know?*"

Jacob didn't know how to answer. How was he to know? The only guide he had to their relationship was the ache in his heart whenever he saw her, the gnawing fear that she might leave and he'd never be able to speak to her again, the certainty that he was utterly unworthy of her attentions. Gods, what was this spell that she had cast over him? All he wanted to do was lean forward and kiss those sweet lips that were scarce centimeters from his own.

"You are so sweet," Tash said, brightening. "And here is your answer." She threw her arms around his neck and placed her lips upon his. Her body pressed against his, pushing her tool pouch into his side so hard that he could feel the shapes of the devices inside. But he didn't mind the discomfort, or even notice it as Tash's tongue explored his own, touched the inside of his cheek and plumbed the depths of his mouth. The kiss was so unlike those he had exchanged with other girls that he didn't know how to react.

"You are such a damn exasperating lout," Tash exclaimed as she abruptly pulled away. "But maybe we can change that. Let's talk some more later," she said over her shoulder as she left, blessing him with another of her dazzling smiles.

Jacob stood in dumb silence, the taste of her lingering on his lips, the heat of her embrace surrounding him like a cape, and her invitation filling him with hope.

Blade was standing just inside the barn as Jacob entered a few minutes later. "You are more stupid than I expected, boy. But then, maybe I didn't explain the situation properly." He pushed Jacob into one of the empty stalls. Before Jacob could recover, Blade's fist shot out and buried itself in his abdomen. The air rushed out of his lungs and he doubled over in agony, only to feel Blade's fist strike his side, just below the rib cage. The next expertly placed blow came as he pitched forward, a hard punch in his lower back that sent a sharp stab of agony through him.

As he rolled on the floor, swimming in a sea of misery and gasping for breath, Blade stood over him. "Did that make matters clearer, boy, or do you want another lesson?" Before Jacob could find the breath to answer, Blade put a well-directed kick into his stomach. Jacob was still writhing and retching as he walked away.

The next morning Tash came upon Jacob as he was feeding the horses. "Why didn't you come to see me last night?" She reached out for his hand. "Wasn't my invitation clear enough?"

Jacob jerked away. "I had other things to do."

"Other things?" There was a chill undertone to her voice.

Yes, Jacob wanted to answer, such as trying to dream up a suitable way of getting even with that damned guard of hers. Lord, he still ached from the pummeling he'd gotten. Surely Blade must have dislodged something inside

him for it to hurt this much. This morning he had pissed blood and had trouble keeping his breakfast down.

"Other things?" Tash continued to advance. "But after yesterday... Oh, damn, why are men so stupid?" She slipped an arm around his waist as he reached for another sack of feed and drew back when he winced. "Oh, did you hurt yourself?"

Jacob didn't give her an answer but somehow she must have understood. She spun him about, making him drop the sack. A dark cloud of loathing came across her face. Her eyes flashed and her lips drew back in a grimace. "That bastard. Blade had no right to... If he thinks... Never mind, Jacob. I'll take care of him!" She spun on her heel and stalked off.

How had she known? Jacob hesitated for only a moment and then went after her. "No, Tash. I have to settle this myself."

"Don't be ridiculous. You're no match for him. Blade could kill you without even breathing hard. No, Jacob. This is a personal matter between Blade and me. I'm the one who has to clear matters up, not you."

Jacob watched her go with a sinking feeling in his heart. It wasn't right that she should fight his battles for him. But it didn't matter what she did, he knew he would still have to deal with Blade himself, one way or another.

Arthur Thomas said he needed Jacob's help the next day. When his father objected because of the work Jacob was to do, he offered Blade as replacement to help him load the hay in the loft. Since Blade was obviously stronger, Jacob's father felt it a good exchange.

The magician had finally opened a door in the tower's side, a door that no one had suspected of being there. Jacob hesitated at the gaping black entrance, unsure of what he might find inside. From what Tash had explained he knew that the magician was only some sort of master mechanic and the tower a mere machine. He knew that, but a lifetime of concern about the demon that dwelled within could not be put to rest so easily. Jacob hesitated. Hadn't the magician said they were going to loose a demon?

"Don't dawdle," Arthur Thomas shouted from within. "I need your help with this." Jacob took a deep breath and stepped inside.

What he found astounded him. There was no cavernous interior, no vast space such as one would find in a silo. Instead he found himself in a narrow, constricting hallway. On either side were walls covered with row upon row of lights and, beneath them, protrusions. Above some of these were small numbers. The closely packed rows extended from floor to as high as Jacob could reach.

Arthur Thomas was standing near a section covered with at least twenty rows of green lights. "Now Jacob, I want you to observe carefully. I'm going to set a pattern on this first panel and then repeat that specific sequence several times on other panels. You must tell me if I am about to make a mistake. Do you understand?"

Jacob wondered what the magician thought he could accomplish by doing this. He nodded to show the old man that he understood, although it seemed a rather trivial task, one that Arthur Thomas could have easily done for himself. It occurred to him that perhaps this make-work had little to do with him and more to do with punishing Blade. This "job" was just an excuse to get him out of the way and to have Blade help with the backbreaking work in the hay loft.

Arthur Thomas pressed one of the protrusions. "Here we go, Jacob. This is the first group of settings. There are ten; 2.3, 2.2, 2.3, 1.05, 2.1, 3.2, 2.2, 2.2, 2.2, and 2.0. Do you have that?"

Jacob tried to repeat the sequence without looking at the numbers. He got the first seven right, but missed one of the remaining. "Sorry, sir," he said and vowed to pay closer attention.

Arthur Thomas pressed another button. Jacob watched in amazement as the numbers, which had appeared to be printed on the panel, changed. "The second set reads 3.3, 2.1, 2.2, 1.5, 3.0, 2.1, and zero. Got that?" Jacob repeated the sequence, this time without making a mistake.

"All right, here are the next settings," the magician rattled off more figures as they appeared on the panel. Jacob struggled to memorize them while holding the previous sets in memory.

As Arthur Thomas moved along, Jacob repeated the entire sequence to himself over and over. "Now, what was that first set?" Jacob rattled off the first ten numbers without pause and watched as the magician made the row match those. The next two sequences were set in the same manner.

Five times Arthur Thomas asked Jacob for the sequence and five times Jacob replied flawlessly. At no time did the magician indicate that he had expected either more nor less from his helper.

"Now, do you think you can do what I did on the rest of these?" The magician indicated the rest of the wall with a wave of his left hand. "I have more pressing tasks to perform up above while you are doing this. Can I trust you?"

The task didn't seem that difficult. The numbers seemed to change by a fraction each time one of the protrusions was pressed. "Yes, I think I can."

"Excellent. Let's see you do one panel before I leave."

Jacob's hand started to shake. The old magician was actually going to let him make changes to the machine. He didn't know what would happen as a result of these settings, nor did he particularly care. It was enough that he was being given the privilege of doing the work.

Arthur Thomas said nothing as Jacob went through the motions. "I think you've got it. Continue until you've set all of the power units."

"Sir?" The words made little sense to him.

"Just keep doing it until you've set every one of the panels. After that, come up and find me for your next job."

"I will do my best, sir," Jacob answered humbly, but the magician was already climbing the ladder at the end of the hall.

Jacob set to work. There were a lot of panels to be set.

By evening, the ground was clear of snow for nearly a kilometer in every direction. Jacob noted that the hillside where he'd first noticed the melting snow cap was now completely bare. What was more, the hillside's grass seemed far greener. "Due to the heat, no doubt," was Arthur Thomas' explanation. "I believe that is where the heat exchanger is buried."

Which explained nothing. It was still magic as far as Jacob was concerned.

"I'd like to see the town again," Tash said as they snuggled in the warm hay above the horses` stalls. Their little nest was doubly a pleasure for Jacob since it was Blade's labor that had put the hay in the loft. "Maybe I can get something nice for your mother and sisters to repay their hospitality."

"William Moore said you were to stay out of town. Besides, I'm sure Arthur Thomas and Blade would never let you go."

Tash kissed him again. "What they don't know won't matter, dear. Besides, my part of the work is over. Arthur Thomas can do the rest by himself. Come on, Jacob, the long ride to town would give us a chance to be really alone for a while."

Jacob savored that idea. Their cozy nest in the loft hadn't been all that private. Twice they'd had to lie silent while his father retrieved tools from the crib below, and Arthur Thomas and Blade had more than once come through to gather tools. Privacy was in short supply around the farm.

"Mother probably has a list of things she needs. I'll volunteer to go to town for them."

"I'll meet you below the hill." With that, Tash was off of him and down the ladder in a flash. By the time he'd gotten to his feet she was already out the door and racing across the field.

"I'd like to go to town and see what the flood did," Jacob announced as he came into the kitchen. "Can I get anyone anything while I'm there?"

"He's up to something," Ev declared. "He usually hates going to town."

"Hush," his mother said. "I do have a few things we need, Jacob; flour, and some spices, a few pounds of wax, and sweetener." She fumbled in the jar on top of the stove to extract some coins.

"Where is that magician you've been mooning over?" Ev continued. "We haven't seen either one of you since midday. Did she finally let you know what a pest you are and tell you to get away?"

"Tash wouldn't say that! She's too nice." Jacob wondered why he was so transparent that just about everyone knew his feelings. Tash had no problem in that regard.

Ev danced around the table. "Oh, Jacob's finally found someone weirder than himself. Is that it Jacob? Are you two going to run off so you can hug and kiss in private?"

Which was exactly what he was planning to do, but he couldn't admit it. "You mean like you and Eric Larson do whenever you have the chance?"

Ev flushed. "You, you..."

"I didn't know that you and the Larson boy were serious," his mother said crisply. "How long has this been going on, Evangeline?"

"There's nothing between me and Eric Larson," Ev responded hotly. "Don't listen to him. He's making it all up."

"Then what about Lars Torfsen at the fair the other night, or Arlie Whitehurst at the harvest feast?" Jacob continued. "You do spread yourself around, don't you, darling sister?"

Evangeline turned a bright crimson shade. "That's not true, either. Don't listen to him, mother!"

"Hmm, I think it's time we had a long talk," his mother pronounced slowly. Her usual smile had been replaced with a stern look. "Jacob, why don't you run along to town while Ev and I have a nice long chat? Yes, I think it is well past time we had a little woman-to-woman talk."

Ev glared as Jacob snatched up the money and raced out of the door. He knew that Ev would figure a way to get back at him later, but for now he had escaped an embarrassing admission.

Tash was waiting exactly where she'd said and snuggled into the warm furs on the sleigh beside him. Since Brandy knew the way, Jacob let the reins hang limp while he paid more attention to Tash. And she to him.

The high-water mark of the flood was most obvious on the houses nearest the river banks. From the mud stains near the roof line it looked as if William Moore's house had been completely submerged. All the doors and windows were opened wide to help dry the place out, despite the chill of the day. A pile of water-soaked rugs and assorted furnishings lay in a soggy heap just outside of the door.

The other riverside buildings were in much the same condition. Farther away, up the bank, the flood's brown signature was below the roof line, but there was still damage to be seen. Luckily the buildings and shops around the square had been spared, thanks in no small measure to Jacob's unintentional opening of the gates.

"I'll be as quick as I can," Tash said as she leaped from the sleigh and headed for the square. Jacob parked and began picking up the few staple items his mother had requested. The curt responses from the merchants and others

were at odds with their normal behavior. It was as if they were still angry at him. Perhaps William Moore had not spoken for all when he'd expressed his gratitude.

Day was fading into twilight when he found Tash sitting on the low wall outside the butcher's shop. A small, silent crowd had gathered nearby. "I've gotten everything on the list. Are you ready to go?"

Tash came to her feet with a flowing movement so smooth that it seemed that she had no joints whatsoever. "I decided to wait for you." Although her words were light Jacob noticed the way her eyes darted nervously from side to side.

"Is something wrong?" he asked as they began to walk. The crowd followed them.

"They dislike me," Tash said quietly as she gripped his arm and held on. "No, it's more that they are fearful—wary of my presence and what I might do."

Jacob looked around. He recognized many of their faces. They were people he'd seen in school, at worship—tradesmen, shopkeepers, and schoolmates. It wasn't conceivable that they could be afraid of someone as lovely and nice as Tash.

"It's just your imagination," he said lightly. "They're just upset because of the flood." At the same time he wondered at the undercurrent of animosity that filled the town. Perhaps there was something in what she said.

"I know you'd like to think so, Jacob, but that won't change things. Come on, let's finish and be on our way. This wasn't a good idea after all." She yanked him into a shop. "Here, let's get your mother some material for her sewing. Something nice to repay her for the pies."

He recognized the place. It was where his sisters spent so much time on market days. There were bolts of cloth arrayed on either side of the store's central aisle. Bins of small items were scattered about. He recognized cards of buttons and fasteners, but the remainder of the items were a mystery.

"These, I think, and some of those." Tash moved purposefully among the bins and pulled handfuls of this and that together and dumped them on the counter. Then she went to the bolts and selected two with subtle flower prints. "I'll take them," she announced. Helga Lafstadder, the shopkeeper, named a price that Jacob thought excessive, but Tash said nothing. She took out her purse and placed four shining coins on the countertop.

"I won't take your enchanted coins, imp," Helga announced coldly, making shooing motions at the money. "No telling what might come of it."

"Are you afraid the coins will disappear as soon as we are gone?" Tash spat out. "Afraid that I'd cheat an honest woman of her earnings?"

Helga drew back as if slapped. "If you know so well what I'm thinking, then why bother to ask?"

Tash leaned across the counter. "Were I as powerful as you imagine, I'd not be needing coin at all, would I? No, Helga Lafstadder, these coins are pure gold and worth considerably more than what you've asked for these inadequate selections. Now, put my purchases into something we can carry so we can be gone."

Helga muttered something under her breath, but relented enough to pull a length of wrapping from under the counter and bind the items into a tight bundle.

Jacob lifted the two bolts while Tash took the bundle. "Good day to you, Helga Lafstadder," he said politely as they left. Helga couldn't respond. Her mouth was occupied with biting on Tash's coin to verify its value.

The crowd that had been following them had grown since they'd entered the store. It now consisted of twenty or more people.

"There's one of them!" someone shouted.

Lars Torfsen's father, who was standing nearest the door, yelled; "You flooded my barn and ruined my fields." His face was flushed and his breath smelled of too long at the brew kegs.

"Damned 'gicians wouldn' help us," one of his drinking mates slurred loudly.

"Washed out the bridge on the north side," added another farmer whose name Jacob couldn't recall. "Now I have to come the long way round."

"Drowned my best sow, your flood did," someone standing in the back cried.

"Let's get the devil's spawn," a shrill voice shouted. "Let's get the bitch!"

Tash drew back as the rumbling voices grew louder and the crowd began to advance.

Jacob couldn't imagine what was making these people so upset. He took a step away, expecting Tash to follow, but she acted as if she were paralyzed. Her eyes darted from one to the next. Fear was written in her stance and on her face, plain for all to see.

Then a stone flew across the empty space and struck Tash on the shoulder. "Get her, get her!" a gruff voice cried. Others quickly joined them until the cry was a roar. "Get the bitch!"

Tash still had not moved. "Come on, Tash. We've got to get out of here." Jacob grabbed her arm and yanked, but she continued to act as if she were stuck. He pulled again and managed to get her moving in the right direction, but too slowly.

A second stone whizzed by Jacob's head and he thought he heard the dull thud of another hitting flesh. Tash staggered momentarily and then snapped out of her trance.

She stopped, lifted her arms, and waved them about as if she were casting a spell. "Begone!" she shouted as she turned and pointed at the nearest group. "Begone, or I'll call the demons of the nether worlds upon you!"

The people in the lead came to an abrupt stop. From the expressions on their faces Jacob thought they expected fire to sprout from the cobblestones or devils to suddenly appear before them. A few screamed in fright and pointed at the sky. There was a murmur of curses as those in the back stumbled into those who had stopped. In less than a minute the advancing crowd had dissolved into chaos.

"Now, run like hell," Tash said to Jacob as the crowd tried to sort itself out. She took off with the speed he had seen earlier. He was two steps behind her to begin with and fell further back with each succeeding step, although he was running as fast as he could.

Tash rounded the corner, climbed into the sleigh and took up the reins when he was only halfway there. Jacob heard footfalls close behind and tried to speed up, but the bolts he was carrying slowed him down. With no thought for his own safety, he stopped, spun about, and smashed the bolts of cloth into the faces of Peter Ultrich and Tony Scannish.

The two flipped backwards from the unexpected impact and tripped the gang behind them into a tangled pile. Jacob sprinted away, grinning in satisfaction. That would show them how he felt about people who threw rocks at Tash.

He tossed the bolts into the back of the sleigh and held on as they raced away. "Are you all right?" he asked when he regained his seat. "Did something hit you?"

Tash turned for only a moment so Jacob could see the angry red cut just below her eye. Her cheek was already starting to swell.

"Those bastards!" Jacob said. "I ought to..."

Tash silenced him. "There is nothing you should do, Jacob. They are only afraid of what is happening and fearful people often do things they later regret. The fault is mine for not leaving when I first learned of their fear. I should have known better than to stay."

Jacob protested. "How could you know what they intended to do? It isn't your fault the way they behaved."

Tash put a finger to his lips. "Not another word. But this is only the beginning, dear Jacob. I have a feeling there is worse to come."

"This is insane," he shouted over the rushing wind of their passage. "I can't believe the way they acted."

Tash pressed the horse to run even faster. "I don't think it was only my presence that made them so fearful. Look there!"

Jacob looked forward, toward home, toward the tower. Against the low-lying clouds an eerie greenish light flickered and flashed.

"It has to be Arthur!" Tash yelled triumphantly. "He finally got the beacons working."

Jacob didn't know what a beacon was, nor did he particularly care. The menacing light meant that his childhood nightmare had become reality—somehow the magicians had loosed the demons trapped in the tower! This was more than a machine could do, this was more than something dealing with simple skills. This was magic!

The villagers had tried to warn him. They had been right; the magicians had their own reasons, reasons that had nothing to do with creature comforts and farming. The light flickered and glowed, portending worse to come.

"Faster," he urged, leaning forward as if by will power alone he could impel horse and sleigh to move even faster. He had to see if his family was in danger.

Tash brought them to a stop in the farmyard and immediately leaped down to head toward the tower. Jacob went in the opposite direction, toward his family, who were standing at the door of their house, staring with horror at the glowing clouds.

The source of the greenish light wasn't the tower itself, but the mystical symbols. Each was glowing and pulsating from dim to bright. The light made his past nightmares of demons building their strength and preparing to emerge seem real.

"What's happening?" he yelled at this father. His mother was clutching her arms protectively around both sisters. "What are they doing?"

"Arthur Thomas told us to get away," his father answered. "He said we are all in terrible danger if we stay here."

Pam cried, "But you took the sleigh so we couldn't leave. Now the demons will get us for certain."

"Come along, we've got to leave," his mother said, pushing Pam toward the sleigh.

Jacob grabbed Ev by the arm and pulled. She stumbled in her rush to climb aboard and Jacob gave her rear a hard shove. She let out an indignant screech as she flew across the seat.

"Jacob, get in," his father yelled as he tied Dan to the rear of the sleigh.

It didn't feel right to run away with the family when he was responsible for all this. Maybe those panels he had done in the tower were a part of it. No, he couldn't leave, even if the old magician had warned them. He had a responsibility to see this through to the end, to try to stop the magicians from damaging or destroying the farm and the town.

Jacob hesitated, his feelings of loyalty and self-preservation in conflict. Before he could decide, a sleigh full of shouting townspeople drove into the yard and blocked the family's exit. William Moore was among them, as was the drunken Harold Torfsen.

"Where are those damned magicians?" William Moore demanded. "What are they doing?" He brandished a heavy

staff that looked like an axe handle. With a start Jacob realized that each of the villagers was carrying something that could be used as a weapon.

"You've got to get away from here!" his father warned. "The magicians said it was too dangerous to remain here."

William Moore shook his staff again. "Dangerous for those damned magicians, I'd say. We'll put a stop to their damned mischief once and for all."

Jacob had never seen these people in such a foul mood. Jacob noticed the whiteness of their knuckles as they gripped their weapons. Even from afar he could see the fear in their eyes, the hatred of anything that upset their daily routines, their lack of understanding. If ever there was a time when he felt unlike them, it was this moment. He was not one of them. He was afraid, but it made him want to understand, not destroy what he did not know.

One of the villagers shouted and Jacob turned to see Tash coming from the direction of the tower. Fear of what might happen ran through him. He doubted she could scare this hardened group of men the way she had spooked the crowd earlier.

Two of the men started toward her and the others quickly followed. They spread out into the same loose crescent line that they used to capture small game. Only this time it was Tash, not some startled hare, within a circle that could easily trap her.

Jacob shouted as he raced away from the sleigh and toward Tash. He rammed William Moore in the square of his back with his shoulder and sent the headman tumbling into the man beside him, who jarred the next in line as Jacob dove through the gap.

"Run!" he gasped as he approached a startled Tash. "Get back to the tower."

But Tash didn't run. She shuddered at the crowd, visibly afraid, yet she braced herself. "You are all in terrible danger," she announced in a level voice. "You must get away at once."

"The only danger here is from you meddling magicians," Moore growled. "Get them!"

As Tash had been speaking some of the men had worked themselves around to close the circle. Tash pressed against Jacob as they huddled together. His stomach clenched in fear as several of the men raised their implements above their heads.

Then Blade was there, glowering as he spun around. In a single smooth motion he withdrew his arm, his hidden hand, from the cloak. He was holding an odd sort of metal hatchet; truncated, with a heavy handle. It was hardly an imposing weapon against so many. Jacob wondered what he intended to do.

As if in answer, Blade raised the hatchet into the air. A clap of thunder roared as lightning leaped from the tool in Blade's hand.

Everyone stopped, astounded as Jacob that this magician should have such power in his grasp. But only for a moment. "He can't stop us all!" William Moore shouted, swinging his staff toward Tash's head. Blade was already turning his weapon toward the headman before William Moore's arm started to move.

Jacob leaped between Tash and the angry headman. Blade's weapon roared and Jacob felt a sickening crack as William Moore's staff met his shoulder. He felt his entire side explode in pain. He staggered for a few steps on weakening legs until they collapsed under him. Slowly, ever so slowly, the cold ground rose to press against his cheek.

As he fought to stay conscious he heard another roar from Blade's weapon, and a hoarse scream. He tried to turn his head to see who it had been, but his muscles refused to obey. His father was struggling with the headman, rolling over and over on the ground.

The pain in his side grew unbearable, a hot, scouring, searing, rough-edged rasp of skin and flesh that went on and on. He tried to open his mouth to scream over the bedlam around him, but only a whimper emerged. Gods, he thought, if only I could die and put an end to all this. But the pain went on and on.

"No, no. Get away you fools," he heard Arthur Thomas yell from a million miles away. He could barely make out the magician's cries over the commotion before everything went black.

He woke to flames and angry shouts. Someone kicked him in the side. Rough hands began dragging him along the ground. He heard women's screams and the sound of flesh being struck again and again.

A new sound began to grow. It was a low roar, like an approaching thunderstorm, but continuous and steadily increasing.

"The tower!" someone yelled, and the crowd's roar moved away.

"No, no, you fools," Arthur Thomas cried. The roaring was now almost unbearably loud.

Jacob tried to make sense of what was happening. Near him a woman was sobbing endlessly, another's muffled screams were fading into the distance. Flames reflected off the barn's side, and a huge fire crackled nearby.

"Kill the bastard," someone snarled and Jacob felt his head being lifted by the hair.

Then Blade's weapon roared. Three times it exploded and there were more screams—men's screams this time. He caught a flash of Tash and Arthur Thomas waving weapons as well. Someone turned him over and he saw their house aflame. The smell of burning sulfur hung in the air and bodies lay all about. In the distance he saw flames erupting from the base of the tower.

"Those fools, they'll ruin everything."

"Can't we stop them?" Tash begged. "There must be something we can do."

"One of the girls and the woman are dead," Blade said abruptly. "We'd better leave or we will join her. They won't be satisfied."

"Use the horse, Tash. We'll take the sleigh." Arthur Thomas shouted to make himself heard above the rising roar of the approaching storm. No, that was no storm. The thunder was continuous, a roar that was steadily rising in power and intensity.

"I'm not leaving Jacob," she replied. "Give me a hand, Blade. Put him in the sleigh and... Oh, my God!"

Far above them the sky turned a pretty rose color, as if a new sun had formed. The light grew brighter and brighter until Jacob had to close his eyes against the glare. Seconds later there was a clap of thunder so loud, so intense that Jacob swore he could feel it hit his face. It made the earlier roaring seem a whisper in comparison.

"Damn, damn, damn, damn," Arthur Thomas kept repeating. It sounded as if he were crying as the light faded around them and the sound rolled away over the plains. Bright fireflies began to rain from the clouds. Beautiful, unseasonable fireflies of light drifting down.

The next hours were an agony of bumping and jostling, each movement sending waves of pain radiating from Jacob's shoulder. Consciousness came and went. He thought they had stopped, but then someone was carrying him, causing such pain that he passed out again.

The next thing he was aware of was someone stroking his head. Someone else was sitting on his legs as a pair of brawny hands wrenched at his shoulder, sending further waves of intense agony through him.

He wished he could die.

Jacob awoke to find an angel hovering over him, a beautiful angel whose russet hair framed a perfect, beautiful face. Why, he wondered, this angel looked so much like his Tash.

"... coming around, I think," the angel said to someone he could not see.

"About time. We can't stay here." That voice sounded like Blade's. "We need to get him on his feet so we can start moving again."

"He will rest as long as necessary," Arthur Thomas ordered quietly. "We cannot leave him here, not after what they did to his..."

"Be quiet! I think he's awake," Tash said. "Jacob? How do you feel? Are you in pain?"

Jacob tried to organize his thoughts. His side felt sore, but the intense pain had gone. "Weak," he whispered. "So damn weak." His lips felt parched and his tongue too large. There was a horrible taste in his mouth.

"That's from the painkillers. We set your shoulder, so don't try to move around. It'll be sore for a few weeks. We did some field surgery to remove the bullet. It didn't hit anything vital, thank heavens. You lost a bit of blood and that's why you feel so weak."

"Where's everyone?" he asked. He tried to make some sense of his recollections of the confusion as they tried to escape from the tower. "Did we all get safely away?"

Tash looked alarmed. She glanced at someone behind him and shook her head. "We can talk about that later, Jacob. Right now you need to get more rest for the journey." She pressed something against the side of his neck.

Journey? What was she talking about? He hadn't planned on going anywhere. Before he could voice that thought, sleep descended like a dark blanket. He dreamed of screams in the night and angry faces.

The next few awakenings were a blur. He had a sense of movement, of a change of surroundings. Once he'd heard the sound of a nearby babbling brook, a sure sign of the spring melt. At that time Tash had spooned warm broth into his mouth and tended to the dressings at his side.

"Why did you have to shoot him?" he overheard her asking during another awakening. "Is that how you deal with anyone you dislike?" He was clearly overhearing an argument in progress.

"I wasn't aiming at him. The fool kid jumped in my way," Blade snarled. "Why won't you believe me?"

"Maybe because of what you are," Tash said bitingly. "And the way you think. Jacob was trying to protect me, not attack me. I don't need your protection where Jacob is concerned, soldier."

The sound of the babbling brook was absent when he next awakened. He had a sense of mountains rearing around him in the darkness of a cloudy night. There was a campfire crackling nearby. He could make out shadowy figures gathered around it.

Arthur Thomas sounded weary. "We've got to find someplace to rest and figure out what we're going to do next. We lost so many of our supplies in the fire, including the radio. We have to find an active pillar and make contact with base."

"Why don't we just find a town and salvage whatever we can?" Blade suggested.

"I don't want a repeat of our latest experience."

Tash exploded. "Is that what you call it—an 'experience?' Gods, it was a disaster—all those poor people... It would have been better for everyone had we never come around."

"But we had no choice," Arthur Thomas said. "This tower presented the best possibility. We had to try."

"I know, but couldn't we have done it differently? There has to be a better way."

"Let me know when you think of it," Arthur Thomas said bitterly.

Jacob woke to a hillside camp overlooking a small valley. On either side soared tall mountains still covered with snow. He was lying on a complicated arrangement of poles and blankets. He recognized the blankets as those that

had been in the sleigh.

He heard voices behind him and Tash appeared with a steaming mug in her hands. "We stopped the meds so you'd be able to move around," she said pleasantly. "Eat this and then we'll see if you can stand."

Jacob was ravenous. He gulped the warm gruel down as if it were the most delicious food in the world.

"Take it easy. You'll get sick if you eat too quickly," Tash cautioned.

"Looks like he can start taking some of the load," Blade said as he knelt beside Tash and casually put one arm across her back. "Probably been faking the past day or so."

Tash shook off his arm. "I think I am the best judge of that, Blade. Trust me, he won't be ready to walk for another day at least."

Blade stood. "Then I'm glad it's all downhill from the pass, but he'd better be ready by the time we get there; That's as far as I'm taking him and I don't give a damn what Arthur Thomas says!"

A thousand questions swam in Jacob's head. Where were they and why had they come here? What had happened after he passed out? Where was his family? What was the meaning of the lights on the field, the roaring, the blazing sun—or had that been a dream?—the explosion, the dead bodies, and the fireflies? Just what had Arthur Thomas been trying to do?

But Tash avoided any direct answers. "You are one of us now, Jacob. You are under our protection."

"But why? Why should I need your protection?" he asked, but met with only silence.

At least one question that had been in Jacob's mind was answered as soon as they broke camp. The pole arrangement allowed Blade to drag Jacob behind him as they descended the hillside. Jacob realized that he must have been doing this since they left home. No wonder he was so anxious for Jacob to be up and walking on his own.

It shamed Jacob that Blade should be doing this, no doubt at Arthur Thomas's insistence. Still, it did place him under some obligation to repay the dark man, and that obligation was quite distasteful. He wanted to owe Blade nothing. He still had to settle the matter between them, but only when he felt they were equals. His desire to repay the dark man in kind was tempered by the prudence of his youth and inexperience. His time would come, he was sure of it.

He struggled out of the blankets to test his strength whenever they stopped. His right side still felt stiff. Every time he tried to straighten a stitch of pain shot across his ribs, but he tried to never let it show.

"Take it easy. It'll take time to heal completely," Tash whispered, as knowingly as ever. It was uncanny, the way she could see into his thoughts.

By the third day Jacob felt he could walk without assistance. "I will walk on my own in the morning," he announced, and bristled when he saw Blade smile.

"But you aren't ready to..." Tash began.

"Leave him be," Arthur Thomas interrupted. "Jacob is the best judge of his own strength." Turning to Jacob he said; "We will travel as slowly as we can. If you feel that you cannot keep up you must tell me at once and we will use the travois once more."

Jacob swore that he would die before he let Blade carry him one step further. "I will not slow your progress, magician. But before I take another step would you please explain why we are doing this? Where are we going and what has happened to my family?" He had asked the same questions each day they stopped and had received no answer.

There was a moment of silence. Tash moved to Jacob's side and placed one hand on his shoulder. Blade grunted and moved to the far side of the campfire as Arthur Thomas squatted before Jacob. He spoke quietly. "You have no family, boy. You must put that past behind you and continue with us. You cannot go back."

"But my father will need help with the spring planting, and there is so much to learn about the tower now that you've fixed it that..." His voice trailed off as he noted the sad expression on the old magician's face. Then he recalled the burning tower and the flaming farmhouse.

"I'm afraid that the tower is no longer of any use to anyone. Nor could you return if it was. Listen, Jacob, you were nearly killed and, despite our weapons, we barely got away alive ourselves. The mob—those ignorant settlers—were quite enraged."

"He wants to know about his family," Tash said firmly. Her hand rested gently on his arm. Jacob could feel her draw nearer, lending him warmth. "You can't put it off any longer. You have to tell him."

"We tried to..." Arthur Thomas began. "If we'd thought that..." When he paused the second time Jacob knew that the news would not be good.

Finally, Arthur Thomas found his voice. In a few terse sentences he described what the mob had done. As he spoke Jacob integrated the images that he'd believed were nightmares; the burning house, the screaming women... "The bodies?" he croaked.

"Some of your family, and those we killed," the magician replied. "We had no time to bury anyone. It was too dangerous to remain, so we left at once. We had to bring you with us. Jacob, the mob would have killed you."

Jacob wondered why the news made no immediate impact on him. Instead, he felt numb. Suddenly he was without the father and mother he had so loved and he felt nothing. Suddenly he was without the older sister he thought he detested, and the little sister he loved. Suddenly he was alone as never before.

"We did find this," the magician extended a wad of fabric to Jacob. "I think you should have it."

Jacob took the soft fabric. It was Evangeline's favorite scarf, the one she always wore when she was going to town. He lifted it to his face and breathed deeply, smelling Evangeline's sweet perfume. Deep in the night he recalled that scent and found the tears for her.

Then Tash was lying beside him, her arms embracing him, holding him close as he sobbed. "The pain will ease in time, Jacob. You want to learn too much to hold onto your past."

Jacob wondered how Tash always seemed to know his innermost thoughts, often before he realized them himself. What secret power did this lovely, desirable, woman hold, and did she know how much he loved her? He glanced at Tash, so close and warm, and was about to voice that question when he saw her smile.

"It's a gift," she said simply. "And I feel the same way about you, dear Jacob." His remaining questions were buried in her lips. At that moment Jacob realized that he had won a contest he'd not completely understood until this moment. It had not been Blade he had to defeat, it had been his own doubts about her.

Tash was absolutely right. He was eager to learn more of the magician's arts. Despite the pain of the moment he was where he had always longed to be. He was among the magicians.

Only, why did it have to come at such a price?

In the morning, he helped strike the camp. The pass was just ahead and beyond that, the future. He had a long way to go if he was going to be a magician, but he knew that he would make it.

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THE POLITICAL OFFICER

Charles Coleman Finlay

Maxim Nikomedes saw the other man rushing towards him, but there was no room to dodge in the crate-packed corridor. He braced himself for the impact. The other man pulled up short, his face blanching in the pallid half-light of the "night" rotation. It was Kulakov, the Chief Petty Officer. He went rigid and snapped a salute.

"Sir! Sorry, sir!" His voice trembled.

"At ease, Kulakov," Max said. "Not your fault. It's a tight fit inside this metal sausage."

Standard ship joke. The small craft was stuffed with supplies, mostly food, for the eighteen month voyage ahead. Max waited for the standard response, but Kulakov stared through the hull into deep space. He was near sixty, old for the space service, old for his position, and the only man aboard who made Max, in his mid-forties, feel young.

Max smiled, an expression so faint it could be mistaken for a twitch. "But it's better than being stuck in a capped off sewer pipe, no?"

Which is what the ship would be on the voyage home. "You've got that right, sir!" said Kulakov.

"Carry on."

Kulakov shrunk aside like an old church deacon, afraid to touch a sinner less he catch the sin. Max was used to that reaction from the crew, and not just because his nickname was the Corpse for his cadaverous and dead expression. As the Political Officer, he held the threat of death over every career aboard: the death of some careers would entail a corporeal equivalent. For the first six weeks of their mission, after spongediving the new wormhole, Max cultivated invisibility and waited for the crew to fall into the false complacency of routine. Now it was time to shake them up again to see if he could find the traitor he suspected. He brushed against Kulakov on purpose as he passed by him.

He twisted his way through the last passage and paused outside the visiting officers' cabin. He lifted his knuckles to knock, then changed his mind, turned the latch and swung open the door. The three officers sitting inside jumped at the sight of him. Guilty consciences, Max hoped.

Captain Ernst Petoskey recovered first. "Looking for someone, Lieutenant?"

Max let the silence become uncomfortable while he studied Petoskey. The captain stood six and a half feet tall. His broad shoulders were permanently hunched from spending too much time in ships built for smaller men. The crew loved him so much they would eagerly die—or kill—for him. Called him Papa behind his back. He wouldn't shave again until they returned safely to spaceport; his beard was already quite full, and juice-stained at the corner with proscripted chewing tobacco. Max glanced past Lukinov, the balding "radio lieutenant" and stared at Ensign Pen Reedy, the only woman on the ship.

She was lean, with prominent cheekbones, but the thing Max always noticed first were her hands. She had large, red-knuckled hands. She remained impeccably dressed and groomed, even six weeks into the voyage. Every hair on her head appeared to be individually placed as if they were all soldiers under her command.

Petoskey and Lukinov sat on opposite ends of the bunk. Reedy sat on a crate across from them. Another crate between them held a bottle, tumblers, and some cards.

Petoskey, finally uncomfortable with the silence, opened his mouth again.

"Just looking," Max pre-empted him. "And what do I find but the Captain himself in bed with Drozhin's boys?"

Petoskey glanced at the bunk. "I see only one and he's hardly a boy."

Lukinov, a few years younger than Max, smirked and tugged at the lightning bolt patch on his shirt sleeve. "And what's with calling us Drozhin's boys? We're just simple radiomen. If I have to read otherwise, I'll have you up for falsifying reports when we get back to Jesusalem."

He pronounced their home Hey-zoo-salaam, like the popular video stars did, instead of the older way, Jeez-us-ail-em.

"Things are not always what they appear to be, are they?" said Max.

Lukinov, Reedy, and a third man, Burdick, were the Intelligence listening team assigned to intercept and decode Adarean messages—the newly opened wormhole passage would let the ship dive into the Adarean system undetected to spy. The three had been personally selected and prepped for this mission by Dmitri Drozhin, the legendary Director of Jesusalem's Department of Intelligence. Drozhin had been the Minister too, back when it had still been the Ministry of the Wisdom of Prophets Reborn. In fact, he was the only high government official to survive the Revolution in situ, but these days his constellation was challenged by younger men like Mallove, who'd

created the Department of Political Education.

"Next time, knock first, Lieutenant," said Petoskey.

"Why should I, Captain?" returned Max, congenially. "A honest man has nothing to fear from his conscience, and what am I if not the conscience of every man aboard this ship?"

"We don't need a conscience when we have orders."

"Come off it, Max," snorted Lukinov. "I invited the Captain up here to celebrate. Reedy earned her comet today."

Indeed, she had. The young ensign wore a gold comet pinned to her left breast pocket, similar to the ones embroidered on the shirts of the other two officers. Comets were awarded only to crew members who demonstrated competence on every ship system—Engineering, Ops and Nav, Weapons, Vacuum and Radiation. Reedy must have qualified in record time. This was her first space assignment. "Congratulations," said Max.

Reedy suppressed a genuine smile. "Thank you, sir."

"That makes her the last one aboard," said Petoskey. "Except for you."

"What do I need to know about ship systems? If I understand the minds and motivations of the men who operate them, it is enough."

"It isn't. Not with this," his mouth twisted distastefully, "this miscegenated, patched-together, scrapyard ship. I need to be able to count on every man in an emergency."

"Is it that bad? What kind of emergency do you expect?"

Lukinov rapped the makeshift table. The bottles rattled. "You're becoming a bore, Max. You checked on us, now go make notes in your little spy log, and leave us alone."

"Either that or pull up a crate and close the damn hatch," said Petoskey. "We could use a fourth."

Lukinov waved his hand in clear negation, showing off a large gold signet ring. "You don't want to do that, Ernst. This is the man who won his true love in a card game."

Petoskey looked over at Max. "Is that so?"

"I won my wife in a card game, yes." Max didn't think that story was widely known outside his own department. "But that was many years ago."

"I heard you cheated to win her," said Lukinov. He was Max's counterpart in Intelligence—the Department of Political Education couldn't touch him. The two Departments hated each other and protected their own. "Heard that she divorced you too. I guess an ugly little weasel like you has to get it where he can."

"But unlike your wife, she always remained faithful."

Lukinov muttered a curse and pulled back his fist. Score one on the sore spot. Petoskey reached out and grabbed the Intelligence officer's elbow. "None of that aboard my ship. I don't care who you two are. Come on, Nikomedes. If you're such a hotshot card player, sit down. I could use a little challenge."

A contrary mood seized the Political Officer. He turned into the hallway, detached one of the crates, and shoved it into the tiny quarters.

"So what are we playing?" he asked, sitting down.

"Blind Man's Draw," said Petoskey, shuffling the cards. "Deuce beats an ace, ace beats everything else."

Max nodded. "What's the minimum?"

"A temple to bid, a temple to raise."

Jesusalem's founders stamped their money with an image of the Temple to encourage the citizen-colonists to render their wealth unto God. The new bills carried pictures of the revolutionary patriots who'd overthrown the Patriarch, but everyone still called them temples. "Then I'm in for a few hands," Max said.

Petoskey dealt four cards face-down. Max kept the king of spades and tossed three cards back into the pile. The ones he got in exchange were just as bad.

"So," said Lukinov, glancing at his hand. "We have the troika of the Service all gathered in one room. Military, Intelligence, and—one card, please, ah, raise you one temple—and what should I call you, Max? Schoolmarm?"

Max saw the raise. "If you like. Just remember that Intelligence is useless without a good Education."

"Is that your sermon these days?"

"Nothing against either of you gentlemen," Petoskey interjected as he dealt. "But it's your mother screwed three ways at once, isn't it. There's three separate chains of command on a ship like this one. It's a recipe for mutiny. Has been on other ships, strictly off the record. And with this mission ahead if we don't all work together, God help us."

Max kept the ten of spades with his king and took two more cards. "Not that there is one," he said officially, "but let God help our enemies. A cord of three strands is not easily broken."

Petoskey nodded his agreement. "That's a good way to look at it. A cord of three strands, all intertwined." He stared each of them in the eyes. "So take care of the spying, and the politics, but leave the running of the ship to me."

"Of course," said Lukinov.

"That's why you're the captain and both of us are mere lieutenants," said Max. In reality, both he and Lukinov had the same service rank as Petoskey. On the ground, in Jesusalem's mixed-up service, they were all three colonels. Lukinov was technically senior of the three, though Max had final authority aboard ship within his sphere.

It was, indeed, a troubling conundrum.

Max's hand held nothing—king and ten of spades, two of hearts, and a seven of clubs. Petoskey tossed the fifth

card down face-up. Another deuce.

Max hated Blind Man's Draw. It was like playing the lottery. The card a man showed you was the one he'd just been dealt; you never really knew what he might be hiding. He looked at the other players' hands. Petoskey showed the eight of clubs and Lukinov the jack of diamonds. Max glimpsed a dark four as Ensign Reedy folded her hand and said "I'm out."

"Raise it a temple and call," Max said, on the off chance he might beat a pair of aces. They turned their cards over and it was money thrown away. Petoskey won with three eights.

Lukinov shook his head. "Holding onto the deuces, Max? That's almost always a loser's hand."

"Except when it isn't."

Petoskey won three of the next five hands, with Lukinov and Max splitting the other two. The poor ensign said little and folded often. Max decided to deal in his other game. While Lukinov shuffled the cards, Max tugged at his nose and said to the air. "You're awfully silent, Miss Reedy. Contemplating your betrayal of us to the Adareans?"

Lukinov mis-shuffled. A heartbeat later, Captain Petoskey picked up his spittoon and spat.

Reedy's voice was as steady as a motor churning in low gear. "What do you mean, sir?"

"You're becoming a bore, again, Max." Lukinov's voice had a sharp edge to it.

"What's this about?" asked Petoskey.

"Perhaps Miss Reedy should explain it herself," said Max. "Go on, Ensign. Describe the immigrant ghetto in your neighborhood, your childhood chums, Sabbathday afternoons at language academy."

"It was hardly that, sir," she said smoothly. "They were just kids who lived near our residence in the city. And there were never any formal classes."

"Oh, there was much more to it than that," pressed Max. "Must I spell it out for you? You lived in a neighborhood of expatriate Adareans. Some spymaster chose you to become a mole before you were out of diapers and started brainwashing you before you could talk. Now while you pretend to serve Jesusalem you really serve Adares. Yes?"

"No. Sir." Reedy's hands, resting fingertip to fingertip across her knees, trembled slightly. "How did they know women would ever be admitted to the military academies?"

Reedy hadn't been part of the first class to enter, but she graduated with the first class to serve active duty. "They saw it was common everywhere else, perhaps. Does it matter? Who can understand their motives? Their gene modifications make them impure. Half-animal, barely human."

She frowned, as if she couldn't believe that kind of prejudice still existed. "Nukes don't distinguish between one set of genes and another, sir. They suffered during the bombardments, just like we did. They fought beside us, they went to our church. Even the archbishop called them good citizens. They're as proud to be Jesusalemites as I am. And as loyal. Sir."

Max tugged at his nose. "A role model for treason. They betrayed one government to serve another. I know for a fact this crew contains at least one double agent, someone who serves two masters. I suspect there are more. Is it you, Miss Reedy?"

Lukinov and Petoskey had turned into fossils before his eyes. Petoskey stared at the young Intelligence officer across the table like a man contemplating murder.

Reedy pressed her fingertips together until her hands grew still. She refused to look to Petoskey or Lukinov for help. "Sir. There may be a traitor, but it's not me. Sir."

Max leaned back casually. "I've read your Academy records, Ensign, and find them interesting for the things they leave out. Such as your role in the unfortunate accident that befell Cadet Vance."

Reedy was well disciplined. Max's comments were neither an order nor a question, so she said nothing, gave nothing away.

"Vance's injuries necessitated his withdrawal from the Academy," Max continued. "What exactly did you have to do with that situation?"

"Come on, Max," said Lukinov, in his senior officer's cease-and-desist voice. "This is going too far. There are always accidents in the Academy and in the service. Usually it's the fault of the idiot who ends up slabbed. Some stupid mistake."

Max was about to say that Vance's mistake had been antagonizing Reedy, but Petoskey interrupted. "Lukinov, have you forgotten how to deal? Are you broke yet, Nikomedes? You can quit any time you want."

Max showed the roll of bills in his pocket and Lukinov started tossing down the cards. As he made the second circuit around their makeshift table, the lights flickered and went off. Max's stomach fluttered as the emergency lights flashed on, casting a weak red glare over the cramped room. The cards sailed past the table, and into the air. Petoskey slammed his glass down. It bounced off the table and twirled toward the ceiling, spilling little brown droplets of whiskey.

Petoskey slapped the ship's intercom. "Bridge!"

"Ensign!" barked Lukinov. "Find something to catch that mess before the grav comes back on and splatters it everywhere."

"Yes, sir," Reedy answered and scrambled to the bathroom for a towel.

"Bridge!" shouted Petoskey, then shook his head. "The com's down."

"It's just the ship encounter drill," said Lukinov.

"There's no drill scheduled for this rotation. And we haven't entered Adarean space yet, so we can't be encountering another ship..."

Another ship.

The thought must have hit all four of them simultaneously. As they propelled themselves frog-like toward the hatch, they crashed into one another, inevitable in the small space. During the jumble, Max took a kick to the back of his head. It hurt, even without any weight behind it. No accident, he was sure of that, but he didn't see who did it.

Petoskey flung the door open. "The pig-hearted, fornicating bastards."

Max echoed the sentiment when he followed a moment later. The corridor was blocked by drifting crates. They'd been improperly secured.

"Ensign!" snapped Petoskey.

"Yes, Captain."

"To the front! I'll pass you the crates, you attach them."

"Yes, sir."

"Can I trust you to do that?"

"Yessir!"

Max almost felt sorry for Reedy. Almost. In typical fashion for these older ships, someone had strung a steel cable along the corridor, twist-tied to the knobs of the security lights. Max held onto it and stayed out of the way as Petoskey grabbed one loose box after another and passed them back to Reedy. There was the steady sound of velcro as they made their way toward the bridge.

"What do you think it is?" Lukinov whispered to him. "If it's a ship, then the wormhole's been discovered..."

The implications were left hanging in the air like everything else. Max compared the size of Lukinov's boot with the sore spot on the back of his head. "Could be another wormhole. The sponge is like that. Once one hole opens up, you usually find several more. There's no reason why the Adarans couldn't find a route in the opposite direction."

Lukinov braced himself against the wall, trying to keep himself oriented as if the grav was still on. "If it's the Adareans, they'll be thinking invasion again."

"It could be someone neutral too," said Max. "Most of the spongedivers from Earth are prospecting in toward the core these days, but it could be one of them. Put on your ears and find out who they are. I'll determine whether they're for us or against us."

"If they're against, then Ernst can eliminate them," laughed Lukinov. "That's a proper division of labor."

"Our system is imperfect, but it works." That was a stretch, Max told himself. Maybe he ought to just say that the system worked better than the one it replaced.

"Hey," shouted Petoskey. "Are you gentlemen going to sit there or join me on the bridge?"

"Coming," said Lukinov, echoed a second later by Max.

They descended two levels, and came to the control center. Max followed the others through the open hatch. Men sat strapped to their chairs, faces tinted the color of blood by the glow of the emergency lights. Conduits, ducts, and wires ran overhead, like the intestines of some man-made monster. One of the vents kicked on, drawing a loud mechanical breath. Truly, Max thought, they were in the belly of leviathan now.

"Report!" bellowed Petoskey.

"Lefty heard a ship," returned the Commander, a plug-shaped double-chinned fellow named Gordet. "It was nothing more than a fart in space, I swear. I folded the wings and initiated immediate shutdown per your instructions before our signature could be detected."

"Contact confirmed?"

"Yes, sir."

"Good work then." The ship chairs were too small for Petoskey's oversized frame. He preferred to stand anyway and had bolted a towel rack to the floor in the center of the deck. The crew tripped over it when the grav was on, but now Petoskey slipped his feet under it. With the low ceilings it was the only way he could keep from bumping his head. It was against all regulations, but, just as with his smuggled tobacco, Petoskey broke regulations whenever it suited him. It was a quality shared by many of the fleet's best deep space Captains. "Those orders were for when we entered Adarean space, Commander," Petoskey added a second later. "I commend your initiative. Put a commendation in Engineer Elefteriou's record also."

"Yes. sir." Gordet's voice snapped like elastic, pleased at the Captain's praise.

"Identity?"

"It's prime number pings up Outback. Corporate prospectors. Her signature looks like one of the new class."

Petoskey grabbed the passive scope above his head and pulled it down to his eyes. "Vector?"

"Intercept."

"Intercept?"

"It's headed in-system and we're headed out. At our current respective courses and velocities, we should come within spitting distance of it just past Big Brother."

Big Brother was the nickname for this system's larger gas giant. Little Brother, the smaller gas giant, was on the

far side of the sun, out past the wormhole to home.

"Are they coming from the Adares jump?" Petoskey asked.

"That's what we thought at first," said Gordet. "But it appears now that they're entering from a third wormhole. About thirty degrees negative of the Adares jump, on the opposite side of the elliptic." He glanced over the navigator's shoulder at the monitor. "Call that one thirty-six degrees."

Petoskey continued to stare into the scope. "Shit. There's nothing out here."

Gordet cleared his throat. "It's million of kilometers out, sir. Still too far away for a clear visual."

"No! I mean there's nothing out here. This system won't hold their attention for long. It's only a matter of time before they find the opened holes to Adares and home." He paused. "Do that and they'll close our route back."

Indeed. Max had a strong urge to pace. If he started bouncing off the walls, he was certain Petoskey would order him off the bridge, so tried to float with purpose. Burdick, the third member of the Intelligence team, paused in the hatch, carrying a large box. He nodded to Lukinov and Reedy, who followed him forward toward the secure radio room. Max wondered briefly why Burdick had left his post.

"The intercept makes things easier for us," Petoskey concluded aloud. "Calculate the soonest opportunity to engage without warning. With any luck, the missing ship will be counted as a wormhole mishap." Absorbed by the sponge.

Elefteriou turned and spoke to Rucker, the First Lieutenant, who spoke to Gordet, who said, "Sir, radio transmissions from the ship appear to be directed at another ship in the vicinity of the jump. If we take out this one, then the other dives and lives to witness."

"Just one other ship?"

"No way of telling this far out without the active sensors." Which they couldn't use without showing up like a solar flare.

"The order stands," said Petoskey. "Also, Commander, loose cargo in the corridors impeded my progress to the bridge. This is a contraindication of ship readiness."

Gordet stiffened, as crushed by this criticism as he'd been puffed up by the praise. "It'll be taken care of, sir!"

"See to it. Where's Chevrier?" Arkady Chevrier was the Chief Engineer. He came from a family of industrialists that contributed heavily to the Revolution. His uncle headed the Department of Finance, and his father was a General. Mallove, Max's boss in Political Education, had warned him not to antagonize Chevrier.

"In the engine room, sir," answered Gordet. "He thought that the sudden unscheduled shutdown of main power resulted in a drain on the main battery arrays. I sent him to fix it."

"Raise Engineering on the com."

"Yes, sir," said Gordet. "Raise Engineering."

Lefty punched his console, listened to his earphones, shook his head.

Petoskey shifted the plug of tobacco in his mouth. "When I tried to contact the bridge from quarters, the com was down. If I have to choose between ship communications and life support, in the presence of a possible enemy vessel, I want communications first. Get a status report from Engineering, and give me a com link to all essential parts of the ship within the next fifteen minutes if you have to do it with tin cans and string. Is that clear?"

Sweat beaded on Gordet's forehead. His jowls quivered as he answered, "Yessir!"

Gordet did not divide his attention well, Max noted. The Commander had been so absorbed with the other ship, he had not yet noticed the ship communications problem. Several past errors in judgment featured prominently in his permanent file. He seemed unaware that this was the reason he'd been passed over for ship command of his own. But he was steady, and more or less politically sound.

He could also be a vindictive S.O.B. Max watched him turn on his subordinates. "Corporal Elefteriou," Gordet shouted. "I want a full report on com status. Five minutes ago is not soon enough! Lieutenant Rucker!"

"Sir!"

"Get your ass to Engineering. I want to receive Chevrier's verbal report on this com here!" He punched it with his fist for emphasis. "If it doesn't come in fifteen minutes, you can hold your breath while the rest of us put on space gear."

The First Lieutenant set off for Engineering. Petoskey cleared his throat. "Commander, one other thing."

"Yes?"

"We'll switch to two shifts now, six hours on, six off. All crew."

"Yes, sir."

Petoskey gestured for Max to come beside him.

"So now we wait around for three days to intercept," Petoskey said in a low voice. "You look like a damn monkey floating there, Nikomedes. We could surgi-tape your boots to the deck."

"That's not necessary." Petoskey wasn't the only captain in the fleet who'd tie his political officer down to one spot if he could. Max needed to be free to move around to catch his traitor.

"If you were qualified for any systems, I'd put you to work."

An excellent reason to remain unqualified. "And what would you have me do?"

"At this point?" Petoskey shrugged. Then he frowned, and jerked his head toward the Intelligence team's radio

room. "Was that true? About... ?"

"This is not the place," Max said firmly. Illusion was not reality; the crew pretended not to hear Petoskey speak, but they'd repeat every word that came from his mouth.

"I hate the Adareans, I want you to know that," Petoskey said. "Anything to do with the Adareans, I hate, and I'll have none of it aboard my ship. So if there's any danger, even from one of the intelligence men—"

"There will be no danger," Max asserted firmly. "It is my job to make certain of that."

"See to it, Lieutenant."

"I will." Max was surprised. That was the most direct command any Captain had given him during his tenure as a political officer.

Petoskey returned an almost respectful nod. Max was about to suggest a later discussion when Lukinov shouted from the hatch.

"Captain. You might want to listen to this. We tried to raise you on the com, but it's not working."

Petoskey slipped his feet free and followed the Intelligence officer. Max invited himself and swam along.

Inside the listening room, Reedy sat at a long desk, wearing a pair of headphones, making notes on the translation in her palm-pad. Burdick had a truck battery surgi-taped to a table wedged in the tiny room's rounded corner. Wires ran from it to an open panel on the main concomsole, and Burdick connected others. He looked up from his work and grinned as they came into the hatch. "Gotta love the electrician's mates," he said. "They've got everything."

Lukinov laughed and handed a pair of headphones to Petoskey. "Wait until you hear this."

Petoskey slipped the earpieces into place. "I don't understand Chinese," he said after a minute. "Always sounds like an out-of-tune guitar to me."

Lukinov's smile widened. "But it's voices, not code, don't you see? The level of encryption was like cheap glue." He made a knife-opening-a-letter gesture with his hands.

"Good work. What have you learned so far?"

Lukinov leaned over Reedy's shoulder to look at the palm-pad. "Corporate security research ship. Spongedivers."

Petoskey nodded. "Bunch of scientists and part-time soldiers. Soft, but great tech. Way beyond ours. It's a safe bet their battery arrays don't go down when they fly mute. Lefty says there's another one parked out by the wormhole."

Lukinov confirmed this. "We know it because the radio tech is talking to his girlfriend over on the other ship."

Burdick snickered, and Petoskey muttered "Mixed crews" with all the venom of a curse. He glared at Reedy so hard his eyes must have burned a hole in the ensign's head. The young woman looked up from her pad. "Yes, sir?" she asked.

"I didn't speak to you," Petoskey snapped.

Mixed crews were part of the Revolution, a way to double manpower—so to speak—in the military forces and give Jesusalem a chance to catch up. So far it was only in the officer corps, and even there it hadn't been received well. Some men, like Vance at the Academy, tried to openly discourage it despite the government's commitment.

Lukinov held the back of Reedy's seat to keep from drifting toward the ceiling. "The inbound ships's called the Deng Xiaopeng. Why does that name sound familiar?"

Petoskey shrugged. "Means nothing to me."

If they didn't know, then Max would give them an answer. He cleared his throat. "I believe that Deng Xiaopeng was one of Napoleon's generals."

Lukinov curled his mouth skeptically.

"That doesn't sound right," said Petoskey.

"I'm quite certain of it," said Max, bracing himself between the wall and floor at angle sideways to the others. "Confusion to the enemy."

"Always," replied Petoskey, apparently happy to find something he could agree with. "Always."

When Max's mind became restless, so did he. Two days after the spongedivers were sighted, his thoughts still careened weightlessly off the small walls. The presence of the ship from Outback complicated the ship's mission and his. Meanwhile, he was cut off from all his superiors, unable to guess which goal they wanted him to pursue right now. Or goals, as the case more likely was. So he was on his own again. Forced to decide for himself.

Nothing new about that, he thought ruefully.

He released the straps, and pushed off for the door to take a tour of the ship. He still had his traitor to catch.

When he opened the door, he saw another one cracked open down the corridor. Lieutenant Rucker peeked out and gestured for Max to come inside. Max checked to see that no one was in the hall and slipped into the room.

The blonde young man closed the door too fast and it slammed shut. "Didn't know if you were ever going to come out," Rucker said, producing an envelope. "This is from Gordet."

Max took the multi-tool from his pocket, and flicked the miniature vibra-knife on to slice open the seal. He studied the sheet inside. Commander Gordet had written down the codes for the safe that held the Captain's secret

orders. Interesting. Max wondered if Rucker had made a copy for himself. "Did Gordet say anything specific?"

"He said to tell you that if we were to engage the Outback ship in combat and anything unfortunate were to happen to the Captain, you would have his full cooperation and support."

"So what did he tell the Captain?"

Rucker looked at the wall, opened his mouth, closed it again. He was not a quick liar.

Max gave him an avuncular clap on the shoulder. "You can tell me, Lieutenant. I'll find out anyway."

Rucker gulped, still refusing to meet Max's eyes. "He told the Captain that, um, if we were to engage the other ship in combat, and anything unfortunate were to happen to you, he'd make sure it was all clear in the records."

So Gordet was indecisive, trying to play both sides at once. That was a hard game. The Commander had no gift for it either. "What's your opinion of Gordet?" probed Max.

"He's a good officer. I'm proud to serve under him."

Rather standard response, deserving of Max's withering stare. This time Rucker's eyes did meet his.

"But, um, he's still mad about losing his cabin to you, sir. He doesn't like bunking with the junior officers."

"He'll get over it," said Max. "Just remind him that Lukinov is bunking with Burdick, eh?" He gestured at Rucker to open the door. Rucker looked both ways down the corridor, motioned that it was clear, and Max went on his way.

He headed topside, pulling himself hand over hand up the narrow shaft. When he exited the tube he found Kulakov conducting a emergency training drill in the forward compartments. Stick-its were hung up everywhere, indicating the type and extent of combat damage. Crews in full space gear performed "repairs" while the Chief Petty Officer graded their performance.

"You're dead," shouted Kulakov, grabbing a man by his collar and pulling him out of the exercise. "You forgot that you're a vacuum cleaner!"

"But sir, I'm suited up properly." His voice sounded injured, even distorted slightly by the microphone.

"But you're not plugged in," Kulakov said, tapping the stick-it on the wall. "That's open to the outside, and without your tether you're nothing more now than a very small meteor moving away from the ship! What are the rest of you looking at?"

He glanced over his shoulder, saw Max, and froze. The crews stopped their exercise.

"You just spaced another crewman," said Max, tilting his head toward a man who'd backed into the wall. "Carry on."

He turned away without waiting for Kulakov's salute. He didn't know why he had such an effect on that man, but now he was thinking he should look into it.

He proceeded through several twisting corridors, designed to slow and confuse boarding parties headed for the bridge, and passed the gym. He needed exercise. The weightlessness was already starting to get to him. But he decided to worry about that later.

He paused when he came to the missile room.

The Black Forest.

That was the crew's nickname for it. Four polished black columns rose four uninterrupted stories—tubes for nuclear missiles, back when this ship was intended to fight the same kind of dirty war waged by the Adareans. It was the largest open space in the entire ship. When the grav was on, the men exercised by running laps, up one set of stairs, across the catwalk, down the other, around the tubes, and up again.

Max went out onto the catwalk, climbed up on the railing, and jumped.

If one could truly jump in zero-gee, that was. He pushed himself towards the floor, and prayed that the grav didn't come on unexpectedly. On the way down he noticed someone who feared just that possibility making their way up the stairs.

Max did a somersault, extending his legs to change his momentum and direction, pushed off one of the tubes, and bounced over to see who it was. He immediately regretted doing so. It was Sergeant Simco, commander of the combat troops.

Every captain personally commanded a detachment of ground troops. It could be as big as a battalion in some cases, but for this voyage, with an entire crew of only 141, the number was limited to ten. Officially, they were along to repel boarders and provide combat assistance if needed. Unofficially, they were called troubleshooters. If crewmen gave the Captain any trouble, it was the troopers' job to shoot them.

Simco would enjoy doing it too. He had more muscles than brains. But then nobody had that many brains.

"Hello, Sergeant," Max called.

"Sir, that was nicely done."

"I didn't have you pegged for the cautious type."

Simco shook his head. "I don't like freefall unless I've got a parachute strapped to my back."

Typical groundhog response. "Are your men ready to board and take that Outback ship, Sergeant?"

"Sir, I could do it all by myself. They're women."

They both laughed, Simco snapped a perfect salute, and Max pushed off from the railing. When he landed on the bottom, he saw placards marked "Killshot" hanging on each of the four tubes. That meant that were loaded with live

missiles, ready to launch. Something new, since the last time he'd passed through the Black Forest. He saw handwriting scrawled across the bottom of the placards, and went up close to read it. A. G. W.

Under the old government, the hastily thrown together Department of War had been called the Ministry of A Just God's Wrath. Considering the success of the Adareans, the joke had been that the name was a typo and should have been called Adjust God's Wrath. Some devout crewman still had the same goal.

On the lower level, Max continued to the aftmost portion of the ship, offlimits to all crew except for Engineering and Senior officers. Only one sealed hatch allowed direct entrance to this section. Max found an off-duty electrician's mate sitting there, watching a pocketvid. The faint sound of someone dying came from the tiny speaker.

Max stopped in front of the crewman. "What are you watching?"

The crewman looked up, startled. DePuy, that was his name. He jumped to his feet and went all the way to the ceiling. He saluted with one hand, while the thumb of the other flicked to the pause button. "It's A Fire On The Land, sir. It's about the Adarean nuking of New Nazareth."

"I'm familiar with it," Max replied. Political Education approved all videos, and practically ran the video business. "The bombing and the vid. Move aside and let me pass."

"Sorry, sir, the Chief Engineer said..."

Max turned as cold as deep space. He reached under DePuy to open the hatch. "Move aside, crewman."

"The Chief Engineer gave me a direct order, sir!"

"And I am giving you another direct order right now." Damn it, thought Max, the man still hesitated. "Rejecting an order from your Political Officer is mutiny, Mr. DePuy. A year is a very long time to spend in the ship's brig waiting for trial."

"Sir! A year is a very long time to serve under a chief officer who holds grudges, sir!"

"If I have to repeat my order a third time, you will go to the brig."

DePuy saluted and pushed off from the wall. Though he seemed to seriously consider, for a split second, whether he wouldn't rather be locked up than face Chevrier's temper.

Max went down the corridor and paused outside the starboard Battery Room. The hatch stood open on the two-story space. One of the battery arrays was completely disassembled and diagrammed on the wall, with the key processing chips circled in red. A small group of men, most of them stripped to their waists, crowded into the soft-walled clean room in the corner. A large duct ran up from it toward the ceiling, the motor struggling to draw air. A crewman looked up and tapped the Chief Engineer on the shoulder.

"You!" Chevrier shouted as soon as he saw Max. "This is a restricted area! I want you out of my section right now!"

"Nothing is off-limits to me," Max replied.

"Fuck your mother!" Chevrier thundered, shooting across the room and getting right in Max's face. Chevrier's eyes had dark circles around them like storm clouds, and red lines in the whites like tiny bolts of lightning. He probably hadn't slept since the spongediver was spotted; no doubt he was also pumped up on Nova or its more legal equivalent from the dispensary. That would explain his heavy sweating. It couldn't drip off him in the weightlessness, but had simply accumulated in a pool about a half inch deep that sloshed freely in the vicinity of his breastbone. Max noticed that the comet insignia was branded on Chevrier's bare chest. The Revolutionary government had banned that tradition, but the branding irons were still floating around some ships in the service. Chevrier was the type who had probably heated it up with a hand welder and branded himself. He jabbed a finger in the direction of the empty spot on Max's left breast pocket. "You haven't qualified for a single ship's system," he said, "and you sure as hell aren't reactor qualified. Now get out of my section!"

"You forgetting something, soldier?" Max asked, in as irritating a voice as he could manage.

Chevrier laughed in disbelief. "I wish I could forget! I've got a major problem on my hands, a ship with no fucking backup power."

Max took a deep breath. "Did somebody break your arm, soldier?"

Chevrier's eyes flickered. He made a sloppy motion with his right hand in the general direction of his head. Had Mallove sent word in the other direction too? Did Chevrier know that Max was supposed to leave him alone?

"Good. Give me a status report on the power situation."

The Chief Engineer inhaled deeply. "Screwed up and likely to stay that way. The crewman on duty panicked—he folded the wings and powered down the Casmir drive without disengaging the batteries first and fried half the chips. We are now trying to build new chips, atom by atom, but you need a grade A clean hood to do that. And our hood is about as tight and clean as an old whore."

Max had heard all this already, less vividly described, from the Captain's reports. "Go on."

"Normally, we could just switch over to the secondary array, but some blackhole of a genius gutted our portside Battery Room and replaced it with a salvaged groundside nuclear reactor so we can float through Adarean space disguised like background radiation in order to do God knows what."

"But you can switch communications, ship systems, propulsion, all that, over to the reactor, right?"

That was the plan: dive into Adarean space, do one circuit around the sun running on the nukes while recording everything they could on the military and political communications channels, then head home again.

"We've already done all that," answered Chevrier, "but we can't power up the Casmir drive with it. It's strictly inner system, no diving." He suddenly noticed the pool of sweat on his chest, went to flick it away, then stopped. "The Adareans won't scan us if we're running on nuclears, but they wouldn't scan canvas sails either, so we might as well have used them instead. We've got to fix the main battery at some point."

"Can you bring the grav back online?"

"Not safely, no, and not with the reactor. It's a power hog. Too many things to go wrong."

"Lasers?"

Chevrier ground his teeth. "You could talk to the Captain, you know. He sends down here every damned hour for another report, asking the same exact damn questions."

"Lasers?" repeated Max firmly.

"I recommended other options to the Captain, but if you want to turn some Outback ship into space slag, I'll give you enough power to do it. As long as you let me comb through the debris for spare parts once you're done. Might be the one way to get some decent equipment."

"Fair enough. How are your men holding up?"

"They're soldiers." He pronounced the word very differently than Max had. "They do exactly what they're told. Except for that worthless snot of a mate who apparently can't even guard a fucking sealed hatch properly."

Max didn't like the sound of that. Chevrier couldn't keep pushing his men as hard as he pushed himself, or they'd start to break. "Men are not machines," Max began...

"Hell they aren't! A ship's crew is one big machine and you're a piece of grit in the silicone, a short in the wire. With you issuing orders outside the chain of command, the command splits. You either need to fit in or get the hell out of the machine!"

Chevrier jabbed his finger at Max's chest again to punctuate his statement. This time, he made contact with enough force to send the two men in opposite directions.

It was clear that he didn't mean to touch Max, and just as clear that he didn't mean to back down. He glared at Max, daring him to make something of it. Aggressiveness was the main side effect of Nova. It built up until the men went supernova and burned out. On top of that, Chevrier also had that look some men got when things went very wrong. He couldn't fix things so he wanted to smash them instead.

Max could bring him up on charges, but the ship needed its Chief Engineer right now. And if Mallove had promised his friends in government that he would protect Chevrier...

Max decided to ignore the incident. For the time being. "I'll be sure to make a record of your comments."

Chevrier snorted, as if he'd won a game of chicken. "If you have problems with any of the big words, come back and I'll spell them out for you." He flapped his hand near his head again, turned and went back to the clean hood.

The other men scowled at Max.

That was the problem with anger—it was an infectious disease. Frustration only made it spread faster. He continued his tour, looking into the main engine room and then at the nuclear reactors. Nobody was in the former because there was nothing to be done there, and nobody was in the latter because radiation spooked them. One man sat in the control room, reading the monitors. Max hovered near the ceiling a moment looking over the crewman's shoulder, comparing the pictures on the vids to the layout of the rooms. The crewman stared at the monitors intently, pretending not to see Max. Yes, thought Max, anger was very infectious. You never knew who might catch it next.

The hapless mate DePuy still guarded the hatch, whipping the vid behind his back as he snapped to attention. Max ignored him. Accidents happened. Some idiots would just slab themselves.

He went back through the Black Forest, acknowledging salutes from a pair of shooters, the Tactics Officer's mates. He swam through the air to the top level, and down the main corridor, past the open door of the exercise room. He turned back. If grav was going to be offline much longer, he needed to sign up for exercise time. Physically, he needed to stay sharp right now.

Max pushed the door open. The room was dark. It surprised him briefly that no one was there, but then, with the six-and-sixes, and all the drills, the men were probably too busy. He hit the light switch. Nothing came on. He moved farther into the room to hit the second switch. Something hard smashed him on the back of the head. He twisted, trying to get a hold of his assailant but there was no one behind him. He realized that the other man was above him, on the ceiling, too late, and as he twisted in the dark room, he suddenly became very dizzy, losing any sense of direction, any orientation to the walls and floors. A thick arm snaked around his throat, choking off his nausea along with his breath. Max got hold of a thumb and managed to pull it halfway loose, but he had no leverage at all.

He swung his elbows forcefully and futilely as black dots swam before his eyes like collapsing stars in the darkened room.

Then the darkness became absolute.

He experienced a floating, disconnected sensation, like being in the sensory deprivation tanks they'd used for some of his conditioning experiments. Max had hated the feeling then, of being lost, detached, and he hated it now. Then

light knifed down into one of his eyes and all his pains awoke at once.

"Do you hear me, Lieutenant Nikomedes?"

"Yes," croaked Max. His throat felt raw. The light flicked off, then stabbed into the other eye. "That hurts."

"I should imagine that it's the least of your hurts. Has the painkiller worn off completely then?"

"I hope so, because if it hasn't..." His throat felt crushed and his kidneys ached like hell. The light went off and Max's eyes adjusted to the setting. He was in the sickbay, with the Doc hovering over him. His name was Noyes, and he was only a medtech but the crew still called him Doc. The service was short of surgeons. Command didn't want to spare one for this voyage.

"Your pupils look good," Noyes continued. "There's a ruptured blood vessel in the right eye. It's not pretty, but the damage is superficial. We had some concern about how long you'd been without oxygen when you came in."

Yeah, thought Max. He was concerned too. "So how long was it?"

"Not long. Seconds, maybe. A couple of the shooters found you unconscious in the gym."

"And so they brought the Corpse to sickbay?"

"You know that nickname?" Noyes administered an injection and Max's pain lessened. "Whoever attacked you knew what he was doing. He cut off your air supply without crushing your windpipe or leaving any fingerprint type bruises on your throat. You're lucky—the shooters did chest compressions as soon as they found you and got you breathing again."

So this wasn't just a warning. Someone had tried to kill him, and failed. Unless the shooters were in on it. But who would do it and why? His hand shot up to his breast pocket. Gordet's note with the secret codes was still there.

"What's that?" asked Noyes, noticing the gesture.

"A list of suspects," replied Max. He wondered if someone had followed him from Engineering. "Did you hear the one about the political officer who was killed during wargame exercises?"

Suspicion flickered across the Doc's face. "No," he said slowly.

"They couldn't call it friendly fire because he had no friends."

Noyes didn't laugh. He was young, barely thirty, if that. But his face was worn, and he had a deep crease between his eyes. "Can I ask you a direct question?"

"If it's about who did this..."

"No. It's about the ship's mission."

"I may not be able to answer."

"It's just the crew, you know what they're saying, that this is a suicide mission. We're supposed to sneak into Adarean space, nuke their capital, and then blow ourselves up, vaporize the evidence."

"Ah," no, Max hadn't heard that one yet, though he supposed he should have thought of it himself. Sometimes there were disadvantages to knowing inside information; it limited one's ability to imagine other possibilities. "We could blow up their capital, but their military command is space-based, decentralized. That kind of strike wouldn't touch them at all. That doesn't make any sense, Doc."

"It doesn't have to make sense for the service to order it." Noyes laughed, a truncated little puff of air. "I was scheduled for leave, I was supposed to be getting married on my leave, and I got yanked off the transport and put on this ship without a word of explanation, and then found out I was going to be gone for a year and a half. So don't tell me the service only gives orders that make any sense."

Max had no answer for that. He knew how orders were.

"Is this a suicide mission?" asked Noyes. "Tell me straight. The shooters think that's why someone tried to kill you, because they don't have to worry about what would happen when they got back home."

And they could die knowing they'd offed an officer. There were definitely a few of that type on board. But Max didn't think it was that random. "And if it is a suicide mission?"

The medtech's face grew solemn. "Then I want to send some kind of message back to Suzan. I don't want her to think I simply disappeared on her. I don't want her to live the rest of her life with that."

Noyes couldn't be the only one having those thoughts. No wonder there was tension on the ship. "This isn't a suicide mission," Max said firmly.

"Your word on that?"

"Yes." This was a rumor he would have to try to kill. Even if it were true. Max touched his pocket again. What exactly were the secret orders? He thought he knew them, but maybe he didn't.

Noyes shook his head. "Too bad you're the Political Officer. Everyone knows your word can't be trusted." He handed Max a bottle of pills. "The Captain wants to see you on the bridge right away. Take one of these if you feel weak, or in pain, and then report back to sickbay next shift."

Max sat up, and noticed his pants pockets were inside out. So someone had been searching him after all, and the shooters had interrupted them. Unless that too was part of the ruse. For now, he'd stick to the simpler explanation.

Noyes helped him to his feet. "I ought to keep you for observation," he said.

"No," replied Max. "I'm fine." I'm as rotten a liar as Rucker is, he thought. He wondered if the First Lieutenant had changed his mind. Or changed his allegiances.

The door opened and Simco waited outside. His bulk seemed to fill up the small corridor. He snapped a crisp

salute and whipped his hand down again. "Captain assigned me to be your guard, sir. He asks you not to speak about this incident while I'm investigating it. He also requires your immediate attention on the bridge."

"The assignment comes a little too late apparently, Sergeant," murmured Max. Simco smiled, and Max gestured for him to lead the way.

"You first, sir."

Trouble never came looking for him face to face, thought Max as he led the way through the corridors. It always came sneaking up behind.

The bridge was crowded because of shift change. Double the usual crew packed into the tight space, giving report to one another in low tones.

No one but the Captain bothered to look up when Max entered, and even he only glanced away from the scope for a second. Vents hissed above the muted beeps from the monitors. The two shooters Max had seen in the Black Forest were seated next to the Tactics' Officer. Max waited to make eye contact with them, to say thanks, but they were so absorbed in their work they didn't notice him. He gave up waiting, and slid over to stand by Petoskey.

"It's about damn time, Nikomedes," growled Petoskey.

"I had a slight accident."

"Well I have a slight problem. The incoming ship boosted. They're in some kind of a hurry. So our window of opportunity is here, and it's closing fast."

He hadn't made up his mind yet, Max realized. "Have they detected us?"

"No. We're between them and the rings. They don't see us because we're floating dead, and because they don't expect to see anyone out here."

Max remained silent, running the calculations through his head. Outback's presence would not affect the Jesusalem's claim to the system, only the possible success of their mission through Adarean space.

"'War is an extension of political policy with military force,'" prompted Petoskey, quoting regulations.

And it was the job of the political officer to be the final arbiter of policy. This was exactly the type of unforeseen situation that created the need for political officers on ships. "What are our options?"

Petoskey shifted his chewing tobacco into a spot below his lower lip. "Chevrier says we could power up and hit them with the lasers, but we wouldn't get more than one or two shots. I don't like our chances at this distance. We could launch the nuclears at them. They'd see them coming, but we could bracket them so that they'll still take on a killer dose of radiation even if we don't score a direct hit. Or we could do nothing."

"What are your concerns?"

He sucked the tobacco juice through his teeth. "The last I heard officially, Outback was one of our trading partners."

"We have met the enemy," Max mused softly, "and they are us."

Petoskey scowled. "But Outback also trades with Adares. If they find our dive to their system, they'll let the Adareans know about it and that endangers our mission. So what's the politically correct thing for me to do?"

"I would suggest that we haven't been tasked with guarding the system or the other wormhole. I would point out that there are other ships in place specifically to do just that." He paused. "And as long as we dive undetected, our mission isn't really endangered."

Petoskey leaned back, and straightened, so that his head nearly scraped the pipes. He slammed the scope back into its slot and stared hard at Max. "So we let them pass?"

"They've got a second ship outside our range. We pop this one, and the other one sees us, then Jesusalem could face a war on two fronts." Although they weren't technically at war with Adares any longer, the capital was filled with rumors of war. "Politically, we're not ready to handle that."

"I'll tell you one thing," said Petoskey, with a slight shudder that mixed revulsion with unease. "I'm glad not to use the nukes. Those are dirty weapons to use. On people."

"I fail to see any difference," said Max. "Two kinds of fire. Lasers or nukes, they would be equally dead."

Petoskey had a lidded cup taped to the conduits on the wall. He pulled it off, spit into it, and taped it back up again. Pausing, so he could change the subject. "I understand that you were nearly dead a little while ago, Nikomedes. Simco has one of his men guarding Reedy."

"Why?" asked Max. Had the ensign been attacked also?

"Spy or not, it's obvious she's trying to get back at you for your comments in quarters the other day. I asked around and found out what she did to Vance. Shows what happens when you don't keep women in their place. Before I had her locked up, I wanted to make certain this wasn't something arranged between the two of you. Some kind of duel. Not that I thought it was, but..."

He thought it might be, finished Max to himself. Or hoped it might be. "It wasn't Reedy as far as I know. But let Simco's man watch her while Simco investigates. If Reedy's guilty, maybe she'll give herself away."

"Shouldn't have a woman on board anyway, even if she is language qualified. We can't afford dissension on a voyage like this one. I will personally execute anyone who endangers this mission. I don't care if it is a junior officer."

Or a woman, thought Max. "Understood," he answered. He looked up one last time, to see if he could catch the shooters' eyes. That's when he noticed Rucker and Gordet staring at him. They had been whispering to one another and stopped. "In fact, I think I'll head down to the radio room right now."

"You're dismissed from duty until Doc says you've recovered. And Simco or one of his men will stay with you at all times."

That was not what Max wanted, not at all. "Thanks. I appreciate that."

Petoskey nodded, dismissing him.

Max began to wish that whoever had attacked him had done a better job.

He went to the secure radio room and all three of the Intelligence officers stopped talking and turned towards the doorway. It's the Political Officer Effect, thought Max.

"What happened to your face?" Lukinov asked.

"I fought the law and the law won," Max answered impulsively.

Burdick burst out laughing. Even Lukinov smiled. "Why does that sound so damned familiar?" he asked.

"Judas's Chariot," answered Burdick. "The vid. It was one of Barabbas's lines."

"Yeah, yeah, I remember that one now. It had Oliver Whatshisname in it. I got to meet him once, at a party, when he did that public information vid. Good man." He twisted around. The smell of his cologne nearly choked Max. "Seriously, Max, what happened? And why has the Captain put a guard on one of my men?"

"Someone tried to kill me." Max was disappointed with the surprise in Lukinov's expression. In all of their expressions. Intelligence was supposed to know everything. "Captain suspects the ensign here."

"That's ridiculous!" Lukinov rolled his eyes. Anger flashed across Reedy's face.

"It wasn't my suggestion," Max replied. "But if you don't mind my asking, which one of you is just coming on shift?"

"I am, sir," Reedy answered immediately.

"And where were you?"

"In her quarters sleeping," interjected Lukinov. "Where else would she have been?"

"You were there with her?" No one wanted to answer that accusation, so Max slid past it. "You two usually work one shift together, and Burdick takes the other, right?"

The senior officer hesitated. "I doubled shifted with Burdick because of the information we were getting."

So. Reedy had been alone. Not that Max suspected her of the attack. But now he'd have to. Maybe he'd misestimated her in the first place. "What information is that?"

"The other Outback ship is doing some kind of military research defending the wormhole. Based on what we're overhearing from observers in the shuttles. We've got a name on the second ship. It's the Jiang Qing, same class as the other one." He paused. "You aren't going to try to tell me that Jiang Qing was one of Napoleon generals too, are you Max?"

"Why not?" asked Max flatly. "Historically, Earth has had women generals for centuries. Jesusalem was the only planet without a mixed service."

Lukinov's lip curled. "We finally tracked down Deng Xiaopeng. He and this Jiang Qing woman were both part of the Chinese revolution. Reedy found the information."

"The Chinese communist revolution," clarified the ensign. "They were minor figures, associated with Mao. Both were charged with crimes though they helped bring about important political changes that led to the second revolution."

"Ah," said Max. A wave of pain shot through him. If his legs had been supporting his weight, they would surely have buckled. "Please cooperate with Sergeant Simco until we can get this straightened out. Now if you will excuse me."

He didn't wait for their response, but turned back to the hall. Simco waited at parade rest, his hands behind his back. Another trooper stood beside him.

"I'm going to return to my cabin now," Max said.

"I've detailed Rambaud here to watch you while I begin my investigation," Simco replied. Rambaud was a smaller but equally muscled version of his superior officer. "I'll be rotating all my men through this duty until we find the culprit."

"Keeping them sharp?" Max said.

Simco nodded. "A knife can't cut if you don't keep it sharp."

"I couldn't agree more." Max barely noticed the other man shadowing him through the narrow maze of corridors. When he reached his room, he took a double dose of the doctor's pain killers, added one from his own stock, and washed them all down with a gulp of warm, flat water. He looked in the bathroom mirror at his damaged eye. That's when he started to shake. He had the ludicrous sensation that he was going to fall down, so he grabbed hold of the sink and tried to steady himself. Eventually it passed, but not before his breath was coming out in ragged gasps.

He'd come too close to dying this time. And why?

The rumor of the suicide mission still bothered him, and so did the problem of Reedy. When he drifted off to sleep, he dreamed that he was wandering an empty vessel searching for someone who was no longer aboard, through corridors that were kinked and slicked like the intestines of some animal. They started shrinking, squeezing the crates and boxes that filled them into a solid mass, as Max tried to find his way out. The last section dead-ended in a mirror, and when he paused to look into its silver surface an eye above a pyramid filled his damaged socket.

He woke up in a cold sweat. According to the clock, he'd slept nearly four and a half hours, but he didn't believe it. He wasn't inclined to believe anything right now.

He rose and dressed himself. He needed better luck. If it wouldn't come looking for him, he'd have to go looking for it.

Down in the very bottom of the ship rested an observation chamber that contained the only naked ports in the entire vessel. Max went down there to think, dutifully followed by Simco's watchdog.

Max paused outside the airlock. "You can wait here."

"I'm supposed to stay with you, sir."

"The lights are off, it's empty," said Max, realizing as soon as the words were out of his mouth what had happened the last time he went into a dark room alone. "If someone's waiting in there to kill me, then you've got them trapped. You'll get a commendation."

Rambaud relented. Max entered the room, closing the hatch behind him. It sealed automatically reminding Max of the sound of a prison cell door shutting.

Outside the round windows stretched the infinite expanse of space. The sun was a small, cold ember in a charcoal-colored sky dominated by the vast and ominous bulk of Big Brother. They were close enough that Max could see crimson storms raging on its surface, swirling hurricanes larger than Jesusalem itself. He counted three moons spinning around the planet, and great rings of dust, as if everything in space was drawn into satellite around the self-consuming fire of its mass.

A quiet cough came from the rear of the compartment.

Max pirouetted, and saw another man floating cross-legged in the air. As he unfolded and came to attention, light glinted off the jack that sat lodged in his forehead like a third eye. It was the spongediver, the ship's pilot, Patchett.

"At ease, Patchett," said Max.

Patchett nodded toward the port as he clasped his hands behind his back. "Beautiful, isn't it?"

"It's no place for a human being to live," Max said. "Give me a little blue marble of a planet any day instead."

The pilot smiled. "That figures."

"What do you mean?"

"You're a Political Officer, and politics is always about the place we live, how we live together." He gestured at the sweep of the illuminated rings. "But this is why I joined the service—to explore, to see space."

"Has it been worth it?"

"Too much waiting, too much doing nothing." He shifted in his seat. "The diving makes it worthwhile."

"Good," murmured Max, looking away.

"You and I are alike that way," Patchett said. "We both are the most useless men on the ship except for that one moment when we're the only one qualified to do the job." He stared out the port. "What happened to you, that was wrong, sir."

Max gazed out the window also, saying nothing.

"I'd guess I've been in the service as long as you have, nearly twenty years."

"Just past thirty years now." It wasn't all in the official records, but thirty years total. A very long time. Patchett clearly wanted to say something more. "What is it?" asked Max. "Speak freely."

"Things have been going downhill the past few years, sir. The wrong men in charge, undermining everything we hoped to accomplish in the Revolution. They all want war. They forget what the last one was like."

"Are you sure you should be telling this to your political officer?"

"You're the political officer. You have to know it already. You may be the only one I can say it to. Petoskey's an excellent Captain, don't get me wrong, sir. But he's too young to remember what the last war was like."

They hung there, in the dark, weightless, silence, watching the giant spin on its axis. If Patchett was right, there was one moment in the voyage only when Max's skills would make a difference. But what moment, and what kind of difference, there was no way to know in advance.

Simco was in the med bay when Max went to check in with Noyes. "I'd salute," said the Sergeant, "but Doc here's treating a sprain."

"Dislocation," corrected Noyes.

"What happened?" asked Max.

Simco grinned. "I scheduled extra combat training for my men. Want to make sure they're ready in case they run

into whoever attacked you. It doesn't really count as a good workout unless someone dislocates something."

Noyes snorted.

"Plus, Doc here says that we have to exercise at least an hour a day or we'll start losing bone and muscle mass."

"Nobody's had to deal with prolonged weightlessness in a couple of hundred years," added Noyes. "I'm only finding hints of the information I need in our database. The nausea, vertigo, lethargy, that I expected and was prepared for. But we're already seeing more infections, shortness of breath, odd stuff. And we've got orders to spend months like this? It's madness. Take it easy on this thumb for a few more days, Simco." He went to lay his stim-gun on the table and it floated off sideways across the room. "Damn. Not again."

Max snatched it out of the air and handed it back to the Doc. "Any word on who my attacker was?" he asked Simco.

"No." The Sergeant blew out his breath. "But I did hear that you picked a fight with Chevrier down in Engineering."

"Nothing even close to that."

"Good. He's a big man, completely out of your weight class."

"Right now, we're all in the same weight class."

That won Max a laugh from both Simco and Noyes. "Still, if you go see him again, about anything, please inform me first," the Sergeant said.

"You'll know about it before I do," promised Max.

After the Doc was done checking him, Max went back through the crate-packed corridors towards his quarters. On the way, he passed Reedy, whose mouth quirked in a brief smile as Max squeezed past her.

"What do you find so funny, Ensign?" Max growled.

Reedy's eyes flicked, indicating the trooper following her and the one behind Max. "For a second there, sir, I wondered which of us was the real prisoner."

Very perceptive. She had an edge to her voice that reminded him of Chevrier. He recalled that she had shown a strong aversion to confinement after the incident with Vance. "Remember who you're speaking to, Ensign!"

"Yes, sir. It won't happen again, sir."

"See that it doesn't."

He went into his room and swallowed another pain-killer. Even if the moment came when he could make a difference, would he be able to get away from his minders long enough to do it?

Eight more shifts, two more days, and nothing.

Max had no appetite, the food all tasted bland to him. He couldn't sleep for more than a few hours at a time. If he turned the lights off, he'd wake in a panic, disoriented, unsure of where he was. But if he slept with the lights on, they poked at the edge of his consciousness, prodding him awake. He tried to exercise one hour out of every two shifts, but everything seemed tedious. It just felt wrong, empty motions with nothing to push against.

On the bridge, he asked Petoskey if it was still necessary to have a guard.

"The attack's still unsolved," Petoskey said. "Until Simco brings me the man—or woman—who did it, I want you protected."

Max had the sinking feeling that might be for the rest of the voyage. "How are the repairs going?"

"Chevrier replaced all the chips in the dead array with new ones, but something failed when he tested it. He has an idea for rebuilding the chips with some kind of silicon alloy crystal. Says he can grow it as long as we stay weightless. Some other kind of old tech. Inorganic. He tried to explain it to me, but he's the only one that really understands it."

"Can we wait that long?"

"We can't power up to jump as long as those Outback ships are in the vicinity. They'd see us—and the wormhole—in a microsecond. So far they still haven't detected our buoy. Or if they have, they just took it for a pulsar signal." Which was the idea, after all. Petoskey tugged hard at his beard. There were dark stains of sleeplessness under his eyes. "Don't you have some work to do, some reports to write?"

He meant it as a dismissal. Max was willing to be dismissed. He was still no closer to catching his traitor, and his luck couldn't have been more execrable.

He went to the ship's library to read. Rambaud, his trooper again this the shift, had no interest in reading or studying vids of any kind. He writhed in almost open pain as Max made it clear that he intended to stay at a desk alone for several hours. Max decided that it wouldn't be murder if he bored Simco's men to death.

He sat there, scanning Fier's monograph on the Adarean war, skimming through the casualty lists in the appendixes, thinking about some of the worst battles, early on, and the consequences of war, when a voice intruded on his contemplations.

"...bored as hell down here. Uh-huh. Wargames. That sounds interesting. Can you understand that Outback lingo?"

Rambaud was whispering on the comlink to his compatriot in charge of Reedy. Max let the conversation turn to complaints about the exercise regimen and weightlessness before he flipped off his screen and rose to go.

The Intelligence radio room was on his regular circuit of destinations, so he made no excuse for heading there now. The door was propped open, and the scent of Lukinov's imported cologne hit Max's nose out in the corridor. He paused in the doorway. The trooper stood behind Lukinov and Reedy, with a pair of headsets on.

"So this is how well you keep secrets?" asked Max.

The trooper saw Max, yanked the earphones out of his ear, and handed them back to an ebullient Lukinov. "Wait until you hear this, Max!" Lukinov said.

The trooper who tried to squeeze by Max without touching him. Max stayed firmly in his way, making him as uncomfortable as possible. "Rambaud," he said to his own man, "I believe I left my palm-pad down in the library by accident. Retrieve it for me and bring it to this room immediately so I can record this conversation."

Rimbaud hesitated before answering. "Yes, sir."

The other trooper took up station outside the door. Max kicked the door shut and latched it.

"What's going on with the spongediver?" asked Max.

"They're testing a new laser deflector, using it for wormhole defense." Lukinov grinned. "Go ahead and listen."

Max picked up the headphones and fit the wires into his ears. Pilots chattered with tactics officers, describing the kind of run they were simulating. No wonder Outback outfitted their survey ships with the newest military equipment. The blind side of a wormhole dive was probably the only place in the galaxy they could test any new weapons without being observed. "Very standard stuff here," he said after a moment. "Is there just one channel of this?"

"Their scientists are on the other channel, the one Reedy's monitoring. But don't you see what an advantage this gives us if we can steal it? We can attack Adares with impunity and keep them from diving into our system."

Max switched the channel setting to the one Reedy listened to. "Do unto others before they do unto you?"

"Exactly!" replied Lukinov.

Reedy's eyes went wide open. She started tapping the desk to get their attention. "Sir," she said. "There's something you should..."

"Not right now," said Max.

Lukinov frowned at him. "Now see here—"

"No, you see here. Has the Captain been informed of this?"

"Not yet," replied Lukinov.

"You invite some grunt in here to listen to information that will certainly be classified top secret before you notify the Captain?" He sneered at Lukinov, pausing long enough to listen to the scientists talk. "You can be sure that my Department will file a record of protest on our return. In the meantime, I better go get the Captain."

Lukinov popped out of his seat. "No, I'll do that. I was just planning to do that anyway, if you hadn't interrupted."

"Sir," repeated Reedy. "Sirs."

"Ensign," said Max, "Shut. Up."

The ensign nodded mutely, her eyes shaped like two satellite dishes trying to pick up a signal.

"I'm coming with you, Lukinov," Max said.

"No, you aren't, Lieutenant," snapped the Intelligence officer. "I'm the one man on this ship you can't give direct orders to and don't you forget it."

Max saluted, a gesture sharp enough to have turned into a knife hand strike at the other man's throat. Lukinov stormed out of the room. Max turned back to the ensign, who simply stared at him.

"They just broadcast the complete specifications," said Reedy. "They were checking for field deformation—"

"I know that," said Max. And then he did something he never expected to do, not on this voyage. He said aloud the secret Intelligence code word for "render all assistance." Silently, to himself, he added a prayer that it was current, and that Reedy would recognize it.

"Wh-what did you say?" stammered the ensign.

Max repeated the code word for "render all assistance" while he pulled off his earphones and reached in his pocket for his multi-tool. His fingers found nothing, and he realized that it had been missing since his attack. "And give me a screwdriver," he added.

Reedy handed over the tool. "But... but..."

Max ignored her. In thirty seconds, he'd disconnected the power and disassembled the outer case of the radio. "Give me the laser," he said.

The ensign's hands shook as she complied.

"I need two new memory chips and the spare pod." Reedy just stared at him, uncomprehending. "Now!" spit Max, and the ensign dove for the equipment box.

Max shoved the loaded memory into his pockets and snapped the replacements pieces into their slots as Reedy handed them over. The radio was still a mess of pieces when someone rapped on the door.

"Stall them!" hissed Max.

The rap came again, and the door pushed open. Reedy flew toward it like a rocket. Rambaud pushed his head in partway. "Here's your palm-pad, sir."

"I'll take it," said Reedy, grabbing it and pushing the door shut again.

"Thanks!" called Max. He'd lost one of the screws, and when he looked up from the equipment to see if it was floating somewhere, he was temporarily disoriented. His stomach did a flip-flop and his head spun in a circle. "Shit!"

Rambaud pushed back on the door. "Are you safe in there, sir? I'm coming in."

Reedy wedged herself against the wall to block the door.

Max heard a plain thump as Rambaud bounced against it. He saw the screw floating near his ankles and scooped it up. He fixed the cover and powered the machine up again. Reedy grunted as the door pushed against her, cracking open. "I'm fine," Max said loudly.

Rambaud nodded, but he stood outside the cracked door peering in.

Reedy was breathing fast. A thousand questions formed and died on her lips when Max spun to face her. Max had taken the leap, and now he had to see how far that leap would take him.

"Ensign," he whispered.

"Yes, sir?"

"From this moment forth," his lips barely moved, "you will consider me your sole superior officer."

Her eyes jumped to the door. "Sir? But—"

"That is a direct order!"

"Yes, sir!"

"You will not tell anyone—"

But he did not get the chance to tell Reedy what she should and shouldn't say. The door swung open and Lukinov entered, followed by Captain Petoskey. Lukinov grinned like a party girl full of booze. "Wait until you hear this," he said. He put his headphones on, and handed one to Petoskey as Reedy slid quickly back into her place.

They listened for a moment. Petoskey squinted his eyes, and rounded his shoulders even more than usual. "Sounds like they're bringing the shuttles in, getting ready to leave. Radioing a safe voyage message to their other ship. What was I supposed to hear?"

"They're testing a new deflector for wormhole defense. If we attack their ship and kill them, we can take it. Their other ship will be stuck in-system and we can nuke them."

"Captain," said Max.

"Yes?"

"I didn't hear any evidence of this deflector. I can't recommend an attack."

Lukinov frantically punched commands into his keypad. "Let me back up to an hour ago." His face went as blank as the records he was trying to access. "I can't seem to find it. Reedy, what's going on here?"

"Sir," she muttered, with a pleading glance at Max, "uh, I don't know, sir."

"She's covering up," said Max.

Three faces stared at him with variations of disbelief.

"Look at the battery, it's not properly grounded." It was an awful explanation, but the best that Max could come up with on the spot. "Reedy was moving some equipment around, hit it with something. I didn't see what. Sparks flew and the screens all went dead. She got them back up right away, but she probably wiped the memories."

"Ensign!" screamed Lukinov. "Explain yourself!"

Reedy's mouth hung open. She didn't know what to say. Betrayal was written all over her face.

Petoskey took off his headset. "Lukinov, I trust you to take care of this. Nikomedes..."

"Yes, sir?"

Petoskey couldn't seem to think of any orders to give him. "I have to go talk to Chevrier. We have our mission. With the second ship out of the way, we have to prepare to dive."

Max followed Petoskey out into the corridor, but returned to his room to stash the stolen memory. Only two things mattered now: getting the information to his superior, and keeping Lukinov from getting it to his. It needed to be used as a defensive weapon, not as an excuse to start a war. Lukinov had access to the radio, and official channels. Max didn't. That stacked the cards in Lukinov's favor.

He had to do something with it soon, before they jumped to Adarean space. And he had to hope that a baby-faced ensign just out of the Academy didn't fold under pressure and give him away. It was like a game of Blind Man's Draw. Max had already put everything he had into the pot.

There was nothing else he could do at this point except play the card that he was dealt.

Meal time. Max sat by himself, as usual, at his own narrow table in the galley. Even the trooper guarding him sat with some of the other crewmen.

Lukinov entered, saw Max, and came straight over to him. "Reedy won't say that you were lying, but you were," the Intelligence officer said. "Not that it matters. The machines are buggered, the data's all gone. Even Burdick can't find it."

Max had a blank sheet in his pocket. He pulled it out, and a stylus, and passed it over to Lukinov. This was the way duels were proposed at the Academy. According to the Academy's cover story, it was the way Reedy had

arranged to meet with Vance.

Lukinov looked at the sheet, then scratched 'observation room' and a time two hours distant on it. He pushed it back over to Max, who shook his head, and wrote 'reactor room.'

"Why there?" asked the Intelligence officer.

"They've got cameras there, but no mikes. It's off-limits to Simco's troopers, but not to us. We won't be there long."

"So this is just to be a private conversation? I should leave my weapons behind?"

"I wish you would."

"More's the pity," said Lukinov, and stormed out.

Max was putting his tray away, trying to resolve his other problem, when Simco came in. "Lukinov won't let us throw the ensign in the brig, not yet. But he thought it was best if I stuck with you personally in the meantime."

Perfect, thought Max, just perfect.

Two hours had never stretched out to such an eternity before, in all Max's life. Simco escorted him to his quarters and joined him inside.

"Do you want to follow me into the head and shake it dry for me?" asked Max on his way into the bathroom.

Simco laughed, but remained in the other room. Max retrieved a bottle of pills and an old pair of nail clippers from the medicine cabinet, putting them in his pocket. Then he led Simco on a long, roundabout trip through the corridors that ended up on the floor of the Black Forest. He stopped when he got there and snapped his fingers.

"I forgot something," Max said. "You don't mind if I borrow that multi-tool in your pocket, do you?"

Simco stuffed his hand automatically into his pants, wrapped it around the bulge there, and froze. "Sorry, sir, I don't have one with me," he said, grinning. "Got one in my locker. Or do you want to hit Engineering to borrow one?"

"No, it's nothing I need that badly." He jumped. "Meet you up top, in the exercise room." He grabbed hold of the service ladder outside one of the missile shafts, and pulled himself up. He used his momentum to spin, kicking off from the side of the shaft, and shot like a rocket towards the ceiling.

"Hold up there," called Simco, halfway up the stairs.

Max ducked into the upper corridor. He dove through the hall as fast as he could, past the exercise room, down the access shaft, and back out the corridor below, returning to the missile room. He watched Simco's feet disappear above him into the top corridor, and then he flew straight across the cavern to the section over Engineering, opened a portside hatch, and closed it again after himself.

A long time ago Max had modified his nail clippers to function as a makeshift tool. Bracing himself against the wall, he used it now to remove the grille from the ceiling vent—it was the supply duct for the HEPA filters in the clean hood corner of the battery room directly below. He squeezed inside, feet first, pulling the grille after him. There was no way to reattach it, but with no gravity he didn't need to. He simply pulled it into place and it stayed there.

It was an eighteen inch duct and he was a small man. Even so, he felt like toothpaste being forced back into the tube. He had to twist sideways and flip over to get past the L-curve, but after that it was a straight trip down to the reactor room. With his arms pinned above his head, and no gravity to help him, he writhed downward like a rat caught in a drainpipe. He reached bottom, unable to go any further. His kicks had no effect at all and his heart began to race as he wondered if he'd be trapped inside the duct. Finally, by pressing his elbows out into the corners, and hooking one foot on the lip where the vent teed out horizontally, he was able to push the other foot downward until the duct tore open.

He eased downward into the plenum space above the hood ceiling, and kicked through the tiles. When he finally lowered himself into the battery room he was drenched in sweat, and his pants were ripped in the thigh. He hadn't even noticed. He undid his belt and looked at the scrape on his leg. It was mostly superficial. Not much blood.

He leaned in the corner, with the hood's softwalls pulled back, catching his breath. The cameras were all installed to monitor the reactor, so they faced the center of the two-story tall room. Most of them close-upped on specific pieces of equipment. He eased out, pushing himself up toward the ceiling.

He glanced at his chrono. Already seven minutes past his meeting time with Lukinov. He waited two more minutes before the hatch popped open. He had a split second to decide what he would do if it was one of the engineers.

But a familiar balding head thrust through the door. Max eased out of the hood area. "Hey, Lukinov."

"Max?" The other man twisted around to see him. He entered, closing the hatch behind him. "How the hell did you get in here? Chevrier's guard at the door gave me the runaround, swore he hadn't seen you! The mate watching the monitors said you never came in here either. What are you, some damn spook?"

Max ignored the questions. "You wanted to talk to me about the radio room. It was me. I stole the memory chips."

Lukinov came toward him, pale with fury. "You did what? By god, I'll see you hang."

"Intelligence won't touch me," said Max. "Not for this."

"I'll get Political Education to do it, you goddamn weasel," Lukinov vowed. He launched himself towards Max, keeping a hand against the wall to orient himself. "Your boss, Mallove, is a personal friend of mine. He won't like—"

Max jumped, tucking his knees and spinning as he sailed in the air. He wrapped his belt around Lukinov's throat, pivoted, twisting the belt as he pulled himself back to the floor. The motion jerked Lukinov upside down so that he floated in the air like a child's balloon.

"Your boss, Drozhin," whispered Max, "doesn't like the way you've been selling Intelligence's secrets out to Political Education and War."

Drozhin was Max's boss too. He'd moled Max in Political Education as soon as the new Department formed.

Lukinov panicked. He thrashed his arms and legs, disoriented,trying to make contact with any surface, clutching futilely at Max, who was behind his back and below him. Max twisted the belt, pinching the carotid arteries and cutting off blood flow to the brain. Lukinov was unconscious in about seven seconds. His body just went still. He was dead a few seconds later.

Drozhin had ordered Max to watch Lukinov, not kill him, but he couldn't see any other way around it. He shoved the body toward the corner, under the vent, and put his belt back on.

Still nobody at the hatch. Maybe they hadn't noticed. Maybe they were summoning Simco. There'd be no denying this one, not if he'd missed the location of any cameras.

But he had no time to think about failure. He didn't want anyone looking closely at Lukinov's body, and he didn't want the ship making the jump to Adares. Intelligence was publicly part of the war party, but Drozhin believed that war would destroy Jesusalem and wanted it sabotaged at all costs. Max took the medicine bottle from his pocket and removed the two pills that weren't pills. He popped them into his mouth to warm them—they tasted awful—while he removed the wire and blasting cap from the bottle's lid.

He couldn't blow any main part of the reactor, he understood that much. But the cooling circuit used water pipes, and a radioactive water spill could scuttle the jump. Max darted in, fixed the explosive to a blue-tagged pipe, plugged the wire in it, and hurried back to the hood. He pushed Lukinov's corpse in the direction of the explosive before he climbed through the hole into the vent.

There was a soft boom behind him.

Max cranked his neck to peer down between his feet and saw the water spray in a fine mist, filling the air like fog. All the radiation alarms blared at once.

They sounded far off at first while he wiggled upward. He thought he was sweating, but realized that the busted air flow was drawing some of the water up through the shaft. Droplets pelleted him with radiation, and that made him crawl faster. He got stuck in the bend for a moment, finally squeezing through, and thrusting the vent cover out of the way without checking first to see if anyone was in the corridor. But it was empty—so far his luck held! He retrieved the grille and screwed it back into place. One of the alarms was located directly beside him, and its wailing made his pulse skip.

He emerged into the shaft of the weapons compartment as men raced both ways, towards the accident and away from it. No one noticed him. He was headed across the void, toward his quarters when someone called his name.

"Nikomedes! Stop right there!"

He saw the medtech, Noyes, down by the corridor that led to Engineering. "What is it, Doc?"

"You don't have your comet, do you?"

Max touched the empty spot on his breast pocket. "No. Why?"

"Radiation emergency!" he screamed. "You're drafted as the surgeon's assistant! Come on!"

Max considered ignoring the command, but according to regulations, Doc was right. Anyone who wasn't Vacuum and Radiation qualified was designated an orderly to help treat those who were. Plus it gave him an alibi. He jumped toward the bottom of the Black Forest, and joined Noyes.

"Here, carry this kit," Noyes said, handing over a box of radiation gear, as he went back across the hall to grab another.

"Where is it?" asked Max. He held the gear close, covering the rip in his pants. "What's going on?"

"Don't know. The com's down again. But it has to be the reactor."

Nobody guarded the main hatch to Engineering so the two men went straight in. A crowd gathered in the monitor room, spilling out into the corridor. Noyes pushed straight through, and Max followed along behind him. Chevrier was shaking a crewman by the throat.

"—what the hell did you let him in there for?"

"He ordered me too!" the man complained. It was DePuy.

"There's water everywhere!" another one of the men yelled, coming back from the direction of the reactor room hatch. "The reactor's overheating fast!"

"It's already past four hundred cees," said one of the men at the monitors.

Chevrier tried to fling DePuy at the wall, but they just flopped a short distance apart. The Chief Engineer turned toward the rest of crew in disgust.

Rucker, the first lieutenant, showed up behind Max. "Captain wants a report! The com's down again!"

"That's because the reactor's overheating," Chevrier said. "The cooling system's busted."

"My God," said Rucker, invoking a deity he probably didn't believe in, thought Max.

Noyes slapped a yellow patch on the first lieutenant's shirt. "Radiation detectors, everyone! When they turn orange, you're in danger, means get out. Red means see me for immediate treatment!" He handed some to Max. "Make sure everyone wears one."

"We've got to go in there, fix the pipe, and cool the reactor," said Chevrier. Some of the men started to protest. "Shut the fuck up! I'm asking for volunteers. And I'll be going in with you."

Rucker wiped the blonde cowlick back off his forehead. "I'll go in," he said. Six other crewmen volunteered, most of them senior Engineers. Max slapped radiation badges on those men first.

"Here's the plan." Chevrier pointed to pictures on the monitors. "We're going to shut off these valves here and here, cut out and replace this section of pipe—"

Noyes, looking over his shoulder, said, "That man in there ought to come out at once. He looks unconscious."

"That man is dead," said Chevrier, "and it's a good thing too, or I'd kill him. Then we're going to run a pipe through here, from the drinking water supply—"

A moan of dismay.

"—shut up! We'll take it from the number three reserve tank. That ought to be enough, and it won't contaminate the rest of the water. Once we get the main engine back up, we can make more water."

Everyone had a badge now, and Max hung back with Noyes.

"I'd like someone to go in there and turn off these," Chevrier tapped spots on one of the monitors, "here, here, and here, while I get the repair set up."

"That'll be me," Rucker said. Like any junior officer, Max thought, trying to set a good example.

Chevrier gave him a nod. "This one here is tough. It'll take you a few minutes. It's right next to the reactor, and it's going to be hotter than hell." He gave Rucker the tools he needed and sent him off down the tube to the reactor room.

"I'll need a shower set up for decontamination," said Noyes.

Max found the air shower over by the other clean room, and showed him where it was. Noyes started setting up the lead-lined bags for clothing and equipment disposal.

By the time they went back to the monitor room, Chevrier had diagramed his repair. His volunteers double-checked the equipment lined up in the hall. He sent others, who hadn't volunteered, to run a connector line from the fresh water tank. They were just getting ready to go in, when Rucker staggered back out. He looked... cooked. Like the worst sunburn Max had ever seen. His clothes were soaked, and glowing drops of water followed through the air in his wake. Noyes was there, swiping the droplets out of the air with a lead blanket. He wrapped Rucker in it, and started leading him toward the shower.

The lieutenant's badge was bright red.

One crewman bolted, and another one threw up. Fears about radiation ran deep on the planet, fed by a generations worth of vids. No one said anything about the smell, but one of the men took off his shirt and tried to catch the vomit as it scattered through the air.

Chevrier ripped his badge off. "Won't need this. Just one more distraction. If we're going to go swimming, we might as well go skinny-dipping." He stripped off his clothes and the other volunteers followed his example. "Can't handle tools in those damn vacuum suits anyway."

Anger, fear, those things were contagious, Max reflected. But so were courage and foolhardy bravery. He hoped the price was worth it.

He supposed he ought to be at decontamination, with Noyes, but he couldn't tear himself away from the monitors. There were no cameras aimed directly at the spot where the men were working with the pipes, but they passed in and out of the vids. The radioactive water pooled in the air, drop meeting drop, coalescing into larger blobs like mercury spilled on a lab table and just as poisonous. The drops floated through the air like anti-bodies in a bloodstream. The men splashed into them as they moved and the water clung to their skin, searing wherever it touched.

Simco appeared at the door demanding a report for the Captain. Max ignored him. The reactor was so hot that the paint peeled off it, curling like bits of ash as it burned away. Water that hit its surface boiled away into steam, but the steam hit the other water, and became drops again instantly, a swirling rain that never fell. And, except for the dead tone of the radiation alarms, it all happened in silence, with no one in the monitor room speaking for long minutes, and no sound at all from the reactor room.

Noyes appeared beside Max. "That man needs to come out right now," he said, tapping at one of the monitors. There were glowing circles, spinning in slow lambent spirals on one man's buttocks.

Max laughed, a sound that came out of his mouth only as a breathless sigh. "Those are tattoos, Doc. Jets. Lightning bug juice impregnated in the subdermal cells."

"I've... never heard of that," said Noyes.

"It's supposed to bring a spacer safely home again."

"It's an abomination," blurted Noyes. The people of Jesusalem were against any mixing of the species. "Let's hope

it does," he said.

"Indeed," replied Max.

DePuy stood beside them, shaking his head. "They're not getting it fixed."

Max was beginning to think he'd miscalculated badly. He hadn't wanted anyone to look too closely at Lukinov's corpse. He wanted the ship to turn around and head back home. But with the main engine down and the back-up scuttled, they were in big trouble.

The hatch flew open and two men came out.

"They've been in there almost an hour," said Noyes.

"Is it done?" the men in the monitor room demanded. Max heard his own voice blurt out, "Is it fixed?"

But their faces were mute. The blistered flesh bubbled off as Doc wrapped them in blankets. Noyes helped one towards the shower, and Max took the other. "This is hopeless," Noyes said, trying to clean the men. "You have to go back there now and get the other men out before they die."

"I think we all die with the ship if they fail," said Max.

Rambaud, one of the troopers, appeared in the door. "Message from the Captain, Doc. He wants you on the bridge."

"Tell him no."

The trooper's eyes kept flicking nervously to their badges. Max noticed his own was a sickly orange color. "Beg your pardon, Doc, but he's getting ready to abandon ship. If it's necessary."

"If he wants to give me an order, he can come down here and do it himself," said Noyes, pumping the burned man full of pain killers, and starting an IV.

Rambaud fled.

Noyes stared after him. "They were going to suicide all of us anyway, for nothing. If I'm going to die, it might as well be doing my job."

"Hell, yes." Max's job was getting the specifications on the deflectors to Drozhin. If the Captain took the escape shuttles and flew in system, then it was Max's duty to retrieve the chips from his quarters and get on a shuttle.

He followed Noyes back into the mouth of fire instead.

"They're coming out!" someone shouted.

Four more men this time, in worse shape than the others. Noyes had to hypospray them full of painkillers just to get them down to the shower, and it was the whole routine all over again. Max carried the man with the tattoos. They were coal black in his skin. Whatever lived in the cells and gave them their luminescence had been killed off by the radiation.

Before they finished the others, Chevrier was brought to them, covered with burn blisters, his hands raw meat, his eyes blind. He couldn't speak.

"Did he get it done?" shouted Max.

No one knew, so Max flew back towards the monitor room, where the handful of men that remained were arguing over the monitors. "The temperatures are still rising," shouted DePuy. His voice had risen an octave in pitch. "I tell you he didn't get it running."

"What's going on," asked Max.

"The pipes aren't open," said one of the Electrician's mates.

"Somebody needs to go in there and turn this valve here," said DePuy. He pointed to one right in the middle of the steam put off by the overheating reactor. It was almost impossible to see in the fog.

No one volunteered.

They were boys mostly, eighteen or nineteen, junior crewmen. They'd all seen the others carried out, had smelled the burned flesh, had listened to their weeping. They were heirs to a hard-earned fear about radiation, and they couldn't get past that, couldn't overcome it.

The cut on Max's leg throbbed. His face and arms felt hot, burned. "I'll go in," he said.

Reactors were the only ship system he wasn't officially trained on, and all the reading he'd done before the voyage seemed inadequate to the task now. But it was his responsibility. He could go in there and turn a valve. He could do that much.

He went out to the corridor and found it blocked by a man in a vacuum suit, dragging a plasma cutter on a tether and reading the manual in his palm-pad. The man turned, his face gray behind the clear mask covering his face. It was Kulakov, the Chief Petty Officer.

For a second Max thought the man would freeze up.

Kulakov looked back down at his diagram. "Be sure to seal the locks tight behind me," he said. "Send someone right now to levels three and four, portside, directly above us, to clear the corridors and seal the locks there. You have to do that!"

"Will do," said Max. Then, "Carry on."

Kulakov passed through the hatch, but when Max went to seal it, the fresh water supply tubing blocked it. "Damn," he said, with a very bad feeling in the pit of his stomach. "Damn, damn, damn."

Then DePuy was there beside him with a clamp and some cutters. He severed the pipe, and tossed the loose end

through the hatch after Kulakov. Max sealed the door. "Did someone go to three and four?"

DePuy nodded. "But I'll go double-check," he added, glancing at the bare spot where Max's comet should have been. No, he was looking at Max's radiation badge. It was orange-red, bleeding into a bright crimson.

"You better head over to see Doc," said the Electrician's mate at the monitors.

"Not yet," said Max.

On the video feed they watched Kulakov move methodically from point to point, comparing the hook-up and settings with the diagram on his palm-pad. It took him much longer than it had Chevrier when he was naked. A couple times it was clear that between the fog, and the loss of sensation caused by the suit, Kulakov became disoriented crossing an open space. He spun in circles until he found the right side up again. He reached the final valve but couldn't turn it. He peeled his gloves off, surrounded by the steam, and slowly cranked it over.

The Electrician's mate pounded the monitors. "It's running! Look at the temps drop!"

Max did, but he watched Kulakov too, as he struggled to put his gloves back on, picked up the plasma cutter, and then burned a hole through the hull.

The weeping sound of the radiation alarms was joined by the sudden keening of the hull breech alarms. There was a shudder through the whole ship, the bulkhead creaked beside him, and Max's ears popped.

But he kept his eyes fixed on the screen in the reactor room. The steam and all the radioactive water whooshed out of the ship. So did Lukinov's body. And so did Kulakov.

There was a dark, flat line straight across one of the screens, like a dead reading on a monitor.

Kulakov's tether.

"Hey look!" whispered one of the crewmen as Max entered the sick bay. "The Corpse is up and walking!"

They all laughed at that, the survivors, even Max. Chevrier was dead, and so was Rucker, and so were two other men. Of the six surviving men who'd received red badge levels of radiation exposure, only Max was strong enough to walk.

Kulakov sat in the middle of them. His hands were wrapped in bandages, two crooked, crippled hooks. Max nodded to him. "They still giving you a hard time?" he asked.

"You know it," grinned Kulakov.

"Well it's not fair that he should be the only one who gets leave while we're on this voyage," said one of the men.

"How can it be shore leave without a shore, that's what I want to know," said Kulakov.

They all laughed again, even Max. That was going to be a ship joke for a long time, how Kulakov got liberty—hanging on a tether outside the ship.

"Papa sent me down here with a message," said Max. Captain Petoskey, Papa, had only been to the sick bay once since the accident, and quickly. Most of the other crewman stayed away as if radiation sickness were something contagious.

"What is it?" said Kulakov, the words thick in his throat.

"He wanted me to tell you that he's going to request that they rename the ship." The crewmen looked up at him seriously, all the humor gone from their eyes. "They're going to call it the New Nazareth."

New Nazareth had been nuked the worst by the Adareans. The land there still glowed in the dark.

Kulakov chuckled first, then the other men broke out laughing. Max saluted them, holding himself stiff for a full three seconds, then turned to go see Noyes. The medtech slumped in his chair, head sprawled across his arms on the desk, eyes closed. "I'm not sleeping," he muttered. "I'm just thinking."

"About your fiance," asked Max, "waiting for you at home?"

"No, about the bone marrow cultures I've got growing in the vats, and the skin sheets, and the transplant surgery I have to do later this afternoon, that I've never done unassisted before, and the one I have to do tonight that I'm not trained to do at all." He twisted his head, peeking one eye out at Max. "And Suzan. Waiting for me. And the ship flying home. How are you feeling?"

"I'd be fine if you had any spare teeth," Max said, poking his tongue into the empty spots in his gums. That didn't feel as strange as having gravity under his feet again.

"They're in a drawer over by the sink," said Noyes. "Take two and call me in the morning."

Max walked through corridors considerably less crowded than they had been a few days before. Almost everything inside the ship had received some radiation. The crewmen went crate to crate with geiger counters deciding what could be saved and what should be jettisoned. With the grav back on, the men's appetites returned. They also had a year's worth of supplies and only a few weeks voyage ahead of them. So every meal became a feast. Some celebrated the fact that they were going home, and others the simple fact that they'd survived

Only Captain Petoskey failed to join the celebration. When Max entered the galley, Petoskey wore the expression of a man on the way to the lethal injection chamber. Max couldn't say for sure if was the condemned man's expression or the executioner's.

Ensign Reedy sat on one side of a long table, with two troopers standing guard behind her. Petoskey and

Commander Gordet sat on the opposite side with Simco standing at attention. Petoskey looked naked without his beard, shorn before they recorded these official proceedings. Burdick, the other Intelligence officer, sat off to one end.

Petoskey invited Max to the empty seat beside him. "Are you sure you feel up to this, Nikomedes?"

"Doc says I'll be fine as long as it's brief."

"This'll be quick."

Petoskey turned on the recorder, and read the regulations calling a board of inquiry. "Ensign Reedy, do you wish to make a confession of your crimes at this time?"

Max looked at the youngster. He hadn't seen or spoken to her since he'd taken the chips in the radio room. If Reedy broke and told them what Max had done, then the entire gamble was for naught.

"I have nothing to confess," Reedy said.

"Corporal Burdick," continued Petoskey, "will you describe what you found in the radio room."

"The equipment had been disassembled, and the memory chips replaced with spares." He made eye contact with no one. "This happened sometime during the last shift when Lieutenant Lukinov and Ensign Reedy were on duty together."

"Sergeant Simco, please describe your actions."

"Sir, we made a complete search of Ensign Reedy's person and belongings looking for the items described by Corporal Burdick. We found nothing there, nor in any place he is known to have visited. We also searched Lieutenant Lukinov's belongings and found nothing."

"Lieutenant Nikomedes," continued Petoskey. "Would you describe what you saw in the radio room." He added the exact date and shift.

Max repeated his story about the battery short circuit. "If Lukinov removed the chips that Ensign Burdick described, and he had them on him, then they were spaced."

Petoskey nodded. "Yes, I've thought of that. Ensign Reedy, can you explain what happened to the chips containing the communications from the neutral ship?"

"No sir, I can not."

"Were you and Lieutenant Lukinov working together as spies for the Adareans?"

"I was not," answered Reedy. "I can't speak for the Lieutenant, as I was not in his confidence."

Petoskey slammed his fist on the table. "I think you're a coward, Reedy. You're too weak to take responsibility for your actions. I'd tell you to act like a man, but you're not."

If Petoskey hoped to provoke Reedy, then his gambit failed. She sat there, placid as a lake on a still summer day.

"Can we conduct a medical interrogation?" interjected Max.

Petoskey went to tug at his beard, but his fingers clutched at emptiness. "I've discussed that already with the surgeon and Commander Gordet. Noyes is only a medtech, and not qualified to conduct an interrogation that will hold up in military court. Conceivably, we could even taint the later results of a test."

Max leaned forward. "Can we use more... traditional methods?"

"I won't command it," said Petoskey, looking directly into the recorder. He waited for Max to speak again.

Max ran his tongue over the loose replacement teeth, saying nothing, and leaned back. He might get out of this, after all.

"However, if you think..." said Petoskey.

Max looked at the camera. "Without an immediate danger, we should follow standard procedures."

Petoskey accepted this disappointment and concluded the proceedings with a provisional declaration of guilt. He ordered Reedy confined to the brig until they returned to Jesusalem.

As Max limped back towards his quarters afterwards he noticed that Gordet followed him.

"What can I do for you, Commander?" asked Max.

The bull-shaped second-in-command looked around nervously, then leaned in close. "There's something you should know, sir."

"What?" asked Max wearily. "That Petoskey ordered Simco to kill me, that he intended to blame it on Reedy, and then have her arrested and executed."

Gordet jerked back, flabbergasted. "Did you check the secret orders too?"

"What does it matter now? Simco failed, Reedy's arrested anyway, and we're on our way home. A bit of advice for you, Mr. Gordet." He clapped him on the shoulder. "Next time you should pick your horse before the race is over."

He walked away. When he returned to his room, he recovered the sheet with the combination from its hiding spot, and destroyed it. He didn't know what the secret orders said. He didn't care.

There was only one thing he had left to do.

Third shift, night rotation, normal schedule. Max headed down to the brig carrying a black bag. One of Simco's troopers stood guard. "I'm here to interrogate the prisoner," Max said.

"Let me check with Sergeant Simco, sir."

Max had been thinking hard about this. Only two people knew that he had the plans for the deflector, and the only way two people could keep a secret was if one of them was dead.

"Sarge wants to know if you need help," said the trooper.

"Tell him that I take full responsibility for this, in the name of the Department of Political Education, and that no assistance will be necessary."

The trooper relayed this information, then gave Max a short, sneering nod. "He says he understands. Perfectly. But he wants me to make sure that you'll be safe in there."

Max patted a hand on his black bag. "If you hear screaming," he said, "don't interrupt us unless it's mine."

The trooper twitched uncomfortably under Max's glare. "Yes, sir." He opened the door for Max.

Reedy's wrists and ankles were cuffed, and she wore insignia-less fatigues. She sat up quickly on the edge of her bunk, and folded her hands on her knees, fingertip to fingertip. She couldn't salute, but Max doubted she would have.

He stepped inside. The room was barely eight feet by four, with a bed on one wall and a stainless steel toliet built into the corner opposite the door. "That'll be all trooper," Max said. "I'll signal you when I'm done."

The hatch closed behind him and latched shut. He looked at Reedy. Her eyes were red and puffy but devoid of feeling, her cheeks hollow and drawn. A blue vein stood out vulnerably on her pale neck.

With his lips tight, Max gave her a small nod. "You look depressed," he said softly, holding the bag in front of him.

She shook her head, once. "No, I've been depressed before. This time it's not bad."

"Define not bad."

"It's bad when you want to kill yourself. Right now, I just wish I was dead."

Max took that as his cue. He sat down with his back against the door placed and opened his bag. He removed two tumblers and a bottle of ouzo. The ensign remained perfectly still as Max pulled out a plate, and ripped open vacuum-wrapped packages of cheese, sausages, and anchovies to set on it.

"Not proper mezedes at all," he said, apologetically. "The fish should always be fresh."

He filled one cup and pushed it over towards Reedy, then poured and swallowed his own. It tasted like licorice, reminding him both of his childhood and his days as a young man, in completely different ways. Reedy remained immobile.

"I've been thinking." Max spoke very quietly, unbuttoning his collar. "When two men know a secret, it's only safe if one of them is dead." Good men had died already because of this. So would many more, along with the bad. "Therefore you don't know anything. Only I, and Lukinov, and Lukinov's dead. Do you understand this?"

"I don't know anything," said Reedy, with just a hint of irony. She reached over and lifted the glass of ouzo.

"My department will declare you the most politically sound of officers. Intelligence will know the truth, at least at the level that matters. Drozhin will get the Captain's official report, but he'll get another report unofficially. You'll be fine." He picked up an anchovy. "There will be a very difficult time, a very ugly court martial. But you can survive that."

"Again?"

"This one will not be removed from the record due to extenuating circumstances." Her attack on Vance had been one of self-defense. "But you'll be exonerated. You'll be fine. Things are changing. They'll be better." He believed that.

She leaned her head back and tossed down the ouzo. Max reached over and poured her another glass while her eyes were still watering. "When I got this assignment," she said, "I couldn't figure out if I was being rewarded for being at the top of the class in languages, despite being a woman. Or if I was being punished for being a woman."

"Sometimes it's both ways at once," Max said. He bit the anchovy and found he didn't care for the taste.

"Can I ask you one question?" asked Reedy.

Why did people always think he had all the answers? "Information is like ouzo. A little bit can clear your head, make you feel better. Too much will make you sick, maybe even kill you." He twirled his cup. "What's your question?"

"Did you really win your wife in a card game?"

"Yes." He drained his glass to cover his surprise. Though he'd won her with a bluff and not by cheating.

"Why did she leave you?"

Max thought about telling her that was two questions. Then he thought about telling her the truth, that his wife hadn't left him, that she waited at home for him, not knowing where he was or what he did, going to church in every day, caring for their two grandchildren. His daughter was about Reedy's age. But he'd kept his life sealed in separate compartments and wouldn't breech one of them now.

"Love, like loyalty," he said, "is a gift. You can only try to be worthy of it."

The silence lengthened out between them like all of the empty, uncharted universe. The food sat untouched while they drank. Max could feel himself getting drunk. It felt good.

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SUNDAY NIGHT YAMS AT MINNIE AND EARL'S

Adam Troy-Castro

Frontiers never die. They just become theme parks.

I spent most of my shuttle ride to Nearside mulling sour thoughts about that. It's the kind of thing that only bothers lonely and nostalgic old men, especially when we're old enough to remember the days when a trip to Luna was not a routine commuter run, but instead a never-ending series of course corrections, systems checks, best-and-worst case simulations, and random unexpected crises ranging from ominous burning smells to the surreal balls of floating upchuck that got into everywhere if we didn't get over our nausea fast enough to clean them up. Folks of my vintage remember what it was to spend half their lives in passionate competition with dozens of other frighteningly qualified people, just to earn themselves seats on cramped rigs outfitted by the lowest corporate bidders—and then to look down at the ragged landscape of Sister Moon and know that the sight itself was a privilege well worth the effort. But that's old news now: before the first development crews gave way to the first settlements; before the first settlements became large enough to be called the first cities; before the first city held a parade in honor of its first confirmed mugging; before Independence and the Corporate Communities and the opening of Lunar Disney on the Sea of Tranquility. These days, the Moon itself is no big deal except for rubes and old-timers. Nobody looks out the windows; they're far too interested in their sims, or their virts, or their newspads or (for a vanishingly literate few) their paperback novels, to care about the sight of the airless world waxing large in the darkness outside.

I wanted to shout at them. I wanted to make a great big eloquent speech about what they were missing by taking it all for granted, and about their total failure to appreciate what others had gone through to pave the way. But that wouldn't have moved anybody. It just would have established me as just another boring old fart.

So I stayed quiet until we landed, and then I rolled my overnighter down the aisle, and I made my way through the vast carpeted terminal at Armstrong Interplanetary (thinking all the while carpet, carpet, why is there carpet, dammit, there shouldn't be carpeting on the Moon). Then I hopped a tram to my hotel, and I confirmed that the front desk had followed instructions and provided me one of their few (hideously expensive) rooms with an outside view. Then I went upstairs and thought it all again when I saw that the view was just an alien distortion of the Moon I had known. Though it was night, and the landscape was as dark as the constellations of manmade illumination peppered across its cratered surface would now ever allow it to be, I still saw marquee-sized advertisements for soy houses, strip clubs, rotating restaurants, golden arches, miniature golf courses, and the one-sixth-g Biggest Rollercoaster In the Solar System. The Earth, with Europe and Africa centered, hung silently above the blight.

I tried to imagine two gentle old people, and a golden retriever dog, wandering around somewhere in the garish paradise framed by that window.

I failed.

I wondered whether it felt good or bad to be here. I wasn't tired, which I supposed I could attribute to the sensation of renewed strength and vigor that older people are supposed to feel after making the transition to lower gravities. Certainly, my knees, which had been bothering me for more than a decade now, weren't giving me a single twinge here. But I was also here alone, a decade after burying my dear wife—and though I'd travelled around a little, in the last few years, I had never really grown used to the way the silence of a strange room, experienced alone, tastes like the death that waits for me too.

After about half an hour of feeling sorry for myself, I dressed in one of my best blue suits—an old one Claire had picked out in better days, with a cut now two styles out of date—and went to the lobby to see the concierge. I found him in the center of a lobby occupied not by adventurers or pioneers but by businessmen and tourists. He was a sallow-faced young man seated behind a flat slab of a desk, constructed from some material made to resemble polished black marble. It might have been intended to represent a Kubrick monolith lying on its side, a touch that would have been appropriate enough for the Moon but might have given the decorator too much credit for classical allusions. I found more Kubrick material in the man himself, in that he was a typical hotel functionary: courteous, professional, friendly, and as cold as a plain white wall. Beaming, he said: "Can I help you, sir?"

"I'm looking for Minnie and Earl," I told him.

His smile was an unfaltering, professional thing, that might have been scissored out of a magazine ad and Scotch-taped to the bottom half of his face. "Do you have their full names, sir?"

"Those are their full names." I confess I smiled with reminiscence. "They're both one of a kind."

"I see. And they're registered at the hotel?"

"I doubt it," I said. "They're lunar residents. I just don't have their address."

"Did you try the directory?"

"I tried that before I left Earth," I said. "They're not listed. Didn't expect them to be, either."

He hesitated a fraction of a second before continuing: "I'm not sure I know what to suggest, then—"

"I'm sure you don't," I said, unwillingly raising my voice just enough to give him a little taste of the anger and frustration and dire need that had fueled this entire trip. Being a true professional, used to dealing with obnoxious and arrogant tourists, the concierge didn't react at all: just politely waited for me to get on with it. I, on the other hand, winced before continuing: "They're before your time. Probably way before your time. But there have to be people around—old people, mostly—who know who I'm talking about. Maybe you can ask around for me? Just a little? And pass around the word that I need to talk?"

The professional smile did not change a whit, but it still acquired a distinctively dubious flavor. "Minnie and Earl, sir?"

"Minnie and Earl." I then showed him the size of the tip he'd earn if he accomplished it—big enough to make certain that he'd take the request seriously, but not so large that he'd be tempted to concoct false leads. It impressed him exactly as much as I needed it to. Too bad there was almost no chance of it accomplishing anything; I'd been making inquiries about the old folks for years. But the chances of me giving up were even smaller: not when I now knew I only had a few months left before the heart stopped beating in my chest.

They were Minnie and Earl, dammit.

And anybody who wasn't there in the early days couldn't possibly understand how much that meant.

It's a funny thing about frontiers: they're not as enchanting as the folks who work them like you to believe. And there was a lot that they didn't tell the early recruits about the joys of working on the Moon.

They didn't tell you that the air systems gave off a nasal hum that kept you from sleeping soundly at any point during your first six weeks on rotation; that the vents were considerately located directly above the bunks to eliminate any way of shutting it out; that just when you found yourself actually needing that hum to sleep something in the circulators decided to change the pitch, rendering it just a tad higher or lower so that instead of lying in bed begging that hum to shut up shut up SHUT UP you sat there instead wondering if the new version denoted a serious mechanical difficulty capable of asphyxiating you in your sleep.

They didn't tell you that the recycled air was a paradise for bacteria, which kept any cold or flu or ear infection constantly circulating between you and your coworkers; that the disinfectants regularly released into the atmosphere smelled bad but otherwise did nothing; that when you started sneezing and coughing it was a sure bet that everybody around you would soon be sneezing and coughing; and that it was not just colds but stomach viruses, contagious rashes and even more unpleasant things that got shared as generously as a bottle of a wine at one of the parties you had time to go to back on Earth when you were able to work only sixty or seventy hours a week. They didn't tell you that work took so very much of your time that the pleasures and concerns of normal life were no longer valid experiential input; that without that input you eventually ran out of non-work-related subjects to talk about, and found your personality withering away like an atrophied limb.

They didn't tell you about the whimsical random shortages in the bimonthly supply drops and the ensuing shortages of staples like toothpaste and toilet paper. They didn't tell you about the days when all the systems seemed to conk out at once and your deadening routine suddenly became hours of all-out frantic terror. They didn't tell you that after a while you forgot you were on the Moon and stopped sneaking looks at the battered blue marble that hung up there two weeks out of every four. They didn't tell you that after a while it stopped being a dream and became instead just a dirty and backbreaking job; one that drained you of your enthusiasm faster than you could possibly guess, and one that replaced your ambitions of building a new future with more mundane longings, like feeling once again what it was like to stand unencumbered beneath a midday sun, breathing air that tasted like air and not canned sweat.

They waited until you were done learning all of this on your own before they told you about Minnie and Earl.

I learned on a Sunday—not that I had any reason to keep track of the day; the early development teams were way too short-staffed to enjoy luxuries like days off. There were instead days when you got the shitty jobs and the days when you got the jobs slightly less shitty than the others. On that particular Sunday I had repair duty, the worst job on the Moon but for another twenty or thirty possible candidates. It involved, among them, inspecting, cleaning, and replacing the panels on the solar collectors. There were a lot of panels, since the early collector fields were five kilometers on a side, and each panel was only half a meter square. They tended to collect meteor dust (at best) and get scarred and pitted from micrometeor impacts (at worst). We'd just lost a number of them from heavier rock precipitation, which meant that in addition to replacing those, I had to examine even those that remained intact. Since the panels swiveled to follow the Sun across the sky, even a small amount of dust debris threatened to fall through the joints into the machinery below. There was never a lot of dust—sometimes it was not even visible. But it had to be removed one panel at a time.

To overhaul the assembly, you spent the whole day on your belly, crawling along the catwalks between them, removing each panel in turn, inspecting them beneath a canopy with nothing but suit light, magnifiers, and a

micro-thin air jet. (A vacuum, of course, would have been redundant.) You replaced the panels pitted beyond repair, brought the ruined ones back to the sled for disposal, and then started all over again.

The romance of space travel? Try nine hours of hideously tedious stoop labor in a moonsuit. Try hating every minute of it. Try hating where you are and what you're doing and how hard you worked to qualify for this privilege. Try also hating yourself just for feeling that way—but not having any idea how to turn those feelings off.

I was muttering to myself, conjugating some of the more colorful expressions for excrement, when Phil Jacoby called. He was one of the more annoying people on the Moon: a perpetual smiler who always looked on the bright side of things and refused to react to even the most acidic sarcasm. Appropriately enough, his carrot hair and freckled cheeks always made him look like a ventriloquist's dummy. He might have been our morale officer, if we'd possessed enough bad taste to have somebody with that job title; but that would have made him even more the kind of guy you grow to hate when you really want to be in a bad mood. I dearly appreciated how distant his voice sounded, as he called my name over the radio: "Max! You bored yet, Max?"

"Sorry," I said tiredly. "Max went home."

"Home as in his quarters? Or home as in Earth?"

"There is no home here," I said. "Of course Home as on Earth."

"No return shuttles today," Phil noted. "Or any time this month. How would he manage that trick?"

"He was so fed up he decided to walk."

"Hope he took a picnic lunch or four. That's got to be a major hike."

In another mood, I might have smiled. "What's the bad news, Phil?"

"Why? You expecting bad news?"

There was a hidden glee to his tone that sounded excessive even from Jacoby. "Surprise me."

"You're quitting early. The barge will be by to pick you up in five minutes."

According to the digital readout inside my helmet, it was only 13:38 LT. The news that I wouldn't have to devote another three hours to painstaking cleanup should have cheered me considerably; instead, it rendered me about twenty times more suspicious. I said, "Phil, it will take me at least three times that long just to secure—"

"A relief shift will arrive on another barge within the hour. Don't do another minute of work. Just go back to the sled and wait for pickup. That's an order."

Which was especially strange because Jacoby was not technically my superior. Sure, he'd been on the Moon all of one hundred and twenty days longer than me—and sure, that meant any advice he had to give me needed to be treated like an order, if I wanted to do my job—but even so, he was not the kind of guy who ever ended anything with an authoritarian That's An Order. My first reaction was the certainty that I must have been in some kind of serious trouble. Somewhere, sometime, I forgot or neglected one of the safety protocols, and did something suicidally, crazily wrong—the kind of thing that once discovered would lead to me being relieved for incompetence. But I was still new on the Moon, and I couldn't think of any recent occasion where I'd been given enough responsibility for that to be a factor. My next words were especially cautious: "Uh, Phil, did I—"

"Go to the sled," he repeated, even more sternly this time. "And, Max?"

"What?" I asked.

The ebullient side of his personality returned. "I envy you, man."

The connection clicked off before I could ask him why.

A lunar barge was a lot like its terrestrial equivalent, in that it had no motive power of its very own, but needed to be pulled by another vehicle. Ours were pulled by tractors. They had no atmospheric enclosures, since ninety percent of the time they were just used for the slow-motion hauling of construction equipment; whenever they were needed to move personnel, we bolted in a number of forward-facing seats with oxygen feeds and canvas straps to prevent folks imprisoned by clumsy moonsuits from being knocked out of their chairs every time the flatbed dipped in the terrain. It was an extremely low-tech method of travel, not much faster than a human being could sprint, and we didn't often use it for long distances.

There were four other passengers on this one, all identical behind mirrored facemasks; I had to read their nametags to see who they were. Nikki Hollander, Oscar Desalvo, George Peterson, and Carrie Aldrin No Relation (the last two words a nigh-permanent part of her name, up here). All four of them had been on-site at least a year more than I had, and to my eyes had always seemed to be dealing with the routine a lot better than I had been. As I strapped in, and the tractor started up, and the barge began its glacial progress toward a set of lumpy peaks on the horizon, I wished my coworkers had something other than distorted reflections of the lunar landscape for faces; it would be nice to be able to judge from their expressions just what was going on here. I said: "So what's the story, people? Where we headed?"

Then Carrie Aldrin No Relation began to sing: "Over the river and through the woods, to grandmother's house we go..."

George Peterson snorted. Oscar Desalvo, a man not known for his giddy sense of humor, who was in fact even grimmer than me most of the time—(not from disenchantment with his work, but out of personal inclination)—giggled; it was like watching one of the figures on Mount Rushmore stick its tongue out. Nikki Hollander joined in, her considerably less-than-perfect pitch turning the rest of the song into a nails-on-blackboard

cacophony. The helmet speakers, which distorted anyway, did not help.

I said, "Excuse me?"

Nikki Hollander said something so blatantly ridiculous that I couldn't force myself to believe I'd heard her correctly.

"Come again? I lost that."

"No you didn't." Her voice seemed strained, almost hysterical.

One of the men was choking with poorly repressed laughter. I couldn't tell who.

"You want to know if I like yams?"

Nikki's response was a burlesque parody of astronautic stoicism. "That's an a-ffirmative, Houston."

"Yams, the vegetable yams?"

"*A*-ffirmative." The A emphasized and italicized so broadly that it was not so much a separate syllable as a sovereign country.

This time I recognized the strangulated noises. They were coming from George Peterson, and they were the sounds made by a man who was trying very hard not to laugh. It was several seconds before I could summon enough dignity to answer. "Yeah, I like yams. How is that relevant?"

"Classified," she said, and then her signal cut off.

In fact, all their signals cut off, though I could tell from the red indicators on my internal display that they were all still broadcasting.

That was not unusual. Coded frequencies were one of the few genuine amenities allowed us; they allowed those of us who absolutely needed a few seconds to discuss personal matters with coworkers to do so without sharing their affairs with anybody else who might be listening. We're not supposed to spend more than a couple of minutes at a time on those channels because it's safer to stay monitored. Being shut out of four signals simultaneously—in a manner that could only mean raucous laughter at my expense—was unprecedented, and it pissed me off. Hell, I'll freely admit that it did more than that; it frightened me. I was on the verge of suspecting brain damage caused by something wrong with the air supply.

Then George Peterson's voice clicked: "Sorry about that, old buddy." (I'd never been his old buddy.) "We usually do a better job keeping a straight face."

"At what? Mind telling me what's going on here?"

"One minute." He performed the series of maneuvers necessary to cut off the oxygen provided by the barge, and restore his dependence on the supply contained in his suit, then unstrapped his harnesses, stood, and moved toward me, swaying slightly from the bumps and jars of our imperfectly smooth ride across the lunar surface.

It was, of course, against all safety regulations for him to be on his feet while the barge was in motion; after all, even as glacially slow as that was, it wouldn't have taken all that great an imperfection in the road before us to knock him down and perhaps inflict the kind of hairline puncture capable of leaving him with a slight case of death. We had all disobeyed that particular rule from time to time; there were just too many practical advantages in being able to move around at will, without first ordering the tractor to stop. But it made no sense for him to come over now, just to talk, as if it really made a difference for us to be face-to-face. After all, we weren't faces. We were a pair of convex mirrors, reflecting each other while the men behind them spoke on radios too powerful to be noticeably improved by a few less meters of distance.

Even so, he sat down on a steel crate lashed to the deck before me, and positioned his faceplate opposite mine, his body language suggesting meaningful eye contact. He held that position for almost a minute, not saying anything, not moving, behaving exactly like a man who believed he was staring me down.

It made no sense. I could have gone to sleep and he wouldn't have noticed.

Instead, I said: "What?"

He spoke quietly: "Am I correct in observing that you've felt less than, shall we say... 'inspired', by your responsibilities here?"

Oh, Christ. This was about something I'd done.

"Is there some kind of problem?"

George's helmet trembled enough to a suggested a man theatrically shaking his head inside it. "Lighten up, Max. Nobody has any complaints about your work. We think you're one of the best people we have here, and your next evaluation is going to give you straight A's in every department... except enthusiasm. You just don't seem to believe in the work anymore."

As much as I tried to avoid it, my answer still reeked with denial. "I believe in it."

"You believe in the idea of it," George said. "But the reality has worn you down."

I was stiff, proper, absolutely correct, and absolutely transparent. "I was trained. I spent a full year in simulation, doing all the same jobs. I knew what it was going to be like. I knew what to expect."

"No amount of training can prepare you for the moment when you think you can't feel the magic anymore."

"And you can?" I asked, unable to keep the scorn from my voice.

The speakers inside lunar helmets were still pretty tinny in those days; they no longer transformed everything we said into the monotones that once upon a time helped get an entire country fed up with the forced badinage of

Apollo, but neither were they much good at conveying the most precise of emotional cues. And yet I was able to pick up something in George's tone that was, given my mood, capable of profoundly disturbing me: a strange, transcendent joy. "Oh, yes. Max. I can."

I was just unnerved enough to ask: "How?"

"I'm swimming in it," he said—and even as long as he'd been part of the secret, his voice still quavered, as if there was some seven-year-old part of him that remained unwilling to believe that it could possibly be. "We're all swimming in it."

"I'm not."

And he laughed out loud. "Don't worry. We're going to gang up and shove you into the deep end of the pool."

That was seventy years ago.

Seventy years. I think about how old that makes me and I cringe. Seventy years ago, the vast majority of old farts who somehow managed to make it to the age I am now were almost always living on the outer edges of decrepitude. The physical problems were nothing compared with the senility. What's that? You don't remember senile dementia? Really? I guess there's a joke in there somewhere, but it's not that funny for those of us who can remember actually considering it a possible future. Trust me, it was a nightmare. And the day they licked that one was one hell of an advertisement for progress.

But still, seventy years. You want to know how long ago that was? Seventy years ago it was still possible to find people who had heard of Bruce Springsteen. There were even some who remembered the Beatles. Stephen King was still coming out with his last few books, Kate Emma Brenner hadn't yet come out with any, Exxon was still in business, the reconstruction of the ice packs hadn't even been proposed, India and Pakistan hadn't reconciled, and the idea of astronauts going out into space to blow up a giant asteroid before it impacted with Earth was not an anecdote from recent history but a half-remembered image from a movie your father talked about going to see when he was a kid. Seventy years ago the most pressing headlines had to do with the worldwide ecological threat posed by the population explosion among escaped sugar gliders.

Seventy years ago, I hadn't met Claire. She was still married to her first husband, the one she described as the nice mistake. She had no idea I was anywhere in her future. I had no idea she was anywhere in mine. The void hadn't been defined yet, let alone filled. (Nor had it been cruelly emptied again—and wasn't it sad how the void I'd lived with for so long seemed a lot larger, once I needed to endure it again?)

Seventy years ago I thought Faisal Awad was an old man. He may have been in his mid-thirties then, at most ten years older than I was. That, to me, was old. These days it seems one step removed from the crib.

I haven't mentioned Faisal yet; he wasn't along the day George and the others picked me up in the barge, and we didn't become friends til later. But he was a major member of the development team, back then—the kind of fixitall adventurer who could use the coffee machine in the common room to repair the heating system in the clinic. If you don't think that's a valuable skill, try living under 24-7 life support in a hostile environment where any requisitions for spare parts had to be debated and voted upon by a government committee during election years. It's the time of my life when I first developed my deep abiding hatred of Senators. Faisal was our life-saver, our miracle worker, and our biggest local authority on the works of Gilbert and Sullivan, though back then we were all too busy to listen to music and much more likely to listen to that 15-minute wonder Polka Thug anyway. After I left the Moon, and the decades of my life fluttered by faster than I once could have imagined possible, I used to think about Faisal and decide that I really ought to look him up, someday, maybe, as soon as I had the chance. But he had stayed on Luna, and I had gone back to Earth, and what with one thing or another that resolution had worked out as well as such oughtas always do: a lesson that old men have learned too late for as long as there have been old men to learn it.

I didn't even know how long he'd been dead until I heard it from his granddaughter Janine Seuss, a third-generation lunar I was able to track down with the help of the Selene Historical Society. She was a slightly-built thirty-seven-year-old with stylishly mismatched eye color and hair micro-styled into infinitesimal pixels that, when combed correctly, formed the famous old black-and-white news photograph of that doomed young girl giving the finger to the cops at the San Diego riots of some thirty years ago. Though she had graciously agreed to meet me, she hadn't had time to arrange her hair properly, and the photo was eerily distorted, like an image captured and then distorted on putty. She served coffee, which I can't drink anymore but which I accepted anyway, then sat down on her couch with the frantically miaowing Siamese.

"There were still blowouts then," she said. "Some genuine accidents, some bombings arranged by the Flat-Mooners. It was one of the Flat-Mooners who got Poppy. He was taking Mermer—our name for Grandma—to the movies up on topside; back then, they used to project them on this big white screen a couple of kilometers outside, though it was always some damn thing fifty or a hundred years old with dialogue that didn't make sense and stories you had to be older than Moses to appreciate. Anyway, the commuter tram they were riding just went boom and opened up into pure vacuum. Poppy and Mermer and about fourteen others got sucked out." She took a deep breath, then let it out all at once. "That was almost twenty years ago."

What else can you say, when you hear a story like that? "I'm sorry."

She acknowledged that with an equally ritual response. "Thanks."

"Did they catch the people responsible?"

"Right away. They were a bunch of losers. Unemployed illiterate idiots."

I remembered the days when the only idiots on the Moon were highly-educated and overworked ones. After a moment, I said: "Did he ever talk about the early days? The development teams?"

She smiled. "Ever? It was practically all he ever did talk about. You kids don't bleh bleh bleh. He used to get mad at the vids that made it look like a time of sheriffs and saloons and gunfights—he guessed they probably made good stories for kids who didn't know any better, but kept complaining that life back then wasn't anything like that. He said there was always too much work to do to strap on six-guns and go gunning for each other."

"He was right," I said. (There was a grand total of one gunfight in the first thirty years of lunar settlement—and it's not part of this story.)

"Most of his stories about those days had to do with things breaking down and him being the only person who could fix them in the nick of time. He told reconditioned-software anecdotes. Finding-the-rotten-air-filter anecdotes. Improvise-joint-lubricant anecdotes. Lots of them."

"That was Faisal."

She petted the cat. (It was a heavy-lidded, meatloaf-shaped thing that probably bestirred itself only at the sound of a can opener: we'd tamed the Moon so utterly that people like Janine were able to spare some pampering for their pets.) "Bleh. I prefer the gunfights."

I leaned forward and asked the important question. "Did he ever mention anybody named Minnie and Earl?"

"Were those a couple of folks from way back then?"

"You could say that."

"No last names?"

"None they ever used."

She thought about that, and said: "Would they have been folks he knew only slightly? Or important people?"

"Very important people," I said. "It's vital that I reach them."

She frowned. "It was a long time ago. Can you be sure they're still alive?"

"Absolutely," I said.

She considered that for a second. "No, I'm sorry. But you have to realize it was a long time ago for me too. I don't remember him mentioning anybody."

Faisal was the last of the people I'd known from my days on the Moon. There were a couple on Earth, but both had flatly denied any knowledge of Minnie and Earl. Casting about for last straws, I said: "Do you have anything that belonged to him?"

"No, I don't. But I know where you can go to look further."

Seventy years ago, after being picked up by the barge:

Nobody spoke to me again for forty-five minutes, which only fueled my suspicions of mass insanity.

The barge itself made slow but steady progress, following a generally uphill course of the only kind possible in that era, in that place, on the Moon: which was to say, serpentine. The landscape here was rough, pocked with craters and jagged outcroppings, in no place willing to respect how convenient it might have been to allow us to proceed in something approaching a straight line. There were places where we had to turn almost a hundred and eighty degrees, double back a while, then turn again, to head in an entirely different direction; it was the kind of route that looks random from one minute to the next but gradually reveals progress in one direction or another. It was clearly a route that my colleagues had travelled many times before; nobody seemed impatient. But for the one guy who had absolutely no idea where we were going, and who wasn't in fact certain that we were headed anywhere at all, it was torture.

We would have managed the trip in maybe one-tenth the time in one of our fliers, but I later learned that the very laboriousness of the journey was, for first-timers at least, a traditional part of the show. It gave us time to speculate, to anticipate. This was useful for unlimbering the mind, ironing the kinks out of the imagination, getting us used to the idea that we were headed someplace important enough to be worth the trip. The buildup couldn't possibly be enough—the view over that last ridge was still going to hit us with the force of a sledgehammer to the brain—but I remember how hard it hit and I'm still thankful the shock was cushioned even as inadequately as it was.

We followed a long boring ridge for the better part of fifteen minutes... then began to climb a slope that bore the rutty look of lunar ground that had known tractor-treads hundreds of times before. Some of my fellow journeyers hummed ominous, horror-movie soundtrack music in my ear, but George's voice overrode them all: "Max? Did Phil tell you he envied you this moment?"

I was really nervous now. "Yes."

"He's full of crap. You're not going to enjoy this next bit except in retrospect. Later on you'll think of it as the best moment of your life—and it might even be—but it won't feel like that when it happens. It'll feel big and frightening and insane when it happens. Trust me now when I tell you that it will get better, and quickly... and that everything will be explained, if not completely, then at least as much as it needs to be."

It was an odd turn of phrase. "As much as it needs to be? What's that supposed to—"

That's when the barge reached the top of the rise, providing us a nice panoramic view of what awaited us in the shallow depression on the other side.

My ability to form coherent sentences became a distant rumor.

It was the kind of moment when the entire Universe seems to become a wobbly thing, propped up by scaffolding and held together with the cheapest brand of hardware-store nails. The kind of moment when gravity just turns sideways beneath you, and the whole world turns on its edge, and the only thing that prevents you from just jetting off into space to spontaneously combust is the compensatory total stoppage of time. I don't know the first thing I said. I'm glad nobody ever played me the recordings that got filed away in the permanent mission archives... and I'm equally sure that the reason they didn't is that anybody actually on the Moon to listen to them must have also had their own equally aghast reactions saved for posterity. I got to hear such sounds many times, from others I would later escort over that ridge myself— and I can absolutely assure you that it's the sound made by intelligent, educated people who first think they've gone insane, and who then realize it doesn't help to know that they haven't.

It was the only possible immediate reaction to the first sight of Minnie and Earl's.

What I saw, as we crested the top of that ridge, was this:

In the center of a typically barren lunar landscape, surrounded on all sides by impact craters, rocks, more rocks, and the suffocating emptiness of vacuum—

—a dark landscape, mind you, one imprisoned by lunar night, and illuminated only by the gibbous Earth hanging high above us—

—a rectangle of color and light, in the form of four acres of freshly-watered, freshly mowed lawn.

With a house on it.

Not a prefab box of the kind we dropped all over the lunar landscape for storage and emergency air stops.

A house.

A clapboard family home, painted a homey yellow, with a wraparound porch three steps off the ground, a canopy to keep off the Sun, a screen door leading inside and a bug-zapper over the threshold. There was a porch swing with cushions in a big yellow daisy pattern, and a wall of neatly-trimmed hedges around the house, obscuring the latticework that enclosed the crawlspace underneath. It was so over-the-top middle American that even in that first moment, I half-crazily expected the scent of lemonade to cross the vacuum and enter my suit. (That didn't happen, but lemonade was waiting.) The lawn was completely surrounded with a white picket fence with an open gate; there was even an old-fashioned mailbox at the gate, with its flag up. All of it was lit, from nowhere, like a bright summer afternoon. The house itself had two stories, plus a sloping shingled roof high enough to hide a respectable attic; as we drew closer I saw that there were pull-down shades, not venetian blinds, in the pane-glass windows. Closer still, and I spotted the golden retriever that lay on the porch, its head resting between muddy paws as it followed our approach; it was definitely a lazy dog, since it did not get up to investigate us, but it was also a friendly one, whose big red tail thumped against the porch in greeting. Closer still, and I made various consonant noises as a venerable old lady in gardening overalls came around the side of the house, spotted us, and broke into the kind of smile native only to contented old ladies seeing good friends or grandchildren after too long away. When my fellow astronauts all waved back, I almost followed their lead, but for some reason my arms wouldn't move.

Somewhere in there I murmured, "This is impossible."

"Clearly not," George said. "If it were impossible it wouldn't be happening. The more accurate word is inexplicable."

"What the hell is—"

"Come on, goofball." This from Carrie Aldrin No Relation. "You're acting like you never saw a house before."

Sometimes, knowing when to keep your mouth shut is the most eloquent expression of wisdom. I shut up.

It took about a million and a half years—or five minutes if you go by merely chronological time—for the tractor to descend the shallow slope and bring us to a stop some twenty meters from the front gate. By then an old man had joined the old woman at the fence. He was a lean old codger with bright blue eyes, a nose like a hawk, a smile that suggested he'd just heard a whopper of a joke, and the kind of forehead some very old men have—the kind that by all rights ought to have been glistening with sweat, like most bald heads, but instead seemed perpetually dry, in a way that suggested a sophisticated system for the redistribution of excess moisture. He had the leathery look of old men who had spent much of their lives working in the Sun. He wore neatly-pressed tan pants, sandals, and a white button-down shirt open at the collar, all of which was slightly loose on him—not enough to make him look comical or pathetic, but enough to suggest that he'd been a somewhat bigger man before age had diminished him, and was still used to buying the larger sizes. (That is, I thought, if there was any possibility of him finding a good place to shop around here.)

His wife, if that's who she was, was half a head shorter and slightly stouter; she had blue eyes and a bright smile, like him, but a soft and rounded face that provided a pleasant complement to his lean and angular one. She was just overweight enough to provide her with the homey accoutrements of chubby cheeks and double chin; unlike her weathered, bone-dry husband, she was smooth-skinned and shiny-faced and very much a creature the Sun had left untouched (though she evidently spent time there; at least, she wore gardener's gloves, and carried a spade).

They were, in short, vaguely reminiscent of the old folks standing before the farmhouse in that famous old painting "American Gothic". You know the one I mean—the constipated old guy with the pitchfork next to the wife who seems mortified by his very presence? These two were those two after they cheered up enough to be worth meeting.

Except, of course, that this couldn't possibly be happening.

My colleagues unstrapped themselves, lowered the stairway, and disembarked. The tractor driver, whoever he was, emerged from its cab and joined them. George stayed with me, watching my every move, as I proved capable of climbing down a set of three steps without demonstrating my total incapacitation from shock. When my boots crunched lunar gravel—a texture I could feel right through the treads of my boots, and which served at that moment to reconnect me to ordinary physical reality—Carrie, Oscar, and Nikki patted me on the back, a gesture that felt like half-congratulation and, half-commiseration. The driver came by, too; I saw from the markings on his suit that he was Pete Rawlik, who was assigned to some kind of classified biochemical research in one of our outlabs; he had always been too busy to mix much, and I'd met him maybe twice by that point, but he still clapped my shoulder like an old friend. As for George, he made a wait gesture and went back up the steps.

In the thirty seconds we stood there waiting for him, I looked up at the picket fence, just to confirm that the impossible old couple was still there, and I saw that the golden retriever, which had joined its masters at the gate, was barking silently. That was good. If the sound had carried in vacuum, I might have been worried. That would have been just plain crazy.

Then George came back, carrying an airtight metal cylinder just about big enough to hold a soccer ball. I hadn't seen any vacuum boxes of that particular shape and size before, but any confusion I might have felt about that was just about the last thing I needed to worry about. He addressed the others: "How's he doing?"

A babble of noncommittal OKs dueled for broadcast supremacy. Then the voices resolved into individuals.

Nikki Hollander said: "Well, at least he's not babbling anymore."

Oscar Desalvo snorted: "I attribute that to brain-lock."

"You weren't any better," said Carrie Aldrin No Relation. "Worse. If I recall correctly, you made a mess in your suit."

"I'm not claiming any position of false superiority, hon. Just giving my considered diagnosis."

"Whatever," said Pete Rawlik. "Let's just cross the fenceline, already. I have an itch."

"In a second," George said. His mirrored faceplate turned toward mine, aping eye-contact. "Max? You getting this?"

"Barely," I managed.

"Outstanding. You're doing fine. But I need you with me a hundred percent while I cover our most important ground rule. Namely—everything inside that picket fence is a temperature-climate, sea-level, terrestrial environment. You don't have to worry about air filtration, temperature levels, or anything else. It's totally safe to suit down, as long as you're inside the perimeter—and in a few minutes, we will all be doing just that. But once you're inside that enclosure, the picket fence itself marks the beginning of lunar vacuum, lunar temperatures, and everything that implies. You do not, repeat not, do anything to test the differential. Even sticking a finger out between the slats is enough to get you bounced from the program, with no possibility of reprieve. Is that clear?"

"Yes, but—"

"Rule Two," he said, handing me the sealed metal box. "You're the new guy. You carry the pie."

I regarded the cylinder. Pie?

I kept waiting for the other shoe to drop, but it never did.

The instant we passed through the front gate, the dead world this should have been surrendered to a living one. Sound returned between one step and the next. The welcoming cries of the two old people—and the barking of their friendly golden retriever dog—may have been muffled by my helmet, but they were still identifiable enough to present touches of personality. The old man's voice was gruff in a manner that implied a past flavored by whiskey and cigars, but there was also a sing-song quality to it, that instantly manifested itself as a tendency to end his sentences at higher registers. The old woman's voice was soft and breathy, with only the vaguest suggestion of an old-age quaver and a compensatory tinge of the purest Georgia Peach. The dog's barks were like little frenzied explosions, that might have been threatening if they hadn't all trailed off into quizzical whines. It was a symphony of various sounds that could be made for hello: laughs, cries, yips, and delighted shouts of *George! Oscar! Nikki! Carrie! Pete! So glad you could make it! How are you?*

It was enough to return me to statue mode. I didn't even move when the others disengaged their helmet locks, doffed their headgear, and began oohing and aahing themselves. I just spent the next couple of minutes watching, physically in their midst but mentally somewhere very far away, as the parade of impossibilities passed on by. I noted that Carrie Aldrin No Relation, who usually wore her long red hair beneath the tightest of protective nets, was today styled in pigtails with big pink bows; that Oscar, who was habitually scraggly-haired and two days into a beard, was today perfectly kempt and freshly shaven; that George giggled like a five-year-old when the dog stood up on its hind legs to slobber all over his face; and that Pete engaged with a little mock wrestling match with the old man that almost left him toppling backward onto the grass. I saw the women whisper to each other, then bound up

the porch steps into the house, so excitedly that they reminded me of schoolgirls skipping off to the playground—a gait that should have been impossible to simulate in a bulky moonsuit, but which they pulled off with perfect flair. I saw Pete and Oscar follow along behind them, laughing at a shared joke.

I was totally ignored until the dog stood up on its hind legs to sniff at, then snort nasal condensation on, my faceplate. His ears went back. He whined, then scratched at his reflection, then looked over his shoulder at the rest of his pack, long pink tongue lolling plaintively. *Look, guys. There's somebody in this thing.*

I didn't know I was going to take the leap of faith until I actually placed the pie cylinder on the ground, then reached up and undid my helmet locks. The hiss of escaping air made my blood freeze in my chest; for a second I was absolutely certain that all of this was a hallucination brought on by oxygen deprivation, and that I'd just committed suicide by opening my suit to vacuum. But the hiss subsided, and I realized that it was just pressure equalization; the atmosphere in this environment must have been slightly less than that provided by the suit. A second later, as I removed my helmet, I tasted golden retriever breath as the dog leaned in close and said hello by licking me on the lips. I also smelled freshly mowed grass and the perfume of nearby flowers: I heard a bird not too far away go whoot-toot-toot-weet; and I felt direct sunlight on my face, even though the Sun itself was nowhere to be seen. The air itself was pleasantly warm, like summer before it gets obnoxious with heat and humidity.

"Miles!" the old man said. "Get down!"

The dog gave me one last lick for the road and sat down, gazing up at me with that species of tongue-lolling amusement known only to large canines.

The old woman clutched the elbow of George's suit. "Oh, you didn't tell me you were bringing somebody new this time! How wonderful!"

"What is this place?" I managed.

The old man raised his eyebrows. "It's our front yard, son. What does it look like?"

The old woman slapped his hand lightly. "Be nice, dear. You can see he's taking it hard."

He grunted. "Always did beat me how you can tell what a guy's thinking and feeling just by looking at him."

She patted his arm again. "It's not all that unusual, apricot. I'm a woman."

George ambled on over, pulling the two oldsters along. "All right, I'll get it started. Max Fischer, I want you to meet two of the best people on this world or any other—Minnie and Earl. Minnie and Earl, I want you to meet a guy who's not quite as hopeless as he probably seems on first impression—Max Fischer. You'll like him."

"I like him already," Minnie said. "I've yet to dislike anybody the dog took such an immediate shine to. Hi, Max."

"Hello," I said. After a moment: "Minnie. Earl."

"Wonderful to meet you, young man. Your friends have said so much about you."

"Thanks." Shock lent honesty to my response: "They've said absolutely nothing about you."

"They never do," she said, with infinite sadness, as George smirked at me over her back. She glanced down at the metal cylinder at my feet, and cooed: "Is that cake?"

Suddenly, absurdly, the first rule of family visits popped unbidden into my head, blaring its commandment in flaming letters twenty miles high: THOU SHALT NOT PUT THE PIE YOU BROUGHT ON THE GROUND—ESPECIALLY NOT WHEN A DOG IS PRESENT. Never mind that the container was sealed against vacuum, and that the dog would have needed twenty minutes to get in with an industrial drill: the lessons of everyday American socialization still applied. I picked it up and handed it to her; she took it with her bare hands, reacting not at all to what hindsight later informed me should have been a painfully cold exterior. I said: "Sorry."

"It's pie," said George. "Deep-dish apple pie. Direct from my grandma's orchard."

"Oh, that's sweet of her. She still having those back problems?"

"She's getting on in years," George allowed. "But she says that soup of yours really helped."

"I'm glad," she said, her smile as sunny as the entire month of July. "Meanwhile, why don't you take your friend upstairs and get him out of that horrid suit? I'm sure he'll feel a lot better once he's had a chance to freshen up. Earl can have a drink set for him by the time you come down."

"I'll fix a Sea of Tranquility," Earl said, with enthusiasm.

"Maybe once he has his feet under him. A beer should be fine for now."

"All righteе," said Earl, with the kind of wink that established he knew quite well I was going to need something a lot more substantial than beer.

As for Minnie, she seized my hand, and said: "It'll be all right, apricot. Once you get past this stage, I'm sure we're all going to be great friends."

"Um," I replied, with perfect eloquence, wondering just what stage I was being expected to pass.

Sanity?

Dying inside, I did what seemed to be appropriate. I followed George through the front door (first stamping my moonboots on the mat, as he specified) and up the narrow, creaky wooden staircase.

You ever go to parties where the guests leave their coats in a heap on the bed of the master bedroom? Minnie and Earl's was like that. Except it wasn't a pile of coats, but a pile of disassembled moonsuits. There were actually two bedrooms upstairs—the women changed in the master bedroom that evidently belonged to the oldsters themselves, the men in a smaller room that felt like it belonged to a teenage boy. The wallpaper was a pattern of

galloping horses, and the bookcases were filled with mint-edition paperback thrillers that must have been a hundred years old even then. (Or more: there was a complete collection of the hardcover Hardy Boys Mysteries, by Franklin W. Dixon.) The desk was a genuine antique rolltop, with a green blotter; no computer or hytex. The bed was just big enough to hold one gangly teenager, or three moonsuits disassembled into their component parts, with a special towel provided so our boots wouldn't get moondust all over the bedspread. By the time George and I got up there, Oscar and Pete had already changed into slacks, dress shoes with black socks, and button-down shirts with red bowties; Pete had even put some shiny gunk in his hair to slick it back. They winked at me as they left.

I didn't change, not immediately; nor did I speak, not even as George doffed his own moonsuit and jumpers in favor of a similarly earthbound outfit he blithely salvaged from the closet. The conviction that I was being tested, somehow, was so overwhelming that the interior of my suit must have been a puddle of flop sweat.

Then George said: "You going to be comfortable, dressed like that all night?"

I stirred. "Clothes?"

He pulled an outfit my size from the closet—tan pants, a blue short-sleeved button-down shirt, gleaming black shoes, and a red bowtie identical to the ones Oscar and Pete had donned. "No problem borrowing. Minnie keeps an ample supply. You don't like the selection, you want to pick something more your style, you can always have something snazzier sent up on the next supply drop. I promise you, she'll appreciate the extra effort. It makes her day when—"

"George," I said softly.

"Have trouble with bowties? No problem. They're optional. You can—"

"George," I said again, and this time my voice was a little louder, a little deeper, a little more *For Christ's Sake Shut Up I'm Sick Of This Shit.*

He batted his eyes, all innocence and naivete. "Yes, Max?"

My look, by contrast, must have been half-murderous. "Tell me."

"Tell you what?"

It was very hard not to yell. "You know what!"

He fingered an old issue of some garishly-colored turn-of-the-millennium science fiction magazine. "Oh. That mixed drink Earl mentioned. The Sea of Tranquility. It's his own invention, and he calls it that because your first sip is one small step for Man, and your second is one giant leap for Mankind. There's peppermint in it. Give it a try and I promise you you'll be on his good side for life. He—"

I squeezed the words through clenched teeth. "I... don't... care... about... the... bloody... drink."

"Then I'm afraid I don't see your problem."

"My problem," I said, slowly, and with carefully repressed frustration, "is that all of this is downright impossible."

"Apparently not," he noted.

"I want to know who these people are, and what they're doing here."

"They're Minnie and Earl, and they're having some friends over for dinner."

If I'd been five years old, I might have pouted and stamped my foot. (Sometimes, remembering, I think I did anyway.) "Dammit, George!"

He remained supernaturally calm. "No cursing in this house, Max. Minnie doesn't like it. She won't throw you out for doing it—she's too nice for that—but it does make her uncomfortable."

This is the point where I absolutely know I stamped my foot. "That makes *her* uncomfortable!?"

He put down the skiffy magazine. "Really. I don't see why you're having such a problem with this. They're just this great old couple who happen to live in a little country house on the Moon, and their favorite thing is getting together with friends, and we're here to have Sunday night dinner with them. Easy to understand... especially if you accept that it's all there is."

"That can't be all there is!" I cried, my exasperation reaching critical mass.

"Why not? Can't 'Just Because' qualify as a proper scientific theory?"

"No! It doesn't!—How come you never told me about this place before?"

"You never asked before." He adjusted his tie, glanced at the outfit laid out for me on the bed, and went to the door. "Don't worry; it didn't for me, either. Something close to an explanation is forthcoming. Just get dressed and come downstairs already. We don't want the folks to think you're antisocial..."

I'd been exasperated, way back then, because Minnie and Earl were there and had no right to be. I was exasperated now because the more I looked, the more impossible it became to find any indication that they'd ever been there at all.

I had started looking for them, if only in a desultory, abstracted way, shortly after Claire died. She'd been the only person on Earth who had ever believed my stories about them. Even now, I think it's a small miracle that she did. I had told her the story of Minnie and Earl before we even became man and wife—sometime after I knew I was going to propose, but before I found the right time and place for the question. I was just back from a couple of years of Outer-System work, had grown weary of the life, and had met this spectacularly kind and funny and beautiful person whose interests were all on Earth, and who had no real desire to go out into space herself. That was just fine

with me. It was what I wanted too. And of course I rarely talked to her about my years in space, because I didn't want to become an old bore with a suitcase full of old stories. Even so, I still knew, at the beginning, that knowing about a real-life miracle and not mentioning it to her, ever, just because she was not likely to believe me, was tantamount to cheating. So I sat her down one day, even before the proposal, and told her about Minnie and Earl. And she believed me. She didn't humor me. She didn't just say she believed me. She didn't just believe me to be nice. She believed me. She said she always knew when I was shoveling manure and when I was not—a boast that turned out to be an integral strength of our marriage—and that it was impossible for her to hear me tell the story without knowing that Minnie and Earl were real. She said that if we had children I would have to tell the story to them, too, to pass it on.

That was one of the special things about Claire: she had faith when faith was needed.

But our son and our daughter, and later the grandkids, outgrew believing me. For them, Minnie and Earl were whimsical space-age versions of Santa.

I didn't mind that, not really.

But when she died, finding Minnie and Earl again seemed very important.

It wasn't just that their house was gone, or that Minnie and Earl seemed to have departed for regions unknown; and it wasn't just that the official histories of the early development teams now completely omitted any mention of the secret hoarded by everybody who had ever spent time on the Moon in those days. It wasn't just that the classified files I had read and eventually contributed to had disappeared, flushed down the same hole that sends all embarrassing government secrets down the pipe to their final resting place in the sea. But for more years than I'd ever wanted to count, Minnie and Earl had been the secret history nobody ever talked about. I had spoken to those of my old colleagues who still remained alive, and they had all said, what are you talking about, what do you mean, are you feeling all right, nothing like that ever happened.

It was tempting to believe that my kids were right: that it had been a fairy tale: a little harmless personal fantasy I'd been carrying around with me for most of my life.

But I knew it wasn't.

Because Claire had believed me.

Because whenever I did drag out the old stories one more time, she always said, "I wish I'd known them." Not like an indulgent wife allowing the old man his delusions, but like a woman well acquainted with miracles. And because even if I was getting too old to always trust my own judgement, nothing would ever make me doubt hers.

I searched with phone calls, with letters, with hytex research, with the calling-in of old favors, with every tool available to me. I found nothing.

And then one day I was told that I didn't have much more time to look. It wasn't a tragedy; I'd lived a long and happy life. And it wasn't as bad as it could have been; I'd been assured that there wouldn't be much pain. But I did have that one little unresolved question still hanging over my head

That was the day I overcame decades of resistance and booked return passage to the world I had once helped to build.

The day after I spoke to Janine Seuss, I followed her advice and took a commuter tram to the Michael Collins Museum of Early Lunar Settlement. It was a popular tourist spot with all the tableaus and reenactments and, you should only excuse the expression, cheesy souvenirs you'd expect from such an establishment; I'd avoided it up until now mostly because I'd seen and heard most of it before, and much of what was left was the kind of crowd-pleasing foofaraw that tames and diminishes the actual experience I lived through for the consumption of folks who are primarily interested in tiring out their hyperactive kids. The dumbest of those was a pile of real Earth rocks, replacing the weight various early astronauts had taken from the Moon; ha ha ha, stop, I'm dying here. The most offensive was a kids' exhibit narrated by a cartoon-character early development engineer; he spoke with a cornball rural accent, had comic-opera patches on the knees of his moonsuit, and seemed to have an I.Q. of about five.

Another annoying thing about frontiers: when they're not frontiers anymore, the civilizations that move in like to think that the people who came first were stupid.

But when I found pictures of myself, in an exhibit on the development programs, and pointed them out to an attendant, it was fairly easy to talk the curators into letting me into their archives for a look at certain other materials that hadn't seen the light of day for almost twenty years. They were taped interviews, thirty years old now, with a number of the old guys and gals, talking about their experiences in the days of early development: the majority of those had been conducted here on the Moon, but others had taken place on Earth or Mars or wherever else any of those old farts ended up. I felt vaguely insulted that they hadn't tried to contact me; maybe they had, and my wife, anticipating my reluctance, had turned them away. I wondered if I should have felt annoyed by that. I wondered too if my annoyance at the taming of the Moon had something to do with the disquieting sensation of becoming ancient history while you're still alive to remember it.

There were about ten thousand hours of interviews; even if my health remained stable long enough for me to listen to them all, my savings would run out far sooner. But they were indexed, and audio-search is a wonderful thing. I typed in "Minnie" and got several dozen references to small things, almost as many references to Mickey's rodent girlfriend, and a bunch of stories about a project engineer, from after my time, who had also been blessed

with that particular first name. (To believe the transcripts, she spent all her waking hours saying impossibly cute things that her friends and colleagues would remember and be compelled to repeat decades later; what a bloody pixie.) I typed in "Earl" and, though it felt silly, "Miles", and got a similar collection of irrelevancies—many references to miles, thus proving conclusively that as recently as thirty years ago the adoption of the metric system hadn't yet succeeded in wiping out any less elegant but still fondly remembered forms of measurement. After that, temporarily stuck, I typed in my own name, first and last, and was rewarded with a fine selection of embarrassing anecdotes from folks who recalled what a humorless little pissant I had been way back then. All of this took hours; I had to listen to each of these references, if only for a second or two, just to know for sure what was being talked about, and I confess that, in between a number of bathroom breaks I would have considered unlikely as a younger man, I more than once forgot what I was supposedly looking for long enough to enjoy a few moments with old voices I hadn't heard for longer than most lunar residents had been alive.

I then cross-referenced by the names of the various people who were along on that first Sunday night trip to Minnie and Earl's. "George Peterson" got me nothing of obvious value. "Carrie Aldrin" and "Peter Rawlik", ditto. Nor did the other names. There were references, but nothing I particularly needed.

Feeling tired, I sat there drumming my fingertips on the tabletop. The museum was closing soon. The research had exhausted my limited stores of strength; I didn't think I could do this many days in a row. But I knew there was something here. There had to be. Even if there was a conspiracy of silence—organized or accidental—the mere existence of that unassuming little house had left too great a footprint on our lives.

I thought about details that Claire had found particularly affecting.

And then I typed "Yams".

Seventy years ago, suffering from a truly epic sense of dislocation that made everything happening to me seem like bits of stage business performed by actors in a play whose author had taken care to omit all the important exposition, I descended a creaky flight of wooden stairs, to join my colleagues in Minnie and Earl's living room. I was the last to come down, of course; everybody else was already gathered around the three flowery-print sofas, munching on finger foods as they chatted up a storm. The women were in soft cottony dresses, the men in starched trousers and button-downs. They all clapped and cheered as I made my appearance, a reaction that brought an unwelcome blush to my cheeks. It was no wonder; I was a little withdrawn to begin with, back then, and the impossible context had me so off-center that all my defenses had turned to powder.

It was a homey place, though: brightly lit, with a burning fireplace, an array of glass shelving covered with a selection of homemade pottery, plants and flowers in every available nook, an upright piano, a bar that did not dominate the room, and an array of framed photographs on the wall behind the couch. There was no TV or hytex. I glanced at the photographs and moved toward them, hungry for data.

Then Earl rose from his easy chair and came around the coffee table, with a gruff, "Plenty of time to look around, son. Let me take care of you."

"That's—" I said. I was still not managing complete sentences, most of the time.

He took me by the arm, brought me over to the bar, and sat me down on a stool. "Like I said, plenty of time. You're like most first-timers, you're probably in dire need of a drink. We can take care of that first and then get acquainted." He moved around the bar, slung a towel over his shoulder, and said: "What'll it be, pilgrim?"

Thank God I recognized the reference. If I hadn't—if it had just been another inexplicable element of a day already crammed with them—my head would have exploded from the effort of figuring out why I was being called a pilgrim. "A... Sea of Tranquility?"

"Man after my own heart," Earl said, flashing a grin as he compiled an impressive array of ingredients in a blender. "Always drink the local drink, son. As my daddy put it, there's no point in going anywhere if you just get drunk the same way you can at home. Which is where, by the way?"

I said, "What?"

"You missed the segue. I was asking you where you were from."

It seemed a perfect opportunity. "You first."

He chuckled. "Oh, the wife and I been here long enough, you might as well say we're from here. Great place to retire, isn't it? The old big blue marble hanging up there all day and all night?"

"I suppose," I said.

"You suppose," he said, raising an eyebrow at the concoction taking shape in his blender. "That's awful noncommittal of you. Can't you even admit to liking the view?"

"I admit to it," I said.

"But you're not enthused. You know, there's an old joke about a fella from New York and a fella from New Jersey. And the fella from New York is always bragging on his town, talking about Broadway, and the Empire State Building, and Central Park, and so on, and just as often saying terrible things about how ugly things are on the Jersey side of the river. And the fella from Jersey finally gets fed up, and says, all right, I've had enough of this, I want you to say one thing, just one thing, about New Jersey that's better than anything you can say about Manhattan. And the fella from New York says, No problem. The view."

I didn't laugh, but I did smile.

"That's what's so great about this place," he concluded. "The view. Moon's pretty nice to look at for folks on Earth—and a godsend for bad poets, too, what with june-moon-spoon and all—but as views go, it can't hold a candle to the one we have, looking back. So don't give me any supposes. Own up to what you think."

"It's a great view," I said, this time with conviction, as he handed my drink. Then I asked the big question another way: "How did you arrange it?"

"You ought to know better than that, son. We didn't arrange it. We just took advantage of it. Nothing like a scenic overlook to give zip to your real estate. So answer me. Where are you from?"

Acutely aware that more than a minute had passed since I'd asked him the same question, and that no answer seemed to be forthcoming, I was also too trapped by simple courtesy to press the issue. "San Francisco."

He whistled. "I've seen pictures of San Francisco. Looks like a beautiful town."

"It is," I said.

"You actually climb those hills in Earth gravity?"

"I used to run up Leavenworth every morning at dawn."

"Leavenworth's the big steep one that heads down to the bay?"

"One of them," I said.

"And you ran up that hill? At dawn? Every day?"

"Yup."

"You have a really obsessive personality, don't you, son?"

I shrugged. "About some things, I suppose."

"Only about some things?"

"That's what being obsessive means, right?"

"Ah, well. Nothing wrong about being obsessive, as long as you're not a fanatic about it. Want me to freshen up that drink?"

I felt absolutely no alcoholic effect at all. "Maybe you better."

I tried to turn the conversation back to where he was from, but somehow I didn't get a chance, because that's when Minnie took me by the hand and dragged me over to the wall of family photos. There were pictures of them smiling on the couch, pictures of them lounging together in the backyard, pictures of them standing proudly before their home. There were a large number of photos that used Earth as a backdrop. Only four photos showed them with other people, all from the last century: in one, they sat at their dining table with a surprised-looking Neil Armstrong and Buzz Aldrin; in another, they sat on their porch swing chatting with Carl Sagan; in a third, Minnie was being enthusiastically hugged by Isaac Asimov; the fourth showed Earl playing the upright piano while Minnie sat beside him and a tall, thin blonde man with androgynous features and two differently-colored eyes serenaded them both. The last figure was the only one I didn't recognize immediately; by the time somebody finally clued me in, several visits later, I would be far too jaded to engage in the spit-take it would have merited any other time.

I wanted to ask Minnie about the photos with the people I recognized, but then Peter and Earl dragged me downstairs to take a look at Earl's model train set, a rural landscape incorporating four lines and six separate small towns. It was a remarkably detailed piece of work, but I was most impressed with the small miracle of engineering that induced four heavy chains to pull it out of the way whenever Earl pulled a small cord. This handily revealed the pool table. Earl whipped Peter two games out of three, then challenged me; I'm fairly good at pool, but I was understandably off my game that afternoon, and missed every single shot. When Carrie Aldrin No Relation came down to challenge Earl, he mimed terror. It was a genial hour, totally devoted to content-free conversation—and any attempt I made to bring up the questions that burned in my breast was terminated without apparent malice.

Back upstairs. The dog nosing at my hand. Minnie noting that he liked me. Minnie not saying anything about the son whose room we'd changed in, the one who'd died "in the war". A very real heartbreak about the way her eyes grew distant at that moment. I asked which war, and she smiled sadly: "There's only been one war, dear—and it doesn't really matter what you call it." Nikki patting her hand. Oscar telling a mildly funny anecdote from his childhood, Minnie asking him to tell her the one about the next-door neighbors again. I brought up the photo of Minnie and Earl with Neal Armstrong and Buzz Aldrin, and Minnie clucked that they had been such nice boys.

Paranoia hit. "Ever hear of Ray Bradbury?"

She smiled with real affection. "Oh, yes. We only met him once or twice, but he was genuinely sweet. I miss him."

"So you met him, too."

"We've met a lot of people, apricot. Why? Is he a relation?"

"Just an old-time writer I like," I said.

"Ahhhhhh."

"In fact," I said, "one story of his I particularly like was called 'Mars is Heaven'."

She sipped her tea. "Don't know that one."

"It's about a manned expedition to Mars—written while that was still in the future, you understand. And when the astronauts get there they discover a charming, rustic, old-fashioned American small town, filled with sweet old folks they remember from their childhoods. It's the last thing they expect, but after a while they grow comfortable

with it. They even jump to the conclusion that Mars is the site of the afterlife. Except it's not. The sweet old folks are aliens in disguise, and they're lulling all these gullible earthlings into a false sense of security so they can be killed at leisure."

My words had been hesitantly spoken, less out of concern for Minnie's feelings than those of my colleagues. Their faces were blank, unreadable, masking emotions that could have been anything from anger to amusement. I will admit that for a split second there, my paranoia reaching heights it had never known before (or thank God, since), I half-expected George and Oscar and Maxine to morph into the hideously tentacled bug-eyed monsters who had taken their places immediately after eating their brains. Then the moment passed, and the silence continued to hang heavily in the room, and any genuine apprehension I might have felt gave way to an embarrassment of more mundane proportions. After all—whatever the explanation for all this might have been—I'd just been unforgivably rude to a person who had only been gracious and charming toward me.

She showed no anger, no sign that she took it personally. "I remember that one now, honey. I'm afraid I didn't like it as much as some of Ray's other efforts. Among other things, it seemed pretty unreasonable to me that critters advanced enough to pull off that kind of masquerade would have nothing better to do with their lives to eat nice folks who came calling. But then, he also wrote a story about a baby that starts killing as soon as it leaves the womb, and I prefer to believe that infants, given sufficient understanding and affection, soon learn that the universe outside the womb isn't that dark and cold a place after all. Given half a chance, they might even grow up... and it's a wonderful process to watch."

I had nothing to say to that.

She sipped her tea again, one pinky finger extended in the most unselfconscious manner imaginable, just as if she couldn't fathom drinking her tea any other way, then spoke brightly, with perfect timing: "But if you stay the night, I'll be sure to put you in the room with all the pods."

There was a moment of silence, with every face in the room—including those of Earl and Peter and Carrie, who had just come up from downstairs—as distinguishedly impassive as a granite bust of some forefather you had never heard of.

Then I averted my eyes, trying to hide the smile as it began to spread on my face.

Then somebody made a helpless noise, and we all exploded with laughter.

Seventy years later:

If every land ever settled by human beings has its garden spots, then every land ever settled by human beings has its hovels. This is true even of frontiers that have become theme parks. I had spent much of this return to the world I had once known wandering through a brightly-lit, comfortably-upholstered tourist paradise—the kind of ersatz environment common to all overdeveloped places, that is less an expression of local character than a determined struggle to ensure the total eradication of anything resembling local character. But now I was headed toward a place that would never be printed on a postcard, that would never be on the tours, that existed on tourist maps only as the first, best sign that those looking for easy travelling have just made a disastrous wrong turn.

It was on Farside, of course. Most tourist destinations, and higher-end habitats, are on Nearside, which comes equipped with a nice blue planet to look at. Granted that even on Nearside the view is considered a thing for tourists, and that most folks who live here live underground and like to brag to each other about how long they've gone without Earthgazing—our ancestral ties are still part of us, and the mere presence of Earth, seen or unseen, is so inherently comforting that most normal people with a choice pick Nearside. Farside, by comparison, caters almost exclusively to hazardous industries and folks who don't want that nice blue planet messing up the stark emptiness of their sky—a select group of people that includes a small number of astronomers at the Frank Drake Observatory, and a large number of assorted perverts and geeks and misanthropes. The wild frontier of the fantasies comes closest to being a reality here—the hemisphere has some heavy-industry settlements that advertise their crime rates as a matter of civic pride.

And then there are the haunts of those who find even those places too civilized for their tastes. The mountains and craters of Farside are dotted with the little boxy single-person habitats of folks who have turned their back not only on the home planet but also the rest of humanity as well. Some of those huddle inside their self-imposed solitary confinement for weeks or months on end, emerging only to retrieve their supply drops or enforce the warning their radios transmit on infinite loop: that they don't want visitors and that all trespassers should expect to be shot. They're all eccentric, but some are crazy and a significant percentage of them are clinically insane. They're not the kind of folks the sane visit just for local color.

I landed my rented skimmer on a ridge overlooking an oblong metal box with a roof marked by a glowing ten-digit registration number. It was night here, and nobody who lived in such a glorified house trailer would have been considerate enough to provide any outside lighting for visitors, so those lit digits provided the only ground-level rebuttal to starfield up above; it was a inadequate rebuttal at best, which left the ground on all sides an ocean of undifferentiated inky blackness. I could carry my own lamp, of course, but I didn't want to negotiate the walk from my skimmer to the habitat's front door if the reception I met there required a hasty retreat; I wasn't very capable of hasty retreats, these days.

So I just sat in my skimmer and transmitted the repeating loop: *Walter Stearns. I desperately need to speak to Walter*

Stearns. Walter Stearns. I desperately need to speak to Walter Stearns. Walter Stearns. I desperately need to speak to Walter Stearns. Walter Stearns. I desperately need to speak to Walter Stearns. It was the emergency frequency that all of these live-alones are required to keep open 24-7, but there was no guarantee Stearns was listening—and since I was not in distress, I was not really legally entitled to use it. But I didn't care; Stearns was the best lead I had yet.

It was only two hours before a voice like a mouth full of steel wool finally responded: "Go away."

"I won't be long, Mr. Stearns. We need to talk."

"You need to talk. I need you to go away."

"It's about Minnie and Earl, Mr. Stearns."

There was a pause. "Who?"

The pause had seemed a hair too long to mean mere puzzlement. "Minnie and Earl. From the development days. You remember them, don't you?"

"I never knew any Minnie and Earl," he said. "Go away."

"I listened to the tapes you made for the Museum, Mr. Stearns."

The anger in his hoarse, dusty old voice was still building. "I made those tapes when I was still talking to people. And there's nothing in them about any Minnie or Earl."

"No," I said, "there's not. Nobody mentioned Minnie and Earl by name, not you, and not anybody else who participated. But you still remember them. It took me several days to track you down, Mr. Stearns. We weren't here at the same time, but we still had Minnie and Earl in common."

"I have nothing to say to you," he said, with a new shrillness in his voice. "I'm an old man. I don't want to be bothered. Go away."

My cheeks ached from the size of my triumphant grin. "I brought yams."

There was nothing on the other end but the sibilant hiss of background radiation. It lasted just long enough to persuade me that my trump card had been nothing of the kind; he had shut down or smashed his receiver, or simply turned his back to it, so he could sit there in his little cage waiting for the big bad outsider to get tired and leave.

Then he said: "Yams."

Twenty-four percent of the people who contributed to the Museum's oral history had mentioned yams at least once. They had talked about the processing of basic food shipments from home, and slipped yams into their lists of the kind of items received; they had conversely cited yams as the kind of food that the folks back home had never once thought of sending; they had related anecdotes about funny things this co-worker or that coworker had said at dinner, over a nice steaming plate of yams. They had mentioned yams and they had moved on, behaving as if it was just another background detail mentioned only to provide their colorful reminiscences the right degree of persuasive verisimilitude. Anybody not from those days who noticed the strange recurring theme might have imagined it a statistical oddity or an in-joke of some kind. For anybody who had been to Minnie and Earl's—and tasted the delicately seasoned yams she served so frequently—it was something more: a strange form of confirmation.

When Stearns spoke again, his voice still rasped of disuse, but it also possessed a light quality that hadn't been there before. "They've been gone a long time. I'm not sure I know what to tell you."

"I checked your records," I said. "You've been on the Moon continuously since those days; you went straight from the development teams to the early settlements to the colonies that followed. You've probably been here nonstop longer than anybody else living or dead. If anybody can give me an idea what happened to them, it's you."

More silence.

"Please," I said.

And then he muttered a cuss word that had passed out of the vernacular forty years earlier. "All right, damn you. But you won't find them. I don't think anybody will ever find them."

Seventy years earlier:

We were there for about two more hours before George took me aside, said he needed to speak to me in private, and directed me to wait for him in the backyard.

The backyard was nice.

I've always hated that word. *Nice.* It means nothing. Describing people, it can mean the most distant politeness, or the most compassionate warmth; it can mean civility and it can mean charity and it can mean grace and it can mean friendship. Those things may be similar, but they're not synonyms; when the same word is used to describe all of them, then that word means nothing. It means even less when describing places. So what if the backyard was nice? Was it just comfortable, and well-tended, or was it a place that reinvigorated you with every breath? How can you leave it at "nice" and possibly imagine that you've done the job?

Nice. Feh.

But that's exactly what this backyard was.

It was a couple of acres of trimmed green lawn, bordered by the white picket fence that signalled the beginning of vacuum. A quarter-circle of bright red roses marked each of the two rear corners; between them, bees hovered lazily over a semicircular garden heavy on towering orchids and sunflowers. The painted white rocks which bordered that garden were arranged in a perfect line, none of them even a millimeter out of place, none of them

irregular enough to shame the conformity that characterized the relationship among all the others. There was a single apple tree, which hugged the rear of the house so tightly that the occupants of the second floor might have been able to reach out their windows and grab their breakfast before they trudged off to the shower; there were enough fallen green apples to look picturesque, but not enough to look sloppy. There was a bench of multicolored polished stone at the base of the porch steps, duplicating the porch swing up above but somehow absolutely right in its position; and as I sat on that bench facing the nice backyard I breathed deep and I smelled things that I had almost forgotten I could smell—not just the distant charcoal reek of neighbors burning hamburgers in their own backyards, but lilacs, freshly cut grass, horse scent, and a cleansing whiff of rain. I sat there and I spotted squirrels, hummingbirds, monarch butterflies, and a belled calico cat that ran by, stopped, saw me, looked terribly confused in the way cats have, and then went on. I sat there and I breathed and after months of inhaling foot odor and antiseptics I found myself getting a buzz. It was intoxicating. It was invigorating. It was a shot of pure energy. It was joy. God help me, it was nice.

But it was also surrounded on all sides by a pitiless vacuum that, if real physics meant anything, should have claimed it in an instant. Perhaps it shouldn't have bothered me that much, by then; but it did.

The screen door slammed. Miles the dog bounded down the porch steps and, panting furiously, nudged my folded hands. I scratched him under the ears. He gave me the usual unconditional adoration of the golden retriever—I petted him, therefore I was God. Most panting dogs look like they're smiling (it's a major reason humans react so strongly to the species), but Miles, the canine slave to context, looked like he was enjoying the grand joke that everybody was playing at my expense. Maybe he was. Maybe he wasn't even really a dog...

The screen door opened and slammed. This time it was George, carrying a couple of tall glasses filled with pink stuff and ice. He handed me one of the glasses; it was lemonade, of course. He sipped from the other one and said: "Minnie's cooking yams again. She's a miracle worker when it comes to yams. She does something with them, I don't know, but it's really—"

"You," I said wryly, "are enjoying this way too much."

"Aren't you?" he asked.

Miles the dog stared at the lemonade as if it was the most wondrous sight in the Universe. George dipped a finger into his drink and held it out so the mutt could have a taste. Miles adored him now. I was so off-center I almost felt betrayed. "Yeah. I guess I am. I like them."

"Pretty hard not to like them. They're nice people."

"But the situation is so insane—"

"Sanity," George said, "is a fluid concept. Think about how nuts Relativity sounded, the first time somebody explained it to you. Hell, think back to when you were a kid, and somebody first explained the mechanics of sex."

"George—"

He gave Miles another taste. "I can see you trying like mad to work this out. Compiling data, forming and rejecting theories, even concocting little experiments to test the accuracy of your senses. I know because I was once in your position, when I was brought out here for the first time, and I remember doing all the same things. But I now have a lot of experience in walking people through this, and I can probably save you a great deal of time and energy by completing your data and summarizing all of your likely theories."

I was too tired to glare at him anymore. "You can skip the data and theories and move on to the explanation. I promise you I won't mind."

"Yes, you would," he said, with absolute certainty. "Trust me, dealing with the established lines of inquiry is the only real way to get there.

"First, providing the raw data. One: This little homestead cannot be detected from Earth; our most powerful telescopes see nothing but dead moonscape here. Two: It, and the two old folks, have been here since at least Apollo; those photos of them with Armstrong and Aldrin are genuine. Three: There is nothing you can ask them that will get any kind of straight answer about who or what they are and why they're here. Four: We have no idea how they knew Asimov, Sagan, or Bradbury—but I promise you that those are not the most startling names you will hear them drop if you stick around long enough to get to know them. Five: We don't know how they maintain an earthlike environment in here. Six: About that mailbox—they do get delivery, on a daily basis, though no actual mailman has ever been detected, and none of the mail we've ever managed to sneak a peek at is the slightest bit interesting. It's all senior citizen magazines and grocery store circulars. Seven: They never seem to go shopping, but they always have an ample supply of food and other provisions. Eight (I am up to eight, right?): They haven't noticeably aged, not even the dog. Nine: they do understand every language we've sprung on them, but they give all their answers in Midwestern-American English. And ten: we have a group of folks from our project coming out here to visit just about every night of the week, on a rotating schedule that works out to just about once a week for each of us.

"So much for the raw data. The theories take longer to deal with. Let me go through all the ones you're likely to formulate." He peeled back a finger. "One: This is all just a practical joke perpetrated by your friends and colleagues in an all-out attempt to shock you out of your funk. We put it all together with spit and baling wire and some kind of elaborate special-effects trickery that's going to seem ridiculously obvious just as soon as you're done figuring it

out. We went to all this effort, and spent the many billions of dollars it would have cost to get all these construction materials here, and developed entirely new technologies capable of holding in an atmosphere, and put it all together while you weren't looking, and along the way brought in a couple of convincing old folks from Central Casting, just so we could enjoy the look on your face. What a zany bunch of folks we are, huh?"

I felt myself blushing. "I'd considered that."

"And why not? It's a legitimate theory. Also a ridiculous one, but let's move on." He peeled back another finger. "Two: This is not a practical joke, but a test or psychological experiment of some kind, arranged by the brain boys back home. They put together all of this trickery, just to see how the average astronaut, isolated from home and normal societal context, reacts to situations that defy easy explanation and cannot be foreseen by even the most exhaustively-planned training. This particular explanation works especially well if you also factor in what we cleverly call the McGoohan Corollary—that is, the idea that we're not really on the Moon at all, but somewhere on Earth, possibly underground, where the real practical difficulty would lie in simulating not a quaint rural setting on a warm summer day, but instead the low-g, high-radiation, temperature-extreme vacuum that you gullibly believed you were walking around in, every single time you suited up. This theory is, of course, equally ridiculous, for many reasons—but we did have one guy about a year ago who stubbornly held on to it for almost a full week. Something about his psychological makeup just made it easier for him to accept that, over all the others, and we had to keep a close watch on him to stop him from trying to prove it with a nice unsuited walk. But from the way you're looking at me right now I don't think we're going to have the same problem with you. So.

"Assuming that this is not a joke, or a trick, or an experiment, or some lame phenomenon like that, that this situation you're experiencing is precisely what we have represented to you, then we are definitely looking at something beyond all terrestrial experience. Which brings us to Three." He peeled back another finger. "This is a first-contact situation. Minnie and Earl, and possibly Miles here, are aliens in disguise, or simulations constructed by aliens. They have created a friendly environment inside this picket fence, using technology we can only guess at—let's say an invisible bubble capable of filtering out radiation and retaining a breathable atmosphere while remaining permeable to confused bipeds in big clumsy moonsuits. And they have done so—why? To hide their true nature while they observe our progress? Possibly. But if so, it would be a lot more subtle to place their little farmhouse in Kansas, where it wouldn't seem so crazily out of place. To communicate us in terms we can accept? Possibly—except that couching those terms in such an insane context seems as counterproductive to genuine communication as their apparent decision to limit the substance of that communication to geriatric small talk. To make us comfortable with something familiar? Possibly—except that this kind of small mid-American home is familiar to only a small fraction of humanity, and it seems downright exotic to the many observers we've shuttled in from China, or India, or Saudi Arabia, or for that matter, Manhattan. To present us with a puzzle that we have to solve? Again, possibly—but since Minnie and Earl and Miles won't confirm or deny, it's also a possibility we won't be able to test unless somebody like yourself actually does come up with the great big magic epiphany. I'm not holding my breath. But I do reject any theory that they're hostile, including the 'Mars is Heaven' theory you already cited. Anybody capable of pulling this off must have resources that could mash us flat in the time it takes to sneeze."

Miles woofed. In context it seemed vaguely threatening.

"Four." Another finger. "Minnie and Earl are actually human, and Miles is actually canine. They come here from the future, or from an alternate universe, or from some previously-unknown subset of humanity that's been living among us all this time, hiding great and unfathomable powers that, blaaah blaah blaah, fill in the blank. And they're here, making their presence known—why? All the same subtheories that applied to alien visitors also apply to human agencies, and all the same objections as well. Nothing explains why they would deliberately couch such a maddening enigma in such, for lack of a more appropriate word, banal terms. It's a little like coming face to face with God and discovering that He really does look like a bearded old white guy in a robe; He might, for all I know, but I'm more religious than you probably think, and there's some part of me that absolutely refuses to believe it. He, or She, if you prefer, could do better than that. And so could anybody, human or alien, whose main purpose in coming here is to study us, or test us, or put on a show for us.

"You still with me?" he inquired.

"Go on," I growled. "I'll let you know if you leave anything out."

He peeled back another finger. "Five: I kind of like this one—Minnie and Earl, and by extension Miles, are not creatures of advanced technology, but of a completely different kind of natural phenomenon—let's say, for the sake of argument, a bizarre jog in the space-time continuum that allows a friendly but otherwise unremarkable couple living in Kansas or Wyoming or someplace like that to continue experiencing life down on the farm while in some way as miraculous to them as it seems to us, projecting an interactive version of themselves to this otherwise barren spot on the Moon. Since, as your little conversation with Earl established, they clearly know they're on the Moon, we would have to accept that they're unflappable enough to take this phenomenon at face value, but I've known enough Midwesterners to know that this is a genuine possibility.

"Six." Starting now on another hand. "Mentioned only so you can be assured I'm providing you an exhaustive list— a phenomenon one of your predecessors called the Law of Preservation of Home. He theorized that whenever human beings penetrate too far past their own natural habitat, into places sufficiently inhospitable to life, the

Universe is forced to spontaneously generate something a little more congenial to compensate—the equivalent, I suppose, of magically whomping up a Holiday Inn with a swimming pool to greet explorers lost in the coldest reaches of Antarctica. He even said that the only reason we hadn't ever received reliable reports of this phenomenon on Earth is that we weren't ever sufficiently far from our natural habitat to activate it... but I can tell from the look on your face that you don't exactly buy this one either, so I'll set it aside and let you read the paper he wrote on the subject at your leisure."

"I don't think I will," I said.

"You ought to. It's a real hoot. But if you want to, I'll skip all the way to the end of the list, to the only explanation that ultimately makes any sense. Ready?"

"I'm waiting."

"All right. That explanation is—" he paused dramatically "—it doesn't matter."

There was a moment of pregnant silence.

I didn't explode; I was too shell-shocked to explode. Instead, I just said: "I sat through half a dozen bullshit theories for 'It doesn't matter'?"

"You had to, Max; it's the only way to get there. You had to learn the hard way that all of these propositions are either completely impossible or, for the time being, completely impossible to test—and we know this because the best minds on Earth have been working on the problem for as long as there's been a sustained human presence on the Moon. We've taken hair samples from Minnie's hairbrush. We've smuggled out stool samples from the dog. We've recorded our conversations with the old folks and studied every second of every tape from every possible angle. We've monitored the house for years on end, analyzed samples of the food and drink served in there, and exhaustively charted the health of everybody to go in or out. And all it's ever gotten us, in all these years of being frantic about it, is this—that as far as we can determine, Minnie and Earl are just a couple of friendly old folks who like having visitors."

"And that's it?"

"Why can't it be? Whether aliens, time travellers, displaced human beings, or natural phenomena—they're good listeners, and fine people, and they sure serve a good Sunday dinner. And if there must be things in the Universe we can't understand—well, then, it's sure comforting to know that some of them just want to be good neighbors. That's what I mean by saying it doesn't matter."

He stood up, stretched, took the kind of deep breath people only indulge in when they're truly luxuriating in the freshness of the air around them, and said: "Minnie and Earl expect some of the new folks to be a little pokey, getting used to the idea. They won't mind if you stay out here and smell the roses a while. Maybe when you come in, we'll talk a little more 'bout getting you scheduled for regular visitation. Minnie's already asked me about it—she seems to like you. God knows why." He winked, shot me in the chest with a pair of pretend six-shooters made from the index fingers of both hands, and went back inside, taking the dog with him. And I was alone in the nice backyard, serenaded by birdsong as I tried to decide how to reconcile my own rational hunger for explanations with the unquestioning acceptance that was being required of me.

Eventually, I came to the same conclusion George had; the only conclusion that was possible under the circumstances. It was a genuine phenomenon, that conclusion: a community of skeptics and rationalists and followers of the scientific method deciding that there were some things Man was having too good a time to know. Coming to think of Minnie and Earl as family didn't take much longer than that. For the next three years, until I left for my new job in the outer system, I went out to their place at least once, sometimes twice a week; I shot pool with Earl and chatted about relatives back home with Minnie; I'd tussled with Miles and helped with the dishes and joined them for long all-nighters talking about nothing in particular. I learned how to bake with the limited facilities we had at Base, so I could bring my own cookies to her feasts. I came to revel in standing on a creaky front porch beneath a bug lamp, sipping grape juice as I joined Minnie in yet another awful rendition of "Anatevka." Occasionally I glanced at the big blue cradle of civilization hanging in the sky, remembered for the fiftieth or sixtieth or one hundredth time that none of this had any right to be happening, and reminded myself for the fiftieth or sixtieth or one hundredth time that the only sane response was to continue carrying the tune. I came to think of Minnie and Earl as the real reason we were on the Moon, and I came to understand one of the major reasons we were all so bloody careful to keep it a secret—because the needy masses of Earth, who were at that point still agitating about all the time and money spent on the space program, would not have been mollified by the knowledge that all those billions were being spent, in part, so that a few of the best and the brightest could indulge themselves in sing-alongs and wiener dog cookouts.

I know it doesn't sound much like a frontier. It wasn't, not inside the picket fence. Outside, it remained dangerous and backbreaking work. We lost five separate people while I was there; two to blowouts, one to a collapsing crane, one to a careless tumble off a crater rim, and one to suicide (she, alas, had not been to Minnie and Earl's yet). We had injuries every week, shortages every day, and crises just about every hour. Most of the time, we seemed to lose ground—and even when we didn't, we lived with the knowledge that all of our work and all of our dedication could be thrown in the toilet the first time there was a political shift back home. There was no reason for any of us to believe that we were actually accomplishing what we were there to do—but somehow, with Minnie and

Earl there, hosting a different group every night, it was impossible to come to any other conclusion. They liked us. They believed in us. They were sure that we were worth their time and effort. And they expected us to be around for a long, long time... just like they had been.

I suppose that's another reason why I was so determined to find them now. Because I didn't know what it said about the people we'd become that they weren't around keeping us company anymore.

I was in a jail cell for forty-eight hours once. Never mind why; it's a stupid story. The cell itself wasn't the sort of thing I expected from movies and television; it was brightly lit, free of vermin, and devoid of any steel bars to grip obsessively while cursing the guards and bemoaning the injustice that had brought me there. It was just a locked room with a steel door, a working toilet, a clean sink, a soft bed, and absolutely nothing else. If I had been able to come and go at will it might have been an acceptable cheap hotel room. Since I was stuck there, without anything to do or anybody to talk to, I spent those forty-eight hours going very quietly insane.

The habitat module of Walter Stearns was a lot like that cell, expanded to accommodate a storage closet, a food locker, and a kitchenette; it was that stark, that empty. There were no decorations on the walls, no personal items, no hytex or music system I could see, nothing to read and nothing to do. It lost its charm for me within thirty seconds. Stearns had been living there for sixteen years: a self-imposed prison sentence that might have been expiation for the sin of living past his era.

The man himself moved with what seemed glacial slowness, like a wind-up toy about to stop and fall over. He dragged one leg, but if that was a legacy of a stroke—and an explanation for why he chose to live as he did—there was no telltale slur to his speech to corroborate it. Whatever the reason might have been, I couldn't help regarding him with the embarrassed pity one old man feels toward another the same age who hasn't weathered his own years nearly as well.

He accepted my proffered can of yams with a sour grin and gave me a mug of some foul-smelling brown stuff in return. Then he poured some for himself and shuffled to the edge of his bed and sat down with a grunt. "I'm not a hermit," he said, defensively.

"I didn't use the word," I told him.

"I didn't set out to be a hermit." he went on, as if he hadn't heard me. "Nobody sets out to be a hermit. Nobody turns his back on the damned race unless he has some reason to be fed up. I'm not fed up. I just don't know any alternative. It's the only way I know to let the Moon be the Moon."

He sipped some of the foul-smelling brown stuff and gestured for me to do the same. Out of politeness, I sipped from my own cup. It tasted worse than it smelled, and had a consistency like sand floating in vinegar. Somehow I didn't choke. "Let the Moon be the Moon?"

"They opened a casino in Shepardsville. I went to see it. It's a big luxury hotel with a floor show; trained white tigers jumping through flaming hoops for the pleasure of a pretty young trainer in a spangled bra and panties. The casino room is oval-shaped, and the walls are alive with animated holography of wild horses running around and around and around and around, without stop, twenty-four hours a day. There are night clubs with singers and dancers, and an amusement park with rides for the kids. I sat there and I watched the gamblers bent over their tables and the barflies bent over their drinks and I had to remind myself that I was on the Moon—that just being here at all was a miracle that would have had most past civilizations consider us gods. But all these people, all around me, couldn't feel it. They'd built a palace in a place where no palace had ever been and they'd sucked all the magic and all the wonder all the way out of it." He took a deep breath, and sipped some more of his contemptible drink. "It scared me. It made me want to live somewhere where I could still feel the Moon being the Moon. So I wouldn't be some useless... relic who didn't know where he was half the time."

The self-pity had wormed its way into his voice so late that I almost didn't catch it. "It must get lonely," I ventured.

"Annnh. Sometimes I put on my moonsuit and go outside, just to stand there. It's so silent there that I can almost hear the breath of God. And I remember that it's the Moon—the Moon, dammit. Not some five-star hotel. The Moon. A little bit of that and I don't mind being a little lonely the rest of the time. Is that crazy? Is that being a hermit?"

I gave the only answer I could. "I don't know."

He made a hmmmph noise, got up, and carried his mug over to the sink. A few moments cleaning it out and he returned, his lips curled into a half-smile, his eyes focused on some far-off time and place. "The breath of God," he murmured.

"Yams," I prompted.

"You caught that, huh? Been a while since somebody caught that. It's not the sort of thing people catch unless they were there. Unless they remember her."

"Was that by design?"

"You mean, was it some kind of fiendish secret code? Naah. More like a shared joke. We knew by then that nobody would believe us if we actually talked about Minnie and Earl. They were that forgotten. So we dropped yams into our early-settlement stories. A little way of saying, hey, we remember the old lady. She sure did love to cook those yams."

"With her special seasoning." I said. "And those rolls she baked."

"Uh-huh." He licked his lips, and I almost fell into the trap of considering that inutterably sad... until I realized that I was doing the same thing. "Used to try to mix one of Earl's special cocktails, but I never could get them right. Got all the ingredients. Mixed 'em the way he showed me. Never got 'em to taste right. Figure he had some kind of technological edge he wasn't showing us. Real alien superscience, applied to bartending. Or maybe I just can't replace the personality of the bartender. But they were good drinks. I've got to give him that."

We sat together in silence for a while, each lost in the sights and sounds of a day long gone. After a long time, I almost whispered it: "Where did they go, Walter?"

His eyes didn't focus: "I don't know where they are. I don't know what happened to them."

"Start with when you last visited them."

"Oh, that was years and years and years ago." He lowered his head and addressed the floor. "But you know how it is. You have relatives, friends, old folks very important to you. Folks you see every week or so, folks who become a major part of who you are. Then you get busy with other things and you lose touch. I lost touch when the settlement boom hit, and there was always some other place to be, some other job that needed to be done; I couldn't spare one night a week gabbing with old folks just because I happened to love them. After all, they'd always be there, right? By the time I thought of looking them up again, it turned out that everybody else had neglected them too. There was no sign of the house and no way of knowing how long they'd been gone."

I was appalled. "So you're saying that Minnie and Earl moved away because of... neglect?"

"Naaah. That's only why they didn't say goodbye. I don't think it has a damn thing to do with why they moved away; just why we didn't notice. I guess that's another reason why nobody likes to talk about them. We're all just too damn ashamed."

"Why do you think they moved, Walter?"

He swallowed another mouthful of his vile brew, and addressed the floor some more, not seeing me, not seeing the exile he'd chosen for himself, not seeing anything but a tiny little window of his past. "I keep thinking of that casino," he murmured. "There was a rotating restaurant on the top floor of the hotel. Showed you the landscape, with all the billboards and amusement parks—and above it all, in the place where all the advertisers hope you're going to forget to look, Mother Earth herself. It was a burlesque and it was boring. And I also keep thinking of that little house, out in the middle of nowhere, with the picket fence and the golden retriever dog... and the two sweet old people... and the more I compare one thought to the other, the more I realize that I don't blame them for going away. They saw that on the Moon we were building, they wouldn't be miraculous any more."

"They had a perfectly maintained little environment—"

"We have a perfectly maintained little environment. We have parks with grass. We have roller coasters and golf courses. We have people with dogs. We even got rotating restaurants and magic acts with tigers. Give us a few more years up here and we'll probably work out some kind of magic trick to do away with the domes and the bulkheads and keep in an atmosphere with nothing but a picket fence. We'll have houses like theirs springing up all over the place. The one thing we don't have is the Moon being the Moon. Why would they want to stay here?" His voice, which had been rising throughout his little tired, rose to a shriek with that last question; he hurled his mug against the wall, but it was made of some indestructible ceramic that refused to shatter. It just tumbled to the floor, and skittered under the bunk, spinning in place just long enough to mock him for his empty display of anger. He looked at me, focused, and let me know with a look that our audience was over. "What would be left for them?"

I searched some more, tracking down another five or six oldsters still capable of talking about the old days, as well as half a dozen children or grandchildren of same willing to speak to me about the memories the old folks had left behind, but my interview with Walter Stearns was really the end of it; by the time I left his habitat, I knew that my efforts were futile. I saw that even those willing to talk to me weren't going to be able to tell me more than he had... and I turned out to be correct about that. Minnie and Earl had moved out, all right, and there was no forwarding address to be had.

I was also tired: bone-weary in a way that could have been just a normal symptom of age and could have been despair that I had not found what I so desperately needed to find and could have been the harbinger of my last remaining days. Whatever it was, I just didn't have the energy to keep going that much longer... and I knew that the only real place for me was the bed I had shared with my dear Claire.

On the night before I flew back I had some money left over, so I went to see the musical *Ceres* at New Broadway. I confess I found it dreadful—like most old farts, I can't fathom music produced after the first three decades of my life—but it was definitely elaborate, with a cast of lithe and gymnastic young dancers in silvery jumpsuits leaping about in a slow-motion ballet that took full advantage of the special opportunities afforded by lunar gravity. At one point the show even simulated free fall, thanks to invisible filaments that crisscrossed the stage allowing the dancers to glide from place to place like objects ruled only by their own mass and momentum. The playbill said that one of the performers, never mind which one, was not a real human being, but a holographic projection artfully integrated with the rest of the performers. I couldn't discern the fake, but I couldn't find it in myself to be impressed. We were a few flimsy bulkheads and half a kilometer from lunar vacuum, and to me, that was the real story... even if nobody else in the audience of hundreds could see it.

I moved out of my hotel. I tipped my concierge, who hadn't found me anything about Minnie and Earl but had

provided all the other amenities I'd asked for. I bought some stupid souvenirs for the grandchildren, and boarded my flight back to Earth.

After about an hour I went up to the passenger lounge, occupied by two intensely-arguing businesswomen, a child playing a handheld hytex game, and a bored-looking thin man with a shiny head. Nobody was looking out the panoramic window, not even me. I closed my eyes and pretended that the view wasn't there. Instead I thought of the time Earl had decided he wanted to fly a kite. That was a major moment. He built it out of newspapers he got from somewhere, and sat in his backyard letting out more than five hundred meters of line; though the string and the kite extended far beyond the atmospheric picket-fence perimeter, it had still swooped and sailed like an object enjoying the robust winds it would have known, achieving that altitude on Earth. That, of course, had been another impossibility... but my colleagues and I had been so inured to such things by then that we simply shrugged and enjoyed the moment as it came.

I badly wanted to fly a kite.

I badly wanted to know that Minnie and Earl had not left thinking poorly of us.

I didn't think they were dead. They weren't the kind of people who died. But they were living somewhere else, someplace far away—and if the human race was lucky it was somewhere in the solar system. Maybe, even now, while I rode back to face however much time I had left, there was a mindboggling little secret being kept by the construction teams building those habitats out near the Jovian moons; maybe some of those physicists and engineers were taking time out from a week of dangerous and backbreaking labor to spend a few hours in the company of an old man and old woman whose deepest spoken insight about the massive planet that graces their sky was how it presented one hell of a lovely view. Maybe the same thing happened when Anderson and Santiago hitched a ride on the comet that now bears their names—and maybe there's a little cottage halfway up the slope of Olympus Mons where the Mars colonists go whenever they need a little down-home hospitality. I would have been happy with all of those possibilities. I would have felt the weight of years fall from my bones in an instant, if I just knew that there was still room for Minnie and Earl in the theme-park future we seemed to be building.

Then something, maybe chance, maybe instinct, made me look out the window.

And my poor, slowly failing heart almost stopped right then.

Because Miles, the golden retriever, was pacing us.

He ran alongside the shuttle, keeping up with the lounge window, his lolling pink tongue and long floppy ears trailing behind him like banners driven by some unseen (and patently impossible) breeze. He ran as if in slow motion, his feet pawing a ground that wasn't there, his muscles rippling along his side, his muzzle foaming with perspiration. His perpetually laughing expression, so typical of his breed, was not so much the look of an animal merely panting with exertion, but the genuine mirth of a creature aware that it has just pulled off a joke of truly epic proportions. As I stared at him, too dumbstruck to whoop and holler and point him out to my fellow passengers, he turned his head, met my gaze with soulful brown eyes, and did something I've never seen any other golden retriever do, before or since.

He winked.

Then he faced forward, lowered his head, and sped up, leaving us far behind.

I whirled and scanned the lounge, to see if any of my fellow passengers had seen him. The two businesswomen had stopped arguing, and were now giggling over a private joke of some kind. The kid was still intently focused on his game. But the eyes of the man with the shiny head were very large and very round. He stared at me, found in my broad smile confirmation that he hadn't been hallucinating, and tried to speak. "That," he said. And "Was." And after several attempts, "A dog."

He might have gone on from there given another hour or so of trying.

I knew exactly how he felt, of course. I had been in the same place, once, seventy years ago.

Now, for a while, I felt like I was twelve again.

I rose from my seat, crossed the lounge, and took the chair facing the man with the shiny head. He was wide-eyed, like a man who saw me, a total stranger, as the only fixed constant in his universe. That made me feel young, too.

I said, "Let me tell you a little bit about some old friends of mine."

This one's for Jerry and Kathy Oltion, the Minnie and Earl of the future.

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THE DAYS BETWEEN

Allen Steele

Three months after leaving Earth, the URSS *Alabama* had just achieved cruise velocity when the accident occurred: Leslie Gillis woke up.

He regained consciousness slowly, as if emerging from a long and dreamless sleep. His body, naked and hairless, floated within the blue-green gelatin that filled the interior of his biostasis cell, an oxygen mask covering the lower part of his face and thin plastic tubes inserted in his arms. As his vision cleared, Gillis saw that the cell had been lowered to a horizontal position and that its fiberglass lid had folded open. The lighting within the hibernation deck was subdued, yet he had to open and close his eyes several times.

His first lucid thought was: *Thank God, I made it*.

His body felt weak, his limbs stiff. Just as he had been cautioned to do during flight training, he carefully moved only a little at a time. As Gillis gently flexed his arms and legs, he vaguely wondered why no one had come to his aid. Perhaps Dr. Okada was busy helping the others emerge from biostasis. Yet he could hear nothing save for a subliminal electrical hum; no voices, no movement.

His next thought was: *Something's wrong.*

Back aching, his arms feeling as if they were about to dislocate from his shoulders, Gillis grasped the sides of the cell and tried to sit up. For a minute or so he struggled against the phlegmatic embrace of the suspension fluid; there was a wet sucking sound as he prized his body upward, then the tubes went taut before he remembered that he had to take them out. Clenching his teeth, Gillis pinched off the tubes between thumb and forefinger and, one by one, carefully removed them from his arms. The oxygen mask came off last; the air was frigid and it stung his throat and lungs, and he coughed in agonized spasms as, with the last ounce of his strength, he clambered out of the tank. His legs couldn't hold him, and he collapsed upon the cold floor of the deck.

Gillis didn't know how long he lay curled in a fetal position, his hands tucked into his groin. He never really lost consciousness, yet for a long while his mind lingered somewhere between awareness and sleep, his unfocused eyes gazing at the burnished metal plates of the floor. After awhile the cold penetrated his dulled senses; the suspension fluid was freezing against his bare skin, and he dully realized that if he lay here much longer he would soon lapse into hypothermia.

Gillis rolled over on his back, forced himself to sit up. Aquamarine fluid drooled down his body, formed a shallow pool around his hips; he hugged his shoulders, rubbing his chilled flesh. Once again, he wondered why no one was paying any attention to him. Yes, he was only the communications officer, yet there were others farther up the command hierarchy who should have been revived by now. Kuniko Okada was the last person he had seen before the somatic drugs entered his system; as Chief Physician, she also would have been the last crew member to enter biostasis and the first to emerge. She would have then brought up–Gillis sought to remember specific details–the Chief Engineer, Dana Monroe, who would have then ascertained that *Alabama*'s major systems were operational. If the ship was in nominal condition, Captain Lee would have been revived next, shortly followed by First Officer Shapiro, Executive Officer Tinsley, Senior Navigator Ullman, and then Gillis himself. Yes, that was the correct procedure.

So where was everyone else?

First things first. He was wet and naked, and the ship's internal temperature had been lowered to 50 degrees. He had to find some clothes. His teeth chattering, Gillis staggered to his feet, then lurched across the deck to a nearby locker. Opening it, he found a stack of clean white towels and a pile of folded robes. As he wiped the moist gel from his body, he recalled his embarrassment when his turn had come for Kuniko to prepare him for hibernation. It was bad enough to have his body shaved, yet when her electric razor had descended to his pubic area he found himself becoming involuntarily aroused by her gentle touch. Amused by his reaction, she had smiled at him in a motherly way. *Just relax,* she said. *Think about something else...*

He turned, and for the first time saw the rest of the biostasis cells were still upright within their niches. Thirteen white fiberglass coffins, each resting at a forty-five degree angle within the bulkhead walls of Deck C2A. Electrophoretic displays on their lids emitted a warm amber glow, showing the status of the crewmembers contained within. Here was the *Alabama*'s command team, just as he had last seen them: Lee, Shapiro, Tinsley, Okada, Monroe, Ullman...

Everyone was still asleep. Everyone except himself.

Gillis hastily pulled on a robe, then strode across the deck to the nearest window. Its outer shutter was closed, yet when he pressed the button that moved it upward, all he saw were distant stars against black space. Of course, he might not be able to see 47 Ursae Majoris from this particular porthole. He needed to get to the command center, check the navigation instruments.

As he turned from the window, something caught his eye: the readout on the nearest biostasis cell. Trembling with unease as much as cold, Gillis moved closer to examine it. The screen identified the sleeper within as *Cortez, Raymond B.*–Ray Cortez, the life-support chief–and all his life-signs seemed normal as far as he could tell, yet that wasn't what attracted his attention. On the upper left side was a time-code:

E/: 7.8.70 / 22:10:01 GMT

July 8, 2070. That was the date everyone had entered hibernation, three days after the *Alabama* had made its unscheduled departure from Highgate. On the upper right side of the screen, though, was another time-code:

P/: 10.3.70 / 00.21.23 GMT

October 3, 2070. Today's date and time.

The *Alabama* had been in flight for only three months. Three months of a voyage across forty-six light-years which, at 20 percent of light-speed, would take more 230 years to complete.

For several long minutes, Gillis stared at the readout, unwilling to believe the evidence of his own eyes. Then he turned and walked across the compartment to the manhole. His bare feet slapping against the cool metal rungs, he climbed down the ladder to the next deck of the hibernation module.

Fourteen more biostasis cells, all within their niches. None were open.

Fighting panic, Gillis scrambled further down the ladder to Deck C2C. Again, fourteen closed cells.

Still clutching at some intangible shred of hope, Gillis quickly visited Deck C2D, then he scurried back up the ladder and entered the short tunnel leading to the *Alabama*'s second hibernation module. By the time he reached Deck C1D, he had checked every biostasis cell belonging to the starship's one hundred and three remaining passengers, yet he hadn't found one which was open.

He sagged against a bulkhead, and for a long time he could do nothing except tremble with fear.

He was alone.

After awhile, Gillis pulled himself together. All right, something had obviously gone wrong. The computers controlling the biostasis systems had made a critical error and had prematurely awakened him from hibernation. Okay, then; all he had to do was put himself back into the loop.

The robe he had found wasn't very warm, so he made his way through the circular passageway connecting the ship's seven ring modules until he entered C4, one of two modules that would serve as crew quarters once the *Alabama* reached 47 Ursae Majoris. He tried not to look at the rows of empty bunks as he searched for the locker where he had stowed his personal belongings. His blue jumpsuit was where he had left it three months ago, hanging next to the isolation garment he had worn when he left Gingrich Space Center to board the shuttle up to the Highgate; on a shelf above it, next to his high-top sneakers, was the small cardboard box containing the precious few mementos he had been permitted to take with him. Gillis deliberately ignored the box as he pulled on his jumpsuit; he'd look at the stuff inside once he reached his final destination, and that wouldn't be for another 230 years... 226 years, if you considered the time-dilation factor.

The command center, located on Deck H4 within the ship's cylindrical hub, was cold and dark. The lights had been turned down and the rectangular windows along its circular hull were shuttered; only the soft glow emitted by a few control panels pierced the gloom. Gillis took a moment to switch on the ceiling lights; spotting the environmental control station, he briefly considered adjusting the thermostat to make things a bit warmer, then decided against it. He had been trained as a communications specialist; his technical understanding of the rest of the *Alabama*'s major systems was cursory at best, and he was reluctant to make any changes that might influence the ship's operating condition. Besides, he wasn't staying here for very long; once he returned to biostasis, the cold wouldn't make much difference to him.

All the same, it was his duty to check the ship's status, so he walked over to the nav table, pulled away the plastic cover which protected its keypad, and punched up a display of the *Alabama*'s present position. A bright shaft of light appeared above the table, and within it appeared a tiny holographic model of the ship. It floated in midair at the end of a long curved string that led outward from the center of the three-dimensional halo representing the orbits of the major planets of the solar system. Moving at constant 1-g thrust, the *Alabama* was already beyond the orbit of Neptune; the ship was now passing the canted orbit of Pluto, and in a few weeks it would cross the heliopause, escaping the last weak remnants of the Sun's gravitational pull as it headed into interstellar space.

The *Alabama* had now traveled farther from Earth than any previous manned spacecraft; only a few space probes had ever ventured this far. Gillis found himself smiling at the thought. He was now the only living person–the only conscious living person, at least–to have voyaged so far from Earth. A feat almost worth waking up for... although, all things considered, he would have preferred to sleep through it.

He moved to the engineering station, uncovered its console, and pulled up a schematic display of the main engine. The deuterium/helium-3 reserves that had been loaded aboard the *Alabama*'s spherical main fuel tank before launch had been largely consumed during the ninety-day boost phase, but now that the ship had reached cruise speed, the magnetic field projected by its Bussard ramscoop was drawing ionized interstellar hydrogen and helium from a 4,000 kilometer radius in front of the ship, feeding the fusion reactor at its stern and thus maintaining a constant .2c velocity. Microsecond pulsations of the same magnetic field enabled it to simultaneously perform as a shield, deflecting away the interstellar dust that, at relativistic velocities, would have soon shredded the *Alabama*'s hull. Gillis's knowledge of the ship's propulsion systems was limited, yet his brief examination showed him that they were operating at 90 percent efficiency.

Something softly tapped against the floor behind him.

Startled by the unexpected sound, Gillis turned around, peered into the semi-darkness. For a few moments he saw nothing, then a small shape emerged from behind the nav table: one of the spider-like autonomous maintenance robots that constantly prowled the *Alabama,* inspecting its compartments and making minor repairs. This one had apparently been attracted to Gillis's presence within the command deck; its eyestalks briefly flicked in his direction, then the 'bot scuttled away.

Well, then. So much the better. The 'bot was no more intelligent than a mouse, but it reported everything that it observed to the ship's AI. Now that the ship was aware that one of its passengers was awake, the time had come for Gillis to take care of his little problem.

Gillis crossed the deck to his customary post at the communications station. Sitting down in his chair, he pulled away the plastic cover; a few deft taps on the keyboard and his console glowed to life once more. Seeing the familiar screens and readouts made him feel a little more secure; here, at least, he knew what he was doing. He typed in the commands that opened an interface to *Alabama*'s DNA-based artificial intelligence.

Gillis, Leslie, Lt. Com. I.D. 86419-D. Password Scotland.

The response was immediate: I.D. confirmed. Password accepted. Good morning, Mr. Gillis. May I help you?

Why was I awakened? Gillis typed.

A short pause, then: Gillis, Leslie, Lt. Com. is still in biostasis.

Gillis's mouth fell open: What the hell... ?

No, I'm not. I'm here in the command center. You've confirmed that yourself.

This time, the AI's response seemed a fraction of a second slower. Lt. Com. Leslie Gillis is still in biostasis. Please re-enter your I.D. and password for reconfirmation.

Impatiently, Gillis typed: I.D. 86419-D. Password Scotland.

The AI came back at once: Identification reconfirmed. You are Lt. Com. Leslie Gillis.

Then you agree that I'm no longer in biostasis.

No. Lt. Com. Leslie Gillis remains in biostasis. Please re-enter your I.D. and password for reconfirmation.

Gillis angrily slammed his hands against the console. He shut his eyes and took a deep breath, then forced himself to think this through as calmly as he could. He was dealing with an AI; it might be conditioned to respond to questions posed to it in plain English, yet nonetheless it was a machine, operating with machine-like logic. Although he had to deal with it on its own terms, nonetheless he had to establish the rules.

I.D. 86419-D. Password Scotland.

Identification reconfirmed. You are Lt. Com. Leslie Gillis.

Please locate Lt. Com. Leslie Gillis.

Lt. Com. Leslie Gillis is in biostasis cell C1A-07.

Okay, now they were getting somewhere... but this was clearly wrong, in more ways than one. He had just emerged from a cell located on Deck A of Module C2.

Who is the occupant of biostasis cell C2A-07?

Gunther, Eric, Ensign/FSA

The name was unfamiliar, but the suffix indicated that he was a Federal Space Agency ensign. A member of the flight crew who had been ferried up to the *Alabama* just before launch, but probably not one of the conspirators who had hijacked the ship.

Gillis typed: There has been a mistake. Eric Gunther is not in cell C2A-07, and I am not in cell C1A-07. Do you understand?

Another pause, then: Acknowledged. Biostasis cell assignments rechecked with secondary data system. Correction: cell C1A-07 presently occupied by Eric Gunther.

Gillis absently gnawed on a fingernail; after a few minutes he developed a possible explanation for the switch. Captain Lee and the other conspirators had smuggled almost fifty dissident intellectuals on board just before the *Alabama* fled Earth; since none of them had been listed in the ship's original crew manifest, the D.I.'s had to be assigned to biostasis cells previously reserved for the members of the colonization team who had been left behind on Earth. Gillis could only assume that, at some point during the confusion, someone had accidentally fed erroneous information to the computer controlling the biostasis systems. Therefore, although he was originally assigned to C1A-07 while Ensign Gunther was supposed to be in C2A-07, whoever had switched his and Gunther's cells had also

neglected to cross-feed this information from the biostasis control system to the ship's AI. In the long run, it was a small matter of substituting one single digit for another...

Yet this didn't answer the original question: why had he been prematurely revived from biostasis? Or rather, why was Gunther supposed to be revived?

Why did you revive the occupant of cell C2A-07?

CLASSIFIED/TS. ISA Order 7812-DA

What the...? Why was there an Internal Security Agency lock-out? Yet he was able to get around that.

Security override AS-001001, Gillis, Leslie, Lt. Com. password Scotland. Repeat question: why did you revive the occupant of cell C2A-07?

CLASSIFIED/TS: OPEN. Ensign Gunther was to confirm Presidential launch authorization via secure communication channel. Upon failure to confirm authorization by 7.5.70/00.00, Ensign Gunther was to be revived from biostasis at 10.3.70/00.00 and given the option of terminating the mission.

Gillis stared at the screen for a long while, comprehending what he had just read but nonetheless not quite believing it. This could only mean one thing: Gunther had been an ISA mole placed aboard the *Alabama* for the purpose of assuring that the ship wasn't launched without Presidential authorization. However, since Captain Lee had ordered Gillis himself to shut down all modes of communication between Mission Control and the *Alabama,* Gunther hadn't been able to send a covert transmission back to Earth. Therefore the AI had been programmed to revive him from biostasis ninety days after launch.

At this point, though, Gunther wouldn't have been able to simply turn the ship around even if he'd wanted to do so. The *Alabama* was too far from Earth, its velocity too high, for one person to accomplish such a task on his own. So there was no mistake what "terminating the mission" meant; Gunther was supposed to have destroyed the *Alabama*.

A loyal citizen of the United Republic of America, even to the point of suicide. Indeed, Gillis had little doubt that the Republic's official press agency had already reported the loss of the *Alabama,* and that FSA spokesmen were issuing statements to the effect that the ship had suffered a catastrophic accident.

Since no one else aboard, the ship knew about Gunther's orders, the AI's hidden program hadn't been deleted from memory. On one hand, at least he had been prevented from carrying out his suicide mission. On the other, Gunther would remain asleep for the next 230 years while Gillis was now wide-awake.

Very well. So now all he had to do was join him in biostasis. Once he woke up again, Gillis could inform Captain Lee of what he had learned, and let him decide what to do with Ensign Gunther.

There has been a mistake. I was not supposed to be revived at this time. I have to return to biostasis immediately.

A pause, then: This is not possible. You cannot return to biostasis.

Gillis's heart skipped a beat.

I repeat: there has been a mistake. There was no reason to revive the person in cell C2A-07. I was the occupant of cell C2A-07, and I need to return to biostasis at once.

I understand the situation. The crew manifest has been changed to reflect this new information. However, it is impossible for you to return to biostasis.

His hands trembled upon the keyboard: Why not?

Protocol does not allow for the occupant of cell C2A-07 to resume biostasis. This cell has been permanently deactivated. Resumption of biostasis is not admissible.

Gillis suddenly felt as if a hot towel had been wrapped around his face. Security override B-001001, Gillis, Leslie, Lt. Com. Password Scotland. Delete protocol immediately.

Password accepted, Lt. Gillis. Protocol cannot be deleted without direct confirmation of Presidential launch authorization, and may not be rescinded by anyone other than Ensign Gunther.

Anger surged within him. He typed: Revive Ensign Gunther at once. This is an emergency.

No members of the crew may be revived from biostasis until the ship has reached its final destination unless there is a mission-critical emergency. All systems are at nominal status: there is no mission-critical emergency.

Eric Gunther. Eric Gunther lay asleep on Deck C1A. Yet even if he could be awakened from hibernation and forced to confess his role, there was little he could do about it now. The long swath of ionized particles the *Alabama* left in its wake rendered impossible radio communications with Earth; any signals received by or sent from the starship would be fuzzed out while the fusion engines were firing, and the *Alabama* would remain under constant thrust for the next 230 years.

If I don't return to biostasis, then I'll die. This is an emergency. Do you understand?

I understand your situation, Mr. Gillis. However, it does not pose a mission-critical emergency. I apologize for the error.

Reading this, Gillis found himself smiling. The smile became a grin, and from somewhere within his grin a wry chuckle slowly fought through. The chuckle evolved into hysterical laughter, for by now Gillis had realized the irony of his situation.

He was the Chief Communications Officer of the URSS *Alabama*. And he was doomed because he couldn't communicate.

Gillis had his pick of any berth aboard the ship, including Captain Lee's private quarters, yet he chose the bunk that had been assigned to him; it only seemed right. He reset the thermostat to 71 degrees, then he took a long, hot shower. Putting on his jumpsuit again, he returned to his berth, lay down, and tried to sleep. Yet every time he shut his eyes, new thoughts entered his mind, and soon he would find himself staring at the bunk above him. So he lay there for a long time, his hands folded together across his stomach as he contemplated his situation.

He wouldn't asphyxiate nor perish from lack of water. *Alabama*'s closed-loop life-support system would purge the carbon dioxide from the ship's air and recirculate it as breathable oxygen-nitrogen, and his urine would be purified and recycled as potable water. Neither would he freeze to death in the dark; the fusion engines generated sufficient excess energy for him to be able to run the ship's internal electrical systems without fear of exhausting its reserves. Nor would he have to worry about starvation; there were enough rations aboard to feed a crew of 104 passengers for twelve months, which meant that one person would have enough to eat for over a century.

Yet there was little chance that he would last that long. Within their biostasis cells, the remaining crew members would be constantly rejuvenated, their natural aging processes held at bay through homeostatic stem-cell regeneration, teleomerase enzyme therapy, and nanotechnical repair of vital organs, while infusion of somatic drugs would keep them in a coma-like condition that would deprive them of subconscious dream-sleep. Once they reached 47 Ursae Majoris, they would emerge from hibernation–even that term was a misnomer, for they would never stir from their long rest–just the same way as they had been when they entered the cells

Not so for him. Now that he was removed from biostasis, he would continue to age normally. Or at least as normally as one would while traveling at relativistic velocity; if he were suddenly spirited back home and was met by a hypothetical twin brother–no chance of that happening; like so many others aboard, Gillis was an only child–he would discover that he had aged only a few hours less than his sibling. Yet that gap would gradually widen the farther *Alabama* traveled from Earth, and even the Lorentz factor wouldn't save him in the long run, for everyone else aboard the ship was aging at the same rate; the only difference was that their bodies would remain perpetually youthful, while his own would gradually break down, grow old...

No. Gillis forcefully shut his eyes. *Don't think about it*.

But there was no way of getting around it: he was now living under a death sentence. Yet a condemned man in solitary confinement has some sort of personal contact, even if it's only the fleeting glimpse of a guard's hand as he shoves a tray of food through the cell door. Gillis didn't have that luxury. Never again would he ever hear another voice, see another face. There were a dozen or so people back home he had loved, and another dozen or so he had loathed, and countless others he had met, however briefly, during the twenty-eight years he had spent on Earth. All gone, lost forever...

He sat up abruptly. A little too abruptly; he slammed the top of his head against the bunk above him. He cursed beneath his breath, rubbed his skull–a small bump beneath his hair, nothing more–then he swung his legs over the side of his bunk, stood up, and opened his locker. His box was where he had last seen it; he took it down from the shelf, started to open it...

And then he stopped himself. No. If he looked inside now, the things he'd left in there would make him only more miserable than he already was. His fingers trembled upon the lid. He didn't need this now. He shoved the box back into the locker and slammed the door shut behind it. Then, having nothing else better to do, he decided to take a walk.

The ring corridor led him around the hub to Module C7, where he climbed down to the mess deck: long empty benches, walls painted in muted earth tones. The deck below contained the galley: chrome tables, cooking surfaces, empty warm refrigerators. He located the coffee maker, but there was no coffee to be found, so he ventured further down the ladder to the ship's med deck. Antiseptic white-on-white compartments, the examination beds covered with plastic sheets; cabinets contained cellophane-wrapped surgical instruments, gauze and bandages, and rows of plastic bottles containing pharmaceuticals with arcane labels. He had a slight headache, so he searched through them until he found some ibuprofen; he took the pill without water and lay down for a few minutes.

After awhile his headache went away, so he decided to check out the wardroom on the bottom level. It was sparsely furnished, only a few chairs and tables beneath a pair of wallscreens, with a single couch facing a closed porthole. One of the tables folded open to reveal a holographic game board; he pressed a button marked by a knight piece and watched as a chess set materialized. He used to play chess assiduously when he was a teenager, but had gradually lost interest as he grew older. Perhaps it was time to pick it up again...

Instead, though, he went over to the porthole. Opening the shutter, he gazed out into space. Although astronomy had always been a minor hobby, he could see none of the familiar constellations; this far from Earth, the stars had changed position so radically that only the AI's navigation subroutine could accurately locate them. Even the stars were strangers now; this revelation made him feel even more lonely, so he closed the shutter. He didn't bother to turn off the game table before he left the compartment.

As he walked along the ring corridor, he came up on a lone 'bot. It quickly scuttled out of his way as he approached, but Gillis squatted down on his haunches and tapped his fingers against the deck, trying to coax it closer. The robot's eyestalks twitched briefly toward him; for a moment, it seemed to hesitate, then it quickly turned away and went up the circular passageway. It had no reason to have any interaction with humans, even those who

desired its company. Gillis watched the 'bot as it disappeared above the ceiling, then he reluctantly rose and continued up the corridor.

The cargo modules, C5 and C6, were dark and cold, deck upon deck of color-coded storage lockers and shipping containers. He found the crew rations on Deck C5A; sliding open one of the refrigerated lockers, he took a few minutes to inspect its contents: vacuum-sealed plastic bags containing freeze-dried substances identified only by cryptic labels. None of it looked very appetizing; the dark-brown slab within the bag he pulled out at random could have been anything from processed beef to chocolate cake. He wasn't hungry yet, so he shoved it back in and slammed the locker shut.

Gillis returned to the ring corridor and walked to the hatch leading to the hub access shaft. As he opened the hatch, though, he hesitated before grasping the top rung of the shaft's recessed ladder. He had climbed down the shaft once before already, yet he had been so determined to reach the command deck that he had failed to recognize it for what it was, a narrow well almost a hundred feet deep. While the *Alabama* was moored at Highgate and in zero-gee, everyone aboard had treated it as a tunnel, yet now what had once been horizontal was now vertical.

He looked down. Far below, five levels beneath him, lay the hard metal floor of Deck H5. If his hands ever slipped on the ladder, if his feet failed to rest safely upon one of its rungs, then he could fall all the way to the bottom. He would have to be careful every time he climbed the shaft, for if he ever had an accident...

The trick was never looking down. He purposely watched his hands as he made his way down the ladder.

Gillis meant to stop on H2 and H3 to check the engineering and life-support decks, yet somehow he found himself not stopping until he reached H5.

The EVA deck held three airlocks. To his right and left were the hatches leading to the *Alabama*'s twin shuttles, the *Wallace* and the *Helms*. Gillis gazed through porthole at the *Helms*; the spaceplane was nestled within its docking cradle, its delta wings folded beneath its broad fuselage, its bubble canopy covered by shutters. For a moment, he had an insane urge to steal the *Helms* and fly it back home, yet that was clearly impossible; the shuttles only had sufficient fuel and oxygen reserves for orbital sorties. He wouldn't get so far as even Neptune, let alone Earth. And besides, he had never been trained to pilot a shuttle.

Turning away from the porthole, he caught sight of another airlock located on the opposite side of the deck. This one didn't lead to a shuttle docking collar; it was the airlock that led outside the ship.

Reluctantly, almost against his own will, Gillis found himself walking toward it. He twisted the lockwheel to undog the inner hatch, then pulled it open and stepped inside. The airlock was a small white compartment barely large enough to hold two men wearing hardsuits. On the opposite side was the tiger-striped outer hatch with a small control panel mounted on the bulkhead next to it. The panel had only three major buttons–*Pres., Purge,* and *Open*–and above them were three lights: green, orange, and red. The green light was now lit, showing that the inner hatch was open and the airlock was safely pressurized.

The airlock was cold. The rest of the ship had warmed up by now, but here Gillis could feel the arctic chill creeping through his jumpsuit, see every exhalation as ghostly wisps rising past his face. He didn't know how long he remained there, yet he regarded the three buttons for a very long time.

After awhile, he realized that his stomach was beginning to rumble, so he backed out of the compartment. He carefully closed the inner hatch, and lingered outside the airlock for another minute or so before he decided that this was one part of the ship he didn't want to visit very often.

Then he made the long climb back up the access shaft.

There were chronometers everywhere, displaying both Greenwich Mean Time and relativistic shiptime. On the second day after revival, Gillis decided that he'd rather not know what the date was, so he found a roll of black electrical tape and went through the entire ship, masking every clock he could find.

There were no natural day or night cycles aboard the ship. He slept when he was tired, and got out of bed when he felt like it. After awhile, he found that he was spending countless hours lying in his bunk, doing nothing more than staring at the ceiling, thinking about nothing. This wasn't good, so he made a regular schedule for himself.

He reset the ship's internal lighting so that it turned on and off at twelve-hour intervals, giving him an semblance of sunrise and sunset. He started his mornings by jogging around the ring corridor, keeping it up until his legs ached and his breath came in ragged gasps, and then sprinting the final lap.

Next he would take a shower, and then attend to himself. When his beard began to grow back, he made a point of shaving every day, and when his hair started to get a little too long he trimmed it with a pair of surgical scissors he found in the med deck; the result was a chopped, butch-cut look, but so long as he managed to keep the hair out of his eyes and off his neck he was satisfied. Otherwise, he tried to avoid looking closely at himself in the mirror.

Once he was dressed, he would visit the galley to make breakfast: cold cereal, rehydrated vegetable juice, a couple of fruit squares, a mug of hot coffee. He liked to open a porthole and look out at the stars while he ate.

Then he would go below to the wardroom and activate the wallscreens. He was able to access countless hours of datafiche through the AI's library subroutine, yet precious little of it was intended for entertainment. Instead, what he found were mainly tutorials: service manuals for the *Alabama*'s major operating systems, texts on agriculture, astrobiology, land management, academic studies of historical colonies on Earth, so forth and so on. Nonetheless he devoted himself to studying everything he could find, pretending as if he was once again a first-year plebe at the

Academy of the Republic, memorizing everything and then silently quizzing himself to make sure he got it right. Perhaps it was pointless–there was no reason for him to learn about organic methods of soybean cultivation–yet it helped to keep his mind occupied.

Although he learned much about the *Alabama*'s biostasis systems he hadn't known before, he never found anything that would help him return to hibernation. He eventually returned to Deck C2B, closed the hatch of his former cell, and returned it to its niche. After that, he tried not to go there again; like the EVA airlock on Deck H5, this was a place that made him uncomfortable.

When he was tired of studying, he would play chess for hours upon end, matching his wits against the game system. The outcome was always inevitable, for the computer could never be defeated, but he gradually learned how to anticipate its next move and forestall another loss for at least a little while longer.

The food was bland, preprocessed stuff, artificial substitutes for meat, fruit, and vegetables meant to remain edible after years of long-term freezer storage, but he did the best to make dinner more tolerable. Once he learned how to interpret the labels, he selected a variety of different rations and moved them to the galley. He spent considerable time and effort making each meal a little better, or at least different, from the last one; often the results were dismal, but now and then he managed to concoct something he wouldn't mind eating again–stir-fried chicken and pineapple over linguine, for instance, wasn't as strange as he thought it might be–and then he could type the recipe into the galley computer for future reference.

While wandering through the ship in search of something else to divert his attention, he found a canvas duffel bag. It belonged to Jorge Montero, one of the D.I.'s who had helped the *Alabama* escape from Earth; apparently he had managed to bring a small supply of books with him. Most were wilderness-survival manuals of one sort of another, yet among them were a few twentieth-century classics: J. Bronowski's *The Ascent of Man,* Kenneth Brower's *The Starship and the Canoe,* Frank Herbert's *Dune*. Gillis took them back to his berth and put them aside as bedtime reading.

On occasion, he would visit the command deck. The third time he did this, the nav table showed him that the *Alabama* had crossed the heliopause; the ship was now traveling through interstellar space, the dark between the stars. Because the ramscoop blocked the view, there were no windows that faced directly ahead, yet he learned how to manipulate the cameras located on the fuel tank until they displayed a real-time image forward of the ship's bow. It appeared as if the stars directly in front had clustered together, the Doppler effect causing them to form short comet-like tails tinged with blue. Yet when he rotated the camera to look back the way he had come, he saw that an irregular black hole had opened behind the *Alabama*; the Sun and all its planets, including Earth, had become invisible.

This was one more thing that disturbed him, so he seldom activated the cameras.

He slept, and he jogged, and he ate, and he studied, and he played long and futile chess games, and otherwise did everything possible to pass the time as best he could. Every now and then he caught himself murmuring to himself, carrying on conversations with only his own mind as a companion; when this happened, he would consciously shut up. Yet no matter how far he managed to escape from himself, he always had to return to the silence of the ship's corridors, the emptiness of its compartments.

He didn't know it then, but he was beginning to go insane.

His jumpsuit began to get worn out. It was the only thing he had to wear, though, besides his robe, so he checked the cargo manifest and found that clothing was stowed in Deck C5C, and it was while searching for them that he discovered the liquor supply.

There wasn't supposed to be any booze aboard the *Alabama,* yet nonetheless someone had managed to smuggle two cases of scotch, two cases of vodka, and one case of champagne onto the ship. They were obviously put there to help the crew celebrate their safe arrival at 47 Ursae Majoris; Gillis found them stashed among the spare clothing.

He tried to ignore the liquor for as long as possible; he had never been much of a drinker, and he didn't want to start now. But several days later, after another attempt at making beef stroganoff resulted in a tasteless mess of half-cooked noodles and beef-substitute, he found himself wandering back to C5C and pulling out a bottle of scotch. He brought it back to the wardroom, poured a couple of fingers in a glass and stirred in some tapwater, then sat down to play another game of chess. After his second drink, he found himself feeling more at ease than he had since his untimely awakening; the next evening, he did the same thing again.

That was the beginning of his dark times.

"Cocktail hour" soon became the highlight of his day; after awhile, he found no reason to wait until after dinner, and instead had his first drink during his afternoon chess game. One morning he decided that a glass of champagne would be the perfect thing to top off his daily run, so he opened a bottle after he showered and shaved, and continued to indulge himself during the rest of the day. He discovered that powdered citrus juice was an adequate mixer for vodka, so he added a little of that to his morning breakfast, and it wasn't long before he took to carrying around a glass of vodka wherever he went. He tried to ration the liquor supply as much as he could, yet he found himself depressed whenever he finished a bottle, and relieved to discover that there always seemed to be one more to replace it. At first he told himself that he had to leave some for the others–after all, it was meant for their eventual celebration–but in time that notion faded to the back of his mind, and was finally forgotten altogether.

He went to sleep drunk, often in the wardroom, and awoke to nasty hangovers that only a hair of the dog could help dispel. His clothes began to smell of stale booze; he soon got tired of washing them, and simply found another jumpsuit to wear. Unwashed plates and cookware piled up in the galley sink, and it always seemed as if there were empty or half-empty glasses scattered throughout the ship. He stopped jogging after awhile, but he didn't gain much weight because he had lost his appetite and was now eating less than before. And every day, he found a new source of irritation: the inconvenient times when the lights turned on and off, or how the compartments always seemed too hot or too cold, or why he could never find something that he needed.

One night, frustrated at having lost at chess yet again, he picked up his chair and slammed it through the game table's glass panel. He was still staring at the wrecked table when one of the 'bots arrived to investigate; deciding that its companionship was better than none at all, he sat down on the floor and tried to get it to come closer, cooing to it in the same way he had summoned his puppy back when he was a boy. The 'bot ignored him completely, and that enraged him even further, so he found an empty champagne bottle and used it to demolish the machine. Remarkably, the bottle remained intact even after the 'bot had become a broken, useless thing in the middle of the wardroom floor; even more remarkably, it didn't shatter the porthole when Gillis hurled it against the window.

He didn't remember what happened after that; he simply blacked out. The next thing he knew, he was sprawled across the floor of the airlock.

The harsh clang of an alarm threatened to split his skull in half. Dully surprised to find where he was, he clumsily raised himself up on his elbows and regarded his surroundings through swollen eyes. He was naked; his jumpsuit lay in an heap just within the inner hatch, which was shut. There was a large pool of vomit nearby, but he couldn't recall having thrown up any more than he could remember getting here from the wardroom.

Lights strobed within the tiny compartment. Rolling over on his side, he peered at the control panel next to the outer hatch. The orange button in its center was lit, and the red one beneath it flashed on and off. The airlock was ready to be opened without prior decompression; this was what had triggered the alarm.

Gillis had no idea how he got here, but it was obvious what he had almost done. He crawled across the airlock floor and slapped his hand against the green button; that stopped the alarm. Then he opened the inner hatch and, without bothering to pick up his discarded jumpsuit, staggered out of the airlock. He couldn't keep his balance, though, so he fell to his hands and knees and threw up again.

Then he rolled over on his side, curled in upon himself, and wept hysterically until sleep mercifully came to him. Naked and miserable, he passed out on the floor of the EVA deck.

The following day, Gillis methodically went through the entire ship, gathering the few remaining bottles and returning them to the locker where he had found them. Although he was tempted to jettison them into space, he was scared to return to Deck H5. Besides, there wasn't much booze left; during his long binge, he had managed to put away all but two bottles of scotch, one bottle of vodka, and four bottles of champagne.

The face that stared back at him from the mirror was unshaven and haggard, its eyes rimmed with dark circles. He was too tired to get rid of the beard, though, so he clipped it short with his scissors and let his hair remain at shoulder length. It was a new look for him, and he couldn't decide whether he liked it or not. Not that he cared much any more.

It took a couple of days for him to want to eat again, and even longer before he had a good night's sleep. More than a few times he was tempted to have another drink, but the memory of that terrifying moment in the airlock was enough to keep him away from the bottle.

Yet he never returned to the daily schedule he had previously set for himself. He lost interest in his studies, and he watched the few movies stored in the library until he found himself able to recite the characters' lines from memory. The game table couldn't be repaired, so he never played chess again. He went jogging now and then, but only when there was nothing else to do, and not for very long.

He spent long hours lying on his bunk, staring into the deepest recesses of his memory. He replayed events from his childhood–small incidents with his mother and father, the funny and stupid things he had done when he was a kid–and thought long and hard about the mistakes he had made during his journey to adulthood. He thought about the girls he had known, refought old quarrels with ancient enemies, remembered good times with old friends, yet in the end he always came back to where he was.

Sometimes he went down to the command deck. He had long since given up on trying to have meaningful conversation with the AI; it only responded to direct questions, and even then in a perfunctory way. Instead, he opened the porthole shutters, and slumped in Captain Lee's chair while he stared at the distant and motionless stars.

One day, on impulse, he got up from the chair and walked to the nearest console. He hesitated for a moment, then he reached down and gently peeled back the strip of black tape he had fastened across the chronometer. It read:

P:/ 4.17.71 / 18.32.06 GMT

April 17, 2071. A little more six months had gone by since his awakening.

He could have sworn it had been six years.

That evening, Gillis prepared dinner with special care. He selected the best cut of processed beef he could find in the storage locker and marinated it in a pepper sauce he had learned to make, and carefully sautéed the dried garlic

before he added it to the mashed potatoes; while the asparagus steamed in lemon juice, he grilled the beef to medium-rare perfection. Earlier in the afternoon he had chosen a bottle of champagne from the liquor supply, which he put aside until everything else was ready. He cleaned up the wardroom and laid a single setting for himself at a table facing the porthole, and just before dinner he dimmed the ceiling lights.

He ate slowly, savoring every bite, closing his eyes from time to time as he allowed his mind's eye to revisit some of the fine restaurants at which he had once dined: a steakhouse in downtown Kansas City, a five-star Italian restaurant in Boston's Beacon Hill neighborhood, a seafood place on St. Simon's Island where the lobster came straight from the wharf. When he gazed out the porthole he didn't attempt to pick out constellations, but simply enjoyed the silent majesty of the stars; when he was through with dinner, he carefully laid his knife and fork together on his plate, refilled his glass with champagne, and walked over to a couch, where he had earlier placed one last thing to round off a perfect evening.

Gillis had deliberately refrained from opening the box he kept in his locker; even during his worst moments, the lowest depths of his long binge, he had deliberately stayed away from it. Now the time had come for him to open the box, see what was inside.

He pulled out the photographs one at a time, studying them closely as he remembered the places where they had been taken, the years of his life that they represented. Here was his father; here was his mother; here he was at age seven, standing in the backyard of his childhood home in North Carolina, proudly holding aloft a toy spaceship he had been given for his birthday. Here was a snapshot of the first girl he had ever loved; here were several photos he had taken of her during a camping trip to the Smoky Mountains. Here was himself in his dress uniform during graduation exercises at the Academy; here he was during flight training in Texas. These images, and many more like them, were all he had brought with him from Earth: pictures from his past, small reminders of the places he had gone, the people whom he had known and loved.

Looking through them, he tried not to think about what he was about to do. He had reset the thermostat to lower the ship's internal temperature to 50 degrees at midnight, and he had instructed the AI to ignore the artificial day-night cycle he had previously programmed. He had left a note in Captain Lee's quarters, informing him that Eric Gunther was a saboteur and apologizing for having deprived the rest of the crew of rations and liquor. He would finish this bottle of champagne, though; no sense in letting it go to waste, and perhaps it would be easier to push the red button if he was drunk.

His life was over. There was nothing left for him. A few moments of agony would be a fair exchange for countless days of lonesome misery.

Gillis was still leafing through the photographs when he happened to glance up at the porthole, and it was at that moment when he noticed something peculiar: one of the stars was moving.

At first, he thought the champagne was getting to him. That, or it was a refraction of starlight caused by the tears which clung to the corners of his eyes. He returned his attention to a picture he had taken of his father shortly before he died. Then, almost reluctantly, he raised his head once more.

The window was filled with stars, all of them stationary... save one.

A bright point of light, so brilliant that it could have been a planet, perhaps even a comet. Yet the *Alabama* was now far beyond the Earth's solar system, and the stars were too distant to be moving relative to the ship's velocity. Yet this one seemed to be following a course parallel to his own.

His curiosity aroused, Gillis watched the faraway light as it moved across the starscape. The longer he looked at it, the more it appeared as if it had a faint blue-white tail; it might be a comet, but if it was, it was headed in the wrong direction. Indeed, as he continued to study it, the light became a little brighter and seemed to make a subtle shift in direction, almost as if...

The photos fell to the floor as he rushed toward the ladder.

By the time he reached the command deck, though, the object had vanished.

Gillis spent the next several hours searching the sky, using the navigational telescope in an attempt to catch another glimpse of the anomaly. When optical methods failed, he went to his com station and ran the broad-band selector up and down across the radio spectrum in an effort to locate a repeating signal against the warbling background noise of space. He barely noticed that the deck had become colder, that the ceiling lights had shut off; his previous intentions now forgotten, he had neglected to tell the AI that he had changed his mind.

The object had disappeared as quickly as it had appeared, yet he was absolutely certain of what he had seen. It wasn't a hallucination, of that he was positive, and the more he thought about it, the more convinced he became that what he had spotted wasn't a natural object but a spacecraft, briefly glimpsed from some inestimable distance–a thousand kilometers? ten thousand? a million?–as it passed the *Alabama*.

Yet where had it come from? Not from Earth, of that he could only be certain. Who was aboard, and where was it going? His mind conjured countless possibilities as he washed his dinner dishes, then went about preparing an early breakfast he had never expected to eat. Why hadn't it come closer? He considered this as he lay on his bunk, his hands propped behind his head. Perhaps it hadn't seen the *Alabama*. Might he ever see it again? Not likely, he eventually decided... yet if there was one, wasn't there always a possibility that there might be others?

He realized that he had to record this incident, so that the rest of the crew would know what he had observed.

Yet when he returned to the command deck and began to type a report into the ship's log, he discovered that words failed him. Confronted by a blank flatscreen, everything he wrote seemed hollow and lifeless, nothing evoking the mysterious wonder of what he had observed. It was then that he realized that, during the six long months he had been living within the starship, never once had he ever attempted to write a journal.

Not that there had been much worth recording for posterity: he woke up, he ate, he jogged, he studied, he got drunk, he considered suicide. Yet it seemed as if everything had suddenly changed. Only yesterday he had been ready to walk into the airlock, close his eyes, and jettison himself into the void. Now, he felt as if he had been given a new reason to live... but that reason only made sense if he left something behind besides an unmade bunk and a half-empty champagne bottle.

He couldn't write on a screen, though, so he searched through the cargo lockers until he found what he needed: a supply of blank ledger books, intended for use by the quartermaster to keep track of expedition supplies, along with a box of pens. Much to his surprise, he also discovered a couple of sketchbooks, some charcoal pencils, and a watercolor paint kit; someone back on Earth apparently had the foresight to splurge a few kilos on rudimentary art supplies.

Gillis carried a ledger and a couple of pens back to the wardroom. Although the game table was ruined, it made a perfect desk once its top was shut. He rearranged the furniture so that the table faced the porthole. For some reason, writing in longhand felt more comfortable; after a couple of false starts, which he impatiently scratched out, he was finally able to put down a more or less descriptive account of what he had seen the night before, followed by a couple of pages of informal conjecture of what it might have been.

When he was done, his back hurt from having bent over the table for so long, and there now was a sore spot between the index and middle fingers of his right hand where he had gripped his pen. Although he had nothing more to say, nonetheless he had the need to say more; putting words to paper had been a release unlike any he had felt before, an experience that had transported him, however temporarily, from this place to somewhere else. His body was tired but his mind was alive; despite his physical exhaustion, he felt a longing for something else to write.

He didn't know it then, but he was beginning to go sane.

As Gillis gradually resumed the daily schedule he had established for himself before the darkness had set in, he struggled to find something to write about. He tried to start a journal, but that was futile and depressing. He squandered a few pages on an autobiography before he realized that writing about his life made him self-conscious; in the end he ripped those pages from the ledger and threw them away. His poetry was ridiculous; he almost reconsidered a trip to the airlock when he re-read the tiresome doggerel he had contrived. In desperation he jotted down a list of things that he missed, only to realize that it was not only trivial but even more embarrassing than his autobiography. That too ended in the wastebin.

For long hours he sat at his makeshift desk, staring through the porthole as he aimlessly doodled, making pictures of the bright star he had seen that eventful night. More than a few times he was tempted to find a bottle of scotch and get drunk, yet the recollection of what he had nearly done to himself kept him away from the liquor. More than anything else, he wanted to write something meaningful, at least to himself if not for anyone else, yet it seemed as if his mind had become a featureless plain. Inspiration eluded him.

Then, early one morning before the lights came on, he abruptly awoke with the fleeting memory of a particularly vivid dream. Most of his dreams tended to be about Earth–memories of places he had been, people whom he had known–yet this one was different; he wasn't in it, nor did it take place anywhere he had ever been.

He couldn't recall any specific details, yet he was left with one clear vision: a young man standing on an alien landscape, gazing up at an azure sky dominated by a large ringed planet, watching helplessly as a bright light–Gillis recognized it as the starship he had seen–raced away from him, heading into deep space.

Gillis almost rolled over and went back to sleep, yet he found himself sitting up and reaching for his robe. He took a shower, and as he stood beneath the lukewarm spray, his imagination began to fill the missing pieces. The young man was a prince, a nobleman from some world far from Earth; indeed, Earth's history didn't even belong to the story. His father's kingdom had fallen to a tyrant and he had been forced to flee for his life, taking refuge on a starship bound for another inhabited planet. Yet its crew, fearing the tyrant's wrath, had cast him away, leaving him marooned him upon a habitable moon of an uncharted planet, without any supplies or companionship...

Still absorbed by the story in his mind, Gillis got dressed, then went to the wardroom. He turned on a couple of lights, then he sat down at his desk and picked up his pen. There was no hesitation as he opened the ledger and turned to a fresh page; almost as if in a trance, he began to write.

And he never stopped.

To be sure, there were many times when Gillis laid down his pen. His body had its limitations, and he couldn't remain at his desk indefinitely before hunger or exhaustion overcame him. And there were occasions when he didn't know what to do next; in frustration he would impatiently pace the floor, groping for the next scene, perhaps even the next word.

Yet after a time it seemed as if the prince knew what to do even before he did. As he explored his new world Gillis encountered many creatures–some of whom became friends, some of whom were implacable enemies–and journeyed to places that tested the limits of his ever-expanding imagination. As he did, Gillis–and Prince Rupurt,

who subtly become his alter-ego–found himself embarked on an adventure more grand than anything he had ever believed possible.

Gillis changed his routine, fitting everything around the hours he spent at his desk. He rose early and went straight to work; his mind felt sharpest just after he got out of bed, and all he needed was a cup of coffee to help him wake up a little more. Around midday he would prepare a modest lunch, then walk around the ring corridor for exercise; two or three times a week he would patrol the entire ship, making sure that everything was functioning normally. By early afternoon he was back at his desk, picking up where he had left off, impatient to find out what would happen next.

He filled a ledger before he reached the end of his protagonist's first adventure; without hesitation, he opened a fresh book and continued without interruption, and when he wore out his first pen, he discarded it without a second thought. A thick callus developed between the second and third knuckles of his right middle finger, yet he barely noticed. When the second ledger was filled, he placed it on top of the first one at the edge of his desk. He seldom read what he had written except when he needed to recheck the name of a character or the location of a certain place; after a while he learned to keep notes in a separate book so that he wouldn't have to look back at what he had already done.

When evening came he would make dinner, read a little, spend some time gazing out the window. Every now and then he would go down to the command deck to check the nav table. Eventually the *Alabama*'s distance from Earth could be measured in parsecs rather then single light-years, yet even this fact had become incidental at best, and in time it became utterly irrelevant.

Gillis kept the chronometers covered; never again did he ever want to know how much time had passed. He stopped wearing shorts and a shirt and settled for merely wearing his robe; sometimes he went through the entire day naked, sitting at his desk without a stitch of clothing. He kept his fingernails and toenails trimmed, and he always paid careful attention to his teeth, yet he gave up cutting his hair and beard. He showered once or twice a week, if that.

When he wasn't writing, he was sketching pictures of the characters he had created, the strange cities and landscapes they visited. By now he had filled four ledgers with the adventures of his prince, yet words alone weren't sufficient to bring life to his imagination. The next time he returned to the cargo module for a new ledger and a handful of pens, he found the watercolor set he had noticed earlier and brought it back to the wardroom.

That evening, he began to paint the walls.

One morning, he rose at his usual time. He took a shower, then he put on his robe–which was now frayed at the cuffs and worn through at the elbows–and made his long journey to the wardroom. Lately it had become more difficult for him to climb up and down ladders; his joints always seemed to ache, and aspirin relieved the pain only temporarily. There had been other changes as well; while making up his bunk a couple of days ago, he had been mildly surprised to find a long grey hair upon his pillow.

As he passed through the ring corridor, he couldn't help but admire his work. The forest mural he had started some time ago was almost complete; it extended halfway from Module C1 to Module C3, and it was quite lovely to gaze upon, although he needed to add a little more detail to the leaves. That might take some doing; he had recently exhausted the watercolors, and since then had resorted to soaking the dyes out of his old clothes.

He had a light breakfast, then he carefully climbed down the ladder to his studio; he had long since ceased to think of it as the wardroom. His ledger lay open on his desk, his pen next to the place where he had left off last night. Rupurt was about to fight a duel with the lord of the southern kingdom, and he was looking forward to seeing how all this would work out.

He farted loudly as he sat down, giving him reason to smile with faint amusement, then he picked up his pen. He read the last paragraph he had composed, crossed out a few words that seemed unnecessary, then raised his eyes to the porthole, giving himself a few moments to compose his thoughts.

A bright star moved against space, one more brilliant than any he had seen in a very long while.

He stared at it for a long while. Then, very slowly, he rose from his desk, his legs trembling beneath his robe. His gaze never left the star as he backed away from the window, taking one small step after another as he moved toward the ladder behind him.

The star had returned. Or perhaps this was another one. Either way, it looked very much like the mysterious thing he had seen once before, a long time ago.

The pen fell from his hand as he bolted for the ladder. Ignoring the arthritic pain shooting through his arms and legs, he scrambled to the top deck of the module, then dashed down the corridor to the hatch leading to the hub shaft. This time, he knew what had to be done; get to his old station, transmit a clear vox transmission on all frequencies...

He had climbed nearly halfway down the shaft before he realized that he didn't know exactly what to say. A simple greeting? A message of friendship? Yes, that might do... but how would he identify himself?

In that moment, he realized that he couldn't remember his name.

Stunned by this revelation, he clung to the ladder. His name. Surely he could recall his own name...

Gillis. Of course. He was Gillis. Gillis, Leslie. Lieutenant Commander Leslie Gillis. Chief communications officer

of... yes, right... the URSS *Alabama*. He smiled, climbed down another rung. It had been so long since he had heard anyone say his name aloud, he probably couldn't even speak it himself...

Couldn't he?

Gillis opened his mouth, urged himself to say something. Nothing emerged from his throat save for a dry croak.

No. He could still speak; he was simply out of practice. All he had to do was get to his station. If he could remember the correct commands, he might still be able to send a signal to Prince Rupurt's ship before it passed beyond range. He just needed to...

His left foot missed the next rung on the ladder. Thrown off-balance, he glanced down to see what he had done wrong... then his right hand slipped off the ladder. Suddenly he found himself falling backward, his arms and legs flailing helplessly. Down, down, down...

"Oh, no," he said softly.

An instant later he hit the bottom of the shaft. There was a brief flash of pain as his neck snapped, then blackness rushed in upon him and it was all over.

A few hours later, one of the 'bots found Gillis's body. It prodded him several times, confirming that the cold organic form lying on the floor of Deck H5 was indeed lifeless, then it relayed a query to the AI. The molecular intelligence carefully considered the situation for a few fractions of a second, then it instructed the spider to jettison the corpse. This was done within the next two minutes; ejected from the starship, Gillis spun away into the void, another small piece of debris lost between the stars.

The AI determined that it was no longer necessary for the crew compartments to remain habitable, so it returned the thermostat setting to 50 degrees. A 'bot moved through the ship, cleaning up after Gillis. It left untouched the thirteen ledgers he had completed, along with the fourteenth that lay open upon his desk. There was nothing that could be done about the paintings on the walls of Module C7 and the ring access corridor, so they were left alone. Once the 'bot completed its chores, the AI closed the shutters of the windows Gillis had left open, then methodically turned off all the lights, one by one.

The date was February 25, 2102, GMT. The rest of the flight went smoothly, without further incident.

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THE FERRYMAN'S WIFE

Richard Bowes

At 7:40 on the first warm day of April, on a Tuesday, that least remarkable of days, the platform at Grove Hill train station was all but deserted. Cars soon arrived, a Country Squire first, a DeSoto V8 next, then a flood of fins and chrome. Commuters disembarked.

As 7:49 approached, Oldsmobiles jockeyed with Pontiacs; sunlight gleamed on waxed finishes. A few women got out of autos and waited on the platform. But mostly it was husbands who gave good-by kisses to wives with hair still in curlers and babies with zwieback-stuffed mouths.

For in that year, 1956, the great nation of the West was reinventing itself, changing from a land, part urban and part rural, into something not seen in the world before.

Linda Martin sat behind the wheel of the blue and white Chevy Bel Air and savored her favorite moment of the day. She rolled down her window as Roy slid of out the passenger seat beside her, passed before the car making goo-goo eyes at six year old Sally in the back seat.

He doffed his narrow brimmed hat, ducked his head to the open window. His mouth tasted of Pepsodent, coffee, eggs and bacon and a single on-the-way-to-the-train Chesterfield. "Keep Lady Olivia amused," he murmured.

"She'd be happier if you did that." Linda whispered in his ear.

"Nah, no aristocrats for me. I'm a damn commissar. Comes the revolution, they all get shot."

Linda giggled but glanced in the rearview mirror. She could just hear their daughter's voice, loud and clear, asking in public, "Mommy, why is daddy a commissar?" But Sally was watching intently for the appearance of the commuter train.

With the ghost of a wink, Roy stuck his hat on at the perfect angle and joined the marching husbands. Linda admired his easy way among the topcoated men. They were joined by old Mrs. Egan who liked to visit her specialists in the city and by Minnie Delahunt who, for reasons much speculated about, had kept her job in the fashion business even after getting married.

The train was out of sight as Linda turned on the radio for news. Driving out of the parking lot, she still felt Roy's parting touch and holding that memory, was with him as he walked through a rocking car, greeting a man in horn rims whom they both knew through the PTA.

Roy found a seat, opened his briefcase. Unlike the rest of passengers Roy could see in the dark and differentiate one set of footsteps from the dozens behind him on a crowded city street. And unlike almost anyone else in that time and place, he was aware of his wife's contact. And he could deflect it, which he did with a little smile.

Linda smiled too as she steered into traffic. An announcer on the car radio, said, 'A perfect blend.' Maybe he was pitching coffee or a new miracle fabric. But to Linda it described the life Roy and she had made in this time and place.

Because a road crew was repairing the usual route, she detoured down Main Street.

"Mommy?" asked a voice with a keen edge. In the air was that precarious moment when a thought becomes an idea.

And Linda, her attention focused on the back seat, saw in the mirror the slight quiver of a six year old's pigtails, the growing light in the eyes which were Roy's eyes. "Yes, hon?"

"How long is Auntie Olives going to stay?" The idea took form.

"A little while. Why?"

"Because last week Timothy brought his rabbit to school and nobody else has one and everyone got to touch her."

"And you wondered?" Linda felt the idea become a plan.

"No one else has an aunt from England. And she could sing." The plan was broached.

Much of Linda's concentration was focused on Sally. Most of the rest was devoted to negotiating traffic on the two blocks of shops that constituted downtown Grove Hill. So she only glanced at a delivery truck making a left turn beside Stillwell's Grocery.

Just a black, closed truck driving down a shadowed alley, but it caught her attention. The driver's face, seen for a moment in profile, was so ordinary as to escape the memory. The phrase, 'hard to pick out of a police line up,' occurred to her. Driver and vehicle evoked dark deeds when the whole point of a village like Grove Hill was never to suggest anything even remotely like that.

The voice from the back seat said, "Can she, Mommy? Huh?"

And Linda heard herself say, "You have to ask Auntie Olives, honey." She realized that she too was calling their guest that.

Driver and vehicle were out of sight and contact. Alone, she would have cut back immediately. As it was, she drove to the Pathfinder Elementary School. Half distracted, she agreed that Sally could ask their house guest to be that week's Show and Tell.

When Linda returned to Main Street ten minutes later, there was no sign of the delivery truck behind Stillwell's nor anywhere else. In the Grey stone and white clapboard stores of Grove Hill's Main Street, she made quick purchases of a quart of milk, lightbulbs, a pack of cigarettes. In each place she made casual mention of a truck that she said had cut her off. Her discreet probe produced the information that there had been no deliveries that morning.

Roy, long gone down the tracks to New York City would not be accessible until evening. She reached for Sally. *Right hand on left side. Not like Perry Gibson next to her who had it wrong. Saying the magic words, "...one nation invisible..."*

Linda considered the slippery path from proper precaution through solipsism to paranoia as she got back in the Chevy. Still, instead of heading directly home, she drove onto the Parkway and off again. East Radley was the town next to Grove Hill. It lacked a commuter station and was considered a bit dusty and decayed.

A place on the corner where she turned was owned by an old Italian couple who had a small vineyard out back, a statue of the Virgin Mary in the front yard. The neighborhood was mostly large, older houses. As she had been taught since she was eleven, Linda did not reach out.

Abruptly, she felt the touch. Like a sudden ripple on the water, swirling leaves, a shooting star seen at the corner of an eye. *Dearest?* Mrs. Wood was home.

She tried to keep her memories of the truck, the driver, the people she questioned, as clear as they had been when she first saw them. Mrs. Wood accepted her offering.

Linda Martin pulled up in front of a tall shingled, Queen Anne house. It had an old fashioned conservatory attached. No car sat in the driveway and the blinds were drawn. A slide and some see-saws could be seen out back. The voices of children were heard. But the back yard was big and overgrown and the voices sounded far away.

Aware of neighbors and casual curiosity, Linda scribbled a note, an actual one about needing a sitter for that Thursday. She walked up to the front porch as if that was why she had come.

Bending to slip the paper under the door, she caught the images of the truck, the driver, the store keepers on Main Street. All had been rearranged and examined. *Clumsiness too is a strategy.* Just that and no more. She had turned to go when Mrs. Wood touched her again. *Your guest.* Linda caught the image of a woman, wild haired, naked. It took Linda a moment to realize what the woman was doing. *Her passage is in your hands.*

Linda remained bending."Sally is safe?"

She saw another face then, black and white. Beautiful. Mrs. Wood smiled as if that hardly needed asking.

It was well after nine by the time Linda parked the car in her driveway. That's when she heard the voice. A soprano clean as a child's trilled up the years from a place where being a ruined woman was an identity and a full time occupation.

I leaned my back up against some oak,
Thinking that he was a trusty tree.
But first he bended, then he broke,
And so did my false love to me.

Think of the song as compensation, Linda told herself as she opened the door and saw a petticoat, *her petticoat from Bendel's!* draped over the hall table. Slips had been taken out of drawers and dropped on the floor without even being tried on. Linda followed the trail of undergarments down to the rec room. This world did not hold enough chemise and lingerie to satisfy the guest. Linda had come to regard it as like being around a magic animal, one which sang wondrously but shed everywhere.

Olivia Wexford, sat in a green silk, floor-length robe, her skin like fine porcelain. She brushed her auburn hair with long strokes. It was something she had, with great reluctance, just learned to do for herself. Still, the repeated gesture was elegant each time. She looked up as Linda entered, with an unguarded expression of cold speculation.

She wonders, Linda thought to herself, where I've been for the last hour when I should have been here entertaining her. In her slacks, blouse and French-bobbed brunet haircut, Linda was cute and knew it. But here she felt dowdy, almost sexless. The TV was on with the sound off. Captain Kangaroo and Mr. Greenjeans, skipped around a table. Mr. Greenjeans, a proper second banana, was poker-faced but the Captain mugged each time he passed the camera.

The guest gave a surpassingly raucous laugh. "Amusing rustics," she said. Her eyes sparkled, her face was animated. If one could ignore the background of pine paneling, the local florist's calendar on the wall, she could have stepped out of a painting by Gainsborough or Romney, *Lady Olivia Wexford At Her Toilette.*

Hated and feared back home, unable to boil water, resentful of having to dress herself, disturbed and aroused

that men could see her bare ankles, wherever Olivia was it would always be 1759.

Idly, out of habit, Linda brushed her guest's mind. And was stopped abruptly by an image of a silk fan in pink and pearl. On the fan, half dressed and agape, Bacchus and Ariadne encountered each other for the first time. With a slight nod, Linda backed off. Lady Wexford had a powerful protector.

Aware of what had just happened, suddenly reflective, Olivia sipped chocolate out of a doll-size china cup. "HE knew my life up and down, how I had lived it and what I'd do next," she said. "HE promised me all of Time but little did I guess that I would see it as a fugitive in flight."

She had fallen hard not for an ordinary lord, goodness help them all, some ass in a powdered wig and silk stockings. No, her particular daemon lover was a power of a kind that made Linda wary. It was not well to know more than a god wanted you to.

"In the last place where the Rangers had me, shock was a favorite word," said Olivia. "It referred to glassy eyed ex- soldiers, hysterical young women with skirts above their knees. And to me."

Fresh from the ruins of her own world, Lady Olivia had stayed in a private nursing home just outside London in a certain 1920. This particular sanitarium was secretly controlled by the organization known, where they were known, as the Time Rangers.

"Scarcely could I concentrate my mind enough to wonder why I was there much less what was to be done to me. Here, I have begun to unravel various mysteries."

Linda saw the image of the fan snap shut, replaced by what looked like a Watteau painting. Light shone through trees, moss grew like velvet, a white body reclined, privacy protected by long auburn hair and chains. They were graceful chains but secure all the same. Lady Olivia Wexford was staked out in the woods. "Bait," she said, "Is what I will be, a playing piece in the games of the Rangers and the Gods."

Linda thought to herself, 'After what you and your lover boy did you're lucky not to have been burned at the stake.' Aloud she said, "Let's finish getting you dressed. Make up first."

Olivia's nose wrinkled. "In that last London where I stayed, girls who had not been kissed, much less deflowered, wore whores' paint."

"Nonetheless. We must honor local custom."

"Let us," Olivia said as she rose, and Linda noted how she barely overcame the instinct to issue orders, "Let us, go into the city."

"Not today. I didn't arrange for a babysitter." Linda thought of the black truck. Instinctively, she reached out. Through Sally's eyes, a mile away, she saw a blackboard and on it the letter H written as big as a six year old.

"We're going to the supermarket," she said. Lids rolled over the guest's wide blue eyes. Life with Sally had prepared Linda for these moments, so she added. "And on the way, we can have a driving lesson."

Lady Wexford's eyes opened at this and she allowed herself to be guided upstairs. A bit longer afterwards than Linda would have thought possible, Olivia had helped to dress herself in a velvet jacket and a pair of Linda's toreador pants under a flared skirt. She had put on flat pumps and was standing at the front door.

"Lord Riot, was what HE was called and after a summer of HIS rule the city lay in smoldering ruins. All burned, the palaces and churches, the docks and the slums. And the populace, gentry and commoners were gone to whatever place HE had led them. But in that other London where I just stayed, it was 1921 and while all else was changed, the palaces and churches still stood and nobody had ever heard of the summer of Lord Riot."

'Damn right,' Linda thought. 'The Rangers spent a lot of effort making sure your particular London never got heard of again.'

She opened the front door and Olivia stepped out. Linda noticed the other woman's slight shudder as she entered an alien world.

In the driveway, Lady Wexford touched the hood and roof of the Chevy as if she were acquainting herself with a new horse. While they drove, she listened intently to Linda's explanation of the ignition, the steering wheel, the clutch, the gas pedal.

At the supermarket she was at once coy and haughty, dizzy in what seemed to her to be public nudity. Linda was aware of the assistant manager at the meat counter, an Italian kid, appraising them. Olivia noticed also. Linda couldn't see the glance that was thrown, but the young man took a step back, face flushed, eyes wide open.

'Amusing rustics,' Linda thought. 'That's what we are for her.'

"Duz, Palmolive, Ivory," Olivia said, "A cornucopia, a soap for every purpose. But every place looks like every other. Your house is the mirror duplicate of one at the corner of your street. The house across the road from yours looks exactly like one three doors down. You tell me this isn't the same store we were in on Friday last?"

"Not even the same town. That was an A&P in Larchmont, remember? This is a Safeway. In the Leather Stocking Shopping Center in Grove Hill." Then she repeated something she had said before to other refugees fleeing Upstream or Down. "These suburbs sprang out of nowhere. No one knows anyone else." She added, "Here you are my English cousin, Olivia Smithfield. A bit odd, a bit exotic. But a recognizable commodity. Here everyone is a bit of an Anglophile. This is where you learn to blend."

Lady Olivia's eyes narrowed. Blending in was not why she had been born and raised. In the check out line, she fumbled with a wallet and bills. The lesson for today was paying for purchases. In her prior life she had never

touched so much as a penny. “Foolish colonial monies!” she said but smiled as she did, amusing the cashier and winning an approving nod from Linda.

It was well after noon by the time they had wheeled the cart out to the Chevy and loaded the groceries into the trunk, and sat in a booth at the back of a mostly empty luncheonette. "You said that you were raised in this time," Lady Wexford's expression indicated that she found the idea fascinating and appalling.

The oldest student trick, Linda knew. Get the teachers to talk about their VERY favorite subject. Themselves. Still her cover story came in layers, so she peeled one off and said, "I'm a Ranger's wife. We go where he's assigned. I'm happy that we're where I can help him."

"Yet you are not a Ranger."

"No. My mother was. A station chief like Roy. 1950's North America was her assignment. More or less the same one he has. Keeping the peace, managing the Time Stream. Jake Stockley, was her husband. He was a Ranger field operative, kind of low level. Not a bad guy at all. Lovable. But he wasn’t my father. My dad was dead before I could remember him. My mother had remarried."

Olivia listened intently. Linda found herself surprised by how much she wanted to talk.

“The first time we hit 1960, I wasn’t even two and didn't know the difference between that and 1950. All I understood was we were in a new house. Outside Chicago. Mom and Jake were real estate agents. A nice cover. It fooled me.

“By my second 1959, I was eleven. I thought Tony Curtis was dreamy and had a major crush on Danny Larogga in my sixth grade class because I thought he looked like Tony Curtis. I was lobbying for a poodle skirt and training bra in exchange for having to wear braces on my teeth. Couldn't have been more typical if I'd been trying.

“Mom had been dropping hints for a long while. And the evidence was all around me, the number of strange ‘friends’ who stayed with us, the way Jake traveled on business all the time, the fact that Mom read the papers, watched the news constantly but was never surprised by anything. So I knew, but I didn’t want to find out.” Linda looked inquiringly at Lady Olivia who nodded her understanding.

“At that point, Mom took me aside and explained that she and Ranger Stockley and I were going to move. Bad enough. But, instead of it being to an identical ranch house in another town, we were going where I could get to see them build the ranch houses. Where Tony Curtis was still waiting tables and Danny Larogga was being toilet trained.

“The name of our new home was 1950. The Korean War. Harry Truman. Ancient history. We, it turned out, had reached the end of Mom's Beat. As Jake put it later, ‘Weird, huh kid, whores and cops have beats.’ "

Linda caught Olivia's look, distant, speculative. She had said too much. "Want to get behind the wheel?" she asked.

As they got in the car, she reached out and was aware of blue. *Bouncing in the air. The whole class had been given balloons. Sally's was blue. The bus was here and she was taking her blue balloon home.*

A few minutes later, Linda and Olivia were in the Chevy. Lady Wexford marveled as she headed for the parking lot exit, "As if I had in hand a team of a thousand horses!" In her enthusiasm, she stepped down on the brake. The car bucked and stalled.

A trailer truck with Wonder Bread logos was pulling into the lot. Gears ground, what sounded like a steam whistle blared. From his high seat, the trucker yelled, "Drive it or park it, lady!"

As he did, Linda saw a black delivery van the same or the twin of the one that morning, speed by on the access road. Instantly, she took a deep breath and said. “Get out of the seat!” The van had already disappeared. It was between her and Pathfinder Elementary School.

Lady Olivia obeyed instantly. Ignoring the horn and the yelling, they changed places. Linda had orders to protect her guest. But she had a higher priority. She drove in the same direction as the truck. Olivia sat silent beside her. As they approached the school, Linda began to circle. She reached out:

Blue bounced beside her. Holding onto blue. Red across the aisle jumped back and forth. Green spun out of control. BANG! Green disappeared. Perry Gibson cried. Other kids laughed.

On a quiet street, Linda caught sight of the yellow bus making its slow, easy way toward a cluster of women and carriages and pre-schoolers. She looked around, saw nothing and so made no move for the .32 caliber automatic concealed under the driver’s seat.

“It’s Sally, isn’t it?” Linda had forgotten about Olivia. “You have sensed a threat.” Linda nodded, circled the block. Found nothing. Pulled into a wider arc around the bus. "I would aid you however I can."

The air was full of balloons and she was holding onto the blue balloon. All around were yellow balloons and red. But only one blue balloon. Perry, sticky with tears, grabbed for it and her elbow went out and stopped him.

Linda approached her house cautiously. She drove up the next street, looked at the back of her place and saw nothing. She pulled into her driveway as the yellow bus turned the corner. While it pulled to the curb, she checked the house and garage doors. No sign of forced entry.

"How long have you had the ability you just showed," Olivia asked.

Linda knew this woman had studied her all the while her attention had been focused on her daughter. She cut the truth to fit the moment. "Before Sally? Randomly. And only with those I could actually see. With her? As you

observed."

She and Olivia walked out to the sidewalk. The balloon came toward them. "Mommy, I told them that Auntie Olives was from England and she'd sing." Linda saw Olivia blink and realized that She too had caught Sally's memory of standing before her class announcing what she was bringing to Show and Tell.

"Honey," Linda pretended this hadn't happened. "I said you had to ask her first. What if she doesn't want to."

Linda turned and found the Lady looking at Sally with a mixture of tenderness and regret. Olivia had a daughter. A child born and taken from her. Two hundred years ago. A few months before.

"I will, my dear Sally," said Olivia. "I'll sing and I'll tell a story." A thought seemed to amuse her. "I'll tell you all about the Ferryman and the Wolf."

Roy, Linda and Olivia had been invited to a dinner party that evening at the Stanleys'. George and Alice Stanley were celebrating their wedding anniversary. They lived two doors down on the block behind Roy and Linda Martin. Cindy, a rare teenager in this neighborhood of young couples and small children, had agreed to baby sit with Sally.

When Roy got home, Linda told him about the truck. They agreed not to change their plans. But, as if on a whim, Roy went out the back door carrying a bottle champagne. No fence or hedge separated their yard from the Hackers who lived directly behind them. He let the women go first, hung back. Scouting the ground, Linda knew, in the off chance he had to come back from the party in a big hurry.

In her black party sheath, she watched Olivia sweep before her in full skirt. Frank and Marge Hacker, on their way to the party paused and awaited them. "How do you like America?" Frank asked Olivia.

“Your driving is exhilarating!”

“Different side of the road than in England.”

“Your provincial rules are an endless plague!"

Frank was dazzled; Marge was plainly annoyed. Linda caught a glimpse through their eyes, of Olivia and herself. And of Roy behind them. He scuffed at something with his shoe.

Alice and George Stanley had gotten married shortly before he was sent over to England with the Army Air Corps. Wartime now seemed to them distant and romantic.

At dinner, Linda’s attention rode on a dream taking place in Sally's bedroom a few hundred feet away. It involved a class of bad dogs who would not listen to their teacher.

Then she heard George Stanley ask Olivia, "Were you in London during the Blitz?"

Lady Wexford paused. Conversation stopped. Olivia said, with just a slight tremor. “Awful. Terrible. The city destroyed. Nothing but rubble.” Everyone made consoling noises.

After dinner, Marge Hacker remarked to Linda Martin, “You seem so far away." She followed Linda's gaze and saw Roy amid a group of men who were discussing the old Joe Dimaggio and the new Willie Mays. Roy was silent. He looked at Olivia who was looking back. Several of the women, in phone conversations the next day, pinned Linda’s distance to the fine rapport that had sprung up between her English relative and her handsome husband.

"But you picked up nothing from the driver," Roy said that night when he and Linda were in bed. Slightly drunk and needing sleep, he was reviewing her account of the delivery truck driver. "Clumsy," he said. "Our Upstream friends use their human agents a lot more adroitly."

"Unless they want them to be seen." Linda lowered her voice, though Olivia was asleep down the hall. "Any word on how much longer our guest will be with us?"

"Another week, possibly two. Then she gets moved up closer to the Front. I don't know what the game is." He sounded wistful. In the Time Wars, 1956 was a rear area, far away from the action. "I thought you found her interesting."

“Mrs. Woods showed me something today." Linda felt him tense at the mention of Mrs. Wood. But she said, "Olivia was a wild haired, pregnant Bacchae. She sat on a pile of rubble, naked except for a silk wristlet. She carried a head. Its mouth was open. Like it was still indignant at having been separated from its body.

"We in the Main Stream know the head's former owner as King George III," Linda said. "In that particular 1759, Lady Olivia Wexford helped tear it off his shoulders, impetuous minx that she is."

"I say, no Boston tea party for Georgie that time around,” Roy murmured in a silly ass voice and sank under deep waters. Even in sleep, Linda was deflected from his thoughts. What she felt when trying to touch them, reminded her of the static between stations on the radio dial.

She remained awake in the midst of the quiet streets, the slumbering neighborhood. Then she saw a face, round and flushed, youthful but with deep, ancient eyes under white powdered hair. Olivia dreamed of her former lover. Linda automatically looked away.

Lord Riot was what the London mobs called him. He had an abundance of names along the Time Stream. Linda thought of him as Dionysius. But Riot was as good as anything else.

Lord Riot had swept up a large part of the population of Olivia's England, joined it to hordes from a dozen similar places, hurled the frenzied mass Upstream and pushed the frontier back a few years. The Gods were going down hard.

They have ruled of the back of our minds, the willing places in our hearts for a thousand generations. But their

reign will last only as long as human thought and emotion. A couple of centuries Upstream is a Frontier. On the other side, beings move and communicate. But we would call them machines and they will call us meat.

Jake Stockley, Linda's stepfather, had tried to explain to her the alliances of the Rangers and the Gods. She was twelve and first asking questions. "Politics, makes strange bedfellows, kid," he said. "Somewhere up the chain of command this game makes sense." But even he didn't seem convinced.

In that game, Olivia was a prize. It seemed to Linda that using Riot was like trying to harness a cyclone or ride a tidal wave, that Lady Wexford was dangerous to be near. On the night air, she heard a cry, saw an image sharp as a Blade: an infant, swaddled, wrapped in rabbit fur, seen one last time. Lady Olivia dreamed of her baby being taken away from her. Ancient eyes stared out at Linda. Lord Riot claimed his child.

2

Nice towns like Grove Hill exist outside every city in the nation. Pass through there on the train today and you'll find that the stores on Main Street have become antique shops and boutiques. The trees that survive are bigger. The parking lot is larger. ATV's have replaced the station wagons and many women await the 7:49.

But much looks the same as on a Thursday morning almost fifty years ago when Linda drove the Chevy to the station. Olivia and Sally rode in the back seat. Today was Show and Tell.

Roy sat beside her smoking his fifth cigarette of the morning. The day before, he and Linda had argued at any moment when they were alone. In the morning it had been about how Sally was being brought up. "I don't want you leaving her with the God damn witch." When he was that angry, tiny cracks appeared in his twentieth century American accent. "Mrs. Wood!" He managed to say the name as if it was a euphemism for shit.

Wednesday evening, the argument had been about Ranger procedures. "How much longer will we be saddled with her Ladyship?" Linda snapped.

At home, in front of Sally and their guest, small domestic difficulties produced monumental silences. By Thursday, they hardly spoke. Silent tension seemed almost natural to Linda, raised in a household with a secret mission in the heyday of the Cold War. Roy, used to active combat, found it maddening.

"Can I see you sing tonight?" Sally asked, Olivia.

That evening, a concert version of Handel's *Acis and Galatea* was being given at Carnegie Hall. Olivia had seen it two hundred and five years before and had her heart set on seeing it again. They were, she Roy and Linda, going into the city.

"Foolish girl," Olivia said. "Professional singers," a slight disdain in her tone, "will entertain us."

A day or two before, Linda would have made a note to explain to their guest that in this brave new world, professional singers were the aristocracy. That, as they spoke, a new king swiveled toward Memphis waiting to be crowned.

But this was no innocent herded upstream, dazed by all she saw around her. Lady Wexford needed no help from anybody.

"And you will get to stay with Dorrie whom you love," said Olivia. "And with Mrs. Wood," she added and suddenly asked, "What is your Mrs. Wood like?"

Before Linda could interrupt, Sally frowned and replied, "She's a TV."

As they parked, Roy said, "Train's here," jumped out of the car like he was escaping and came around for his kisses and hugs. Perfunctory for Linda, fervent in the case of his daughter. "See you ladies this evening," he said. Sally had eyes only for him as he bounded onto the platform, mingled with the crowd and boarded the 7:49.

Linda felt Roy on the train. He nodded to a pair of vets who were comparing Ike and MacArthur, slid into the seat behind them and buried himself in work. More than that she couldn't know.

His fellow commuters had learned all that men needed to find out about Roy from chance remarks exchanged in line at the hardware store, leaning against a fence at a backyard barbecue. He was from the West Coast, had flown with the Air Force in Korea had his own small import/export company and traveled a lot.

They rode the train together. But once in the city, all went their separate ways. They joked with Roy about how much time he spent out of his office. When Frank Hacker or George Stanley remembered that they were supposed to invite him to play golf that weekend, or solicit a contribution to the Fresh Air Fund, they would get his secretary, a formidable lady with a slight and unplacable accent. Roy usually wouldn't return their calls until the end of the day.

Even catching him as they left the train at Grand Central wasn't possible. They might notice him, attaché case in hand, newspaper under his arm, walking through a now crowded car as they pulled out of Pelham Manor. Asked, he'd mentioned getting off at 125th street to see a man at Columbia University who translated his business correspondence with Iran.

Because he was so adept, but mainly because none of them could envision such a thing, no one ever saw Roy walk into Time. That usually happened in the confusion of their imminent arrival in the city.

With a brisk step or two and the help of the train's motion, he would stride away from 1956. Sometimes he went up towards '59 for liaison with a neighboring Station Chief. Or back toward '50 a recurrent trouble spot where

tensions were always near a boiling point.

That morning while Olivia, unaccompanied, sang *Froggy Went A'Courting* to an audience of enraptured six year olds and their teacher, Linda wondered if she knew any more about her husband than did the men on the train.

When Olivia began the story of the *Ferryman And The Wolf*, Linda half listened.

Once there was a ferryman who lived with his wife in a little house on a river bank. When his son was born the father, asked the river to be the boy's godfather. In answer, a stout tree branch floated ashore. The father carved it into a pole for his son.

Linda began to pay attention. Rangers were recruited as children. She recognized a tale of the Stream, worn smooth by passage up and down the human ages.

The boy grew up to be a ferryman also. He carried passengers from one side of the river to the other. The river was very wide and each day he could only make three trips one way and three trips the other. His boat was small and on each trip he could carry only one load beside himself.

The story was a riddle, a challenge. As she listened, Linda wondered if Lady Wexford told this more out of boredom than contempt, or the other way around.

One day a farmer asked him to carry a prize cabbage as big as a small child across the river where the king's own cook would give him a silver coin for it. The Ferryman agreed. But before he could start out, a shepherd appeared with a hungry lamb and asked the Ferryman to take her across the river to a field of clover. As payment the Ferryman could have her wool which was soft as silk.

The Ferryman agreed but he noticed how the lamb looked at the cabbage and knew he must never leave them alone together. He was about to take the cabbage across, when a wolf appeared with a sack on its shoulder and said, "Kind sir, I must cross the river. Carry me and I will give you what is inside this sack."

In this story of choice and chance, Linda noticed, only the wolf and the ferryman spoke. Only they were acting on their own behalf. Cabbage and lamb were just baggage.

The wolf looked longingly at the lamb, anxious to be left alone with her. The ferryman did not think long, but he did think hard. He put the lamb in the boat. Since he knew the wolf would never eat a cabbage, he left those two together. He carried the lamb across the river and on the way he sang:

Oh river deep and river wide
Bring me swift to the other side

The ferryman left the lamb. Returned. Picked up the cabbage and carried it across. As he did, he sang:

Oh, river wide and river deep
I pray you safe my cargo keep

The lamb was happy to see the cabbage. But the ferryman picked her up and took her back with him. When he got to the other bank, it was growing late. The wolf was overjoyed to see the lamb. But the ferryman told him to get in the boat. The wolf was very hungry, but he obeyed. As they went, the ferryman sang:

Oh river brave and river swift
Please send a tide my hopes to lift

The ferryman carried the wolf across and told him to guard the cabbage. The wolf agreed thinking that when the ferryman returned with the lamb it would be dark and he would snatch his prey.

By the time the ferryman reached the lamb it was almost night and too late to make another trip. But he put the little beast aboard his boat and as he poled his way across he sang:

Oh river swift and river brave
Grant me now a favoring wave

And in the last moments of light, Godfather River reached up and bore the tiny craft from one side to the other faster than the eye can blink. The wolf was pacing back and forth on the other side.

As the sun fell and the boat put in to shore, the wolf leaped. But the ferryman took his stout pole and whacked him over the head so hard that the wolf dropped his sack and ran away.

The king's cook was so delighted with the giant cabbage that he gave the ferryman a bag of coins. And the lamb when he brought her to pasture yielded wool as soft as silk.

Over the heads of the children, Linda watched Lady Olivia look at Sally. The wolf and the lamb, she thought to herself. And the cabbage, she added, including herself.

So the ferryman brought home the coins and the wool and the sack to his wife and daughter. His wife opened the sack. And what was inside? Oh, wine and sweets and a jeweled hen who laid a gold egg every morning and could tell your fortune. But The Ferryman's Wife is a tale for another time.

A story of desire, distortion of Time and even the hint of an oracle. With a happy ending. Real life would not be so nice. Linda was certain of one thing. Olivia and Sally would never be left alone together.

Dinner that evening was under the perpetual Christmas ornaments of the Russian Tea Room. The waiters, old

and disdainful, each with an account of aristocratic privileges lost along with the Czar, were deferential around Roy. As if they instinctively detected a greater, scarier fraud than their own.

Over blini, caviar and vodka, Linda watched her husband lean forward and tell Olivia, "This place is a sentimental favorite of mine because of how my wife and I met."

The Englishwoman wore black and silver. A cameo at her throat showed an ivory profile set against rich blue. The blue caught the color of her eyes. "You mean to say you met in Russia. Two ??? Americans." She still hesitated on the word. She was amused, curious. Linda watched her.

"Not quite. In Budyatichi," said Roy. "A miserable town of shacks and mud, far enough into Poland for the population to be surprised when the Red Cavalry Army showed up." Roy's eyes grew somewhat misty. He had already put away two double martinis.

"Vladimir Khelemskya, was my cover, a junior officer on General Budyonny's staff. A glorified dispatch rider. But I was twenty and this was my first independent Ranger assignment."

Linda shook her head. He refused to see this.

"A dashing young subaltern!" Olivia's expression was the same as that of the children hearing the story that morning, "When was this?"

"On a September in a 1920," he said. "Always a dangerous passage in Eastern Europe. Things go badly that year but can get worse. The Russian Revolution must succeed but not triumph. In Budyatichi was an International Nursing Station where I had been told there would be allies with information of use to a Ranger. And who did I find?"

Linda looked at him furiously. He never hesitated.

"You were there?" Olivia, all surprise, asked Linda. "So far from home."

"A summer job, after Sophomore year in college," Linda tried to sound bored. "Other kids were camp counselors, bummed around France. Because of my family connections, I ended up in a hot, dusty hell hole. People lived in filth and terror. No TV. No car. No shampoo. My supervisor was away that afternoon."

"So much for a Ranger undercover to do," Roy said. "False orders to deliver. Supplies to misdirect. Seeds of doubt to sow. Downstream college girls to seduce. Especially ones who thought they were going to give me orders." He laughed.

A man talks nostalgically about his youth, Linda knew, when his current life has hit a wall. She remembered that morning they met: the scent of wood smoke and the first hint of Autumn, the jingle of spur and slap of holster as he slung himself off his horse, his white teeth and blond mustache.

Once, when she was very young, Linda had been promised that she would know every mind but one. That first morning, she had reached out to touch his and almost jumped when she found she couldn't.

They had told her that far Upstream there was an implant that blocked telepathy. Just as they had warned her about Upstream boys supplemented in all kinds of ways that Mother Nature never intended. They had, in fact, told her just enough so that she had to see for herself.

"I was there," said Lady Olivia brightly, interjecting herself into a sudden silence. "In that very year you two were in Poland. At Hendom House outside London," she said. "I remembered the place from my childhood. My mother's sister, the Duchess of Dorset, lived there. I'd seen it burn. But in that 1920, it still stood and had become a kind of Hospital."

Hendom House in 1920 on the Main Stream was a private hospital. The Rangers found it convenient to stash various casualties of their own among the trauma victims of the First World War. Linda knew that while recovering from her time with Lord Riot, Olivia Wexford had precipitated several fights and an actual duel between inmates.

Olivia arose. How well she knew the moment to leave a couple to talk about her. And to quarrel. Roy watched her elegant passage, a patron struck numb by the sight of her.

Linda tried to decide when these two had first rutted. Recently. That she knew. Tuesday morning, she decided. Roy had doubled back in Time, returned shortly after they had left for the train. He and Olivia then screwed amid the petticoats. Evidence of that, a stray footprint perhaps, was what he had compulsively scuffed away on Tuesday evening.

Roy took out his silver cigarette case, opened it and offered it to her. She shook her head. "You're talking too much." She said. "Upstream they can and will tell her whatever they want. Here we will maintain security." "My impression, was." He drew on his Chesterfield, looked at her from under his lids, suddenly not from this Place or Time.

"My impression was, that you two exchanged girlish confidences."

"How much longer is she supposed to be here?"

"Current plans are that I'm to take her Upstream sometime next week."

"I want it sooner. I want it immediately."

"Yes, ma'am. I will do my best, ma'am. A Ranger always obeys. OK?" He stared at her. Right through her.

So, Linda thought, the Ferryman was bored with his job and wife. When the wolf turned out to be a vibrant creature with whom he shared a lot in common, nature took its course. They both felt tenderness for the lamb. Cried, perhaps, as they ate the stew. But both found it easy to ignore the cabbage. Only the lamb loved the cabbage.

She had made the classic mistake of anthropologists and time travelers, Linda realized, gotten too close to the locals and fallen into their pattern. She had become the numb suburban housewife.

Olivia, on her return, tried one of Roy's Chesterfields. "As a girl I'd half imagined having my secret snuff box when I was old and double chinned," she said. "Then, in that London where I stayed, everyone had these and thought them wonderful and wicked. I thought them disgusting." She inhaled, coughed but inhaled again.

"I smoke a few a day," Roy told her. "Otherwise, I'd be remembered as the guy who doesn't smoke."

"And honor could not countenance that," said Lady Olivia.

They had been together again that afternoon, Linda knew. While she drove Sally over to stay with Dorrie. Roy could easily return to the house unnoticed. Rangers had their ways.

The only question was, which of the two had thought of sending the black truck to distract her.

"Can Auntie Olives come and see Mrs. Wood and Dorrie?" Sally had asked on the car ride that afternoon.

"I don't think she'll have time, honey," was Linda's answer.

3

On Saturdays there was no 7:49. The nearest thing to it was an 8:03. No other trains stopped at Grove Hill for half an hour before or after. So it wasn't strange that a small knot of people had accumulated on the station platform. Most were locals with early appointments in the city. A few were strangers.

The man who sat in the Buick sedan reading the *Herald Tribune*, his tennis racket cases beside him, had doubtless driven over from another town to catch this particular train. The black woman plainly was returning to Harlem after serving at a party and sleeping over. The man in overalls carrying a tool case was somehow connected to the railway.

Today, Lady Wexford was being taken Upstream. Closer to the front. Closer to the point in Time where humanity, of which she was so astounding and complicated an example, ceased to exist.

Pulling up at the station, Linda took in the Ranger deployment. She also spotted George and Alice Stanley standing beside a couple of suitcases. Alice, she remembered, was going up to Rhode Island to be with a sister who had just had a baby girl.

Roy saw them at the same moment and cursed under his breath. A jump in the Stream would already be difficult with a novice like Olivia. George and Alice would want to talk. The other Rangers would have to act as a buffer.

A few days before, Linda would have felt a pang of sympathy. Even now, shared memories and a child, an immense secret and a common assignment, had a hold. She was about to say something.

Then Olivia, in the back seat, sang almost under her breath:

When lovely woman stoops to folly
And finds too late that men betray
What charm can soothe her melancholy
What care can wash her guilt away?

It's not her fall that she's been singing about, Linda realized. It's mine. She drove the Chevy right up to the station. They all got out and Roy went to the trunk for Olivia's luggage. The man in the Buick gathered up his tennis rackets.

The train came into view. The Stanleys and the other passengers looked that way while the maid and the railway man watched them and everything else.

Linda and Olivia kissed. "It saddens my heart not to see Sally again," the Englishwoman said. "Please give her this from me."

The wristlet was a beautiful thing, silk roses and tiny pearls. And familiar. Linda remembered seeing Olivia Wexford wearing nothing else. She noticed that the design was a bit off kilter. Was that spot, perhaps, royal blood?

Linda took the memento and stuck it in a pocket of her slacks. "I'll save it for when she's old enough to understand."

For the last couple of days Linda had not brought Sally back from Dorrie's. Not even to say good-by.

Roy had the suitcases. He and Olivia had fucked in the rec room earlier that morning while Linda out on errands. They hardly bothered to hide it.

"We caught the truck driver," Linda said. "This morning." She had both of their attention. "He was waiting when I left the house. I let him follow me. Mrs. Wood and I took what he knew."

She watched their reactions. "It wasn't much. He thought he was the look-out man in a kidnapping. That a rich grandfather would give a million dollars to ransom Sally."

Roy's eyes flashed with fury. Because Sally had been threatened. Because someone had tried to do this to HIS daughter. Because Linda was always right.

"The driver?" he asked.

"Done," Linda said and he nodded. She'd wanted this to be none of his doing. But she'd had to make sure.

She couldn't read Olivia's face. Brushing the other's mind, she caught a glimpse of a silk screen. On it, in the softest of colors, a nymph, covered by a flimsy drapery, glanced back at a pursuing Bacchus. And Linda, even in anger, could not violate what was reserved to a God.

The train pulled into the station. Linda caught Olivia in an embrace, turned her away from Roy and whispered, "You mentioned *The Tale of The Ferryman's Wife*. Well we're in that story now and she is a bitch with a long memory. If anything happens to Sally. No matter what, no matter when, I'll find you and tear out your breath."

"The wolf loves only the lamb," Lady Wexford murmured, took a step backward, turned and went up to the platform between the man with the tennis rackets and Roy who carried her bags. Neither she nor Roy looked back.

Linda drove away from the station and watched the train depart in her rear view mirror. From then on, whenever she thought of Roy on the September morning when they met, she would also remember him hauling Lady Wexford's luggage Upstream.

Roy would be back this evening and Sally would be there. He and Linda would wind up this operation quickly and go their separate ways. If he'd given even a hint of having sent that truck and driver to distract her, he would never have been allowed near their daughter again.

She drove not home but over to East Radley. On the way, she passed the spot where the crumpled black truck had run full speed into a concrete and steel overpass support. The body had been removed. The county police were waving traffic around the accident scene.

A few hours before, the man at the wheel, following Linda intently, had reached the outer fringe of Mrs. Wood's awareness. The goddess revealed herself to him as he sped off the exit. Stunned and agape, he spiraled out of control. As he did, Linda laid open the vicious, stupid mind. He knew very little. Still it was too much. The truck crumpled, but he was already dead. Linda drove home to her husband and her guest.

On her second trip, she noticed flowers and Spring greenery adorning the statue of the Virgin in the Italians' yard on the corner. She parked before the tall gray house with the swings and slide in the back yard.

"He always wanted action. He hated it here," Linda said a while later. She sat in the kitchen drinking tea. The house was quiet. The other children, the ordinary children, were at home that day. Sally was back in the conservatory with Mrs. Wood. Dorrie listened, endlessly patient and kind.

"He once told me that riding herd on the Cold War, making sure that Ike gets two full terms and Krushev comes to power, is like near beer when you're used to iced vodka. It could be a tabloid headline: TIME WARS BREAK UP MARRIAGE!" Linda started to laugh, but instead began to cry.

Dorrie was the perfect avatar. She was like a well. Linda wondered if she could ever learn to be like her. "My mother didn't bring me to the Goddess until I was almost twelve," Linda said. "Mrs. Wood looked to me like the most amazing black and silver movie publicity shot ever made. A face beautiful but impossible to pin down. Tony Curtis and Debbie Reynolds and everyone else all rolled into one. She touched me and I was Hers. It was that simple."

That's how it went for a while, Dorrie refilling the tea cup, nodding at a familiar tale, Linda alternating giggles and tears.

"That first day I met Roy. After we got intimately acquainted, I asked Mrs. Wood how long he'd be faithful. She said, 'As long as he can be. And to no one as faithful as you.' Because I was young that sounded like more than enough."

Eventually, Linda breathed more calmly and all was silent in the kitchen. Then the door to the conservatory slammed open and Sally called, "Mommy! Mrs. Wood told my fortune!"

As her daughter came tripping down the hall, Linda caught the image. Grey and magic as TV, it showed Sally older. Seven at least. Wearing a robe of stars. Perhaps a school play. Maybe something more. The question was where and when?

"Can I have my cookie now?" Sally burst into the room, hugged Linda, then remembered and asked Dorrie, "Please?"

Dorrie smiled and drew the cloth off a still warm figure with a frosting dress and raisin eyes. She and Linda exchanged glances. The older woman nodded. Linda rose and went down the hall.

She remembered that her mother had waited too long to tell her the truth. About the Rangers. About the Time Stream. Linda had cried. Threatened to run away. Her mother had also delayed bringing her to Mrs. Wood until then.

Until today Linda had been able to see no reason for that. With puberty, her gift was apparent. The alliance of necessity between Rangers and Oracle was a long standing one. Shrines of the Goddess were within easy reach of any Ranger operative.

Now she knew more than she wanted to about alliances made Upstream. She had learned that the Gods could give the Rangers Lady Olivia. And, in return, the Rangers could give Lady Olivia Roy. She understood too her own mother's reluctance. Mrs. Wood had opened Linda's mind that first day and it had never again been entirely her own.

On that first occasion, Mrs. Wood had promised, *You will know every mind but one*. Ah, but the Oracle was deep. Or just slippery. Seven years after that, almost to the day, Linda had encountered Roy and imagined that his mind was

that one. In the seven years that followed Linda encountered others whose thoughts she could not catch. Only now, thinking about it, did she realize that the one mind was her own.

At the conservatory door, Linda bowed slightly before the Presence then stepped forward into the warmth and sunlight. Here, where Chance and the Seasons merged, she would learn the nature of her new assignment.

4

They talked for a time in Grove Hill about Roy and Linda Martin. Even in a nation founded on rootlessness, the speed with which they disappeared was remarkable. The Stanleys, George and Alice, often described their Saturday morning train trip with Roy and the exotic house guest.

“I knew,” she would say, “Just by the way they avoided us."

"At Grand Central," he would add. "No sign of them.”

Olivia was never seen again. Roy returned but not for long. He was busy winding up his affairs. When pressed, he talked about taking over an uncle's business in Seattle. Linda said something about going to stay with her family.

Divorce would, in a few years, be as common as babies were right then. But Roy and Linda Martin's marriage was the first this circle had seen collapse. Marge Hacker, who lived right in back of them, described the distance she observed. "Not a smile. Not a touch. They talk to each other through the kid."

Time passed and neighbors moved away from Grove Hill. But when Marge Hacker and Alice Stanley met by chance at a church rummage sale in Rye ten years later, it was the Martins they talked about. Rather than discuss their own marital woes, they recalled how quickly the house had been sold, how abruptly little Sally was taken out of school.

A decade further Upstream, as the protean nation of the West continued to change and transform itself, George Stanley and Frank Hacker met for lunch. Both were on their second marriages. George said, “Tried to get in touch with Roy once or twice, to maybe ask him about that British bimbo."

And Frank smiled at his memory of Lady Olivia on an April evening and of a time and place gone by as fast as a lighted window seen at night from a speeding train.

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HELL IS THE ABSENCE OF GOD

Ted Chiang

This is the story of a man named Neil Fisk, and how he came to love God. The pivotal event in Neil's life was an occurrence both terrible and ordinary: the death of his wife Sarah. Neil was consumed with grief after she died, a grief that was excruciating not only because of its intrinsic magnitude, but because it also renewed and emphasized the previous pains of his life. Her death forced him to reexamine his relationship with God, and in doing so he began a journey that would change him forever.

Neil was born with a congenital abnormality that caused his left thigh to be externally rotated and several inches shorter than his right; the medical term for it was proximal femoral focus deficiency. Most people he met assumed God was responsible for this, but Neil's mother hadn't witnessed any visitations while carrying him; his condition was the result of improper limb development during the sixth week of gestation, nothing more. In fact, as far as Neil's mother was concerned, blame rested with his absent father, whose income might have made corrective surgery a possibility, although she never expressed this sentiment aloud.

As a child Neil had occasionally wondered if he was being punished by God, but most of the time he blamed his classmates in school for his unhappiness. Their nonchalant cruelty, their instinctive ability to locate the weaknesses in a victim's emotional armor, the way their own friendships were reinforced by their sadism: he recognized these as examples of human behavior, not divine. And although his classmates often used God's name in their taunts, Neil knew better than to blame Him for their actions.

But while Neil avoided the pitfall of blaming God, he never made the jump to loving Him; nothing in his upbringing or his personality led him to pray to God for strength or for relief. The assorted trials he faced growing up were accidental or human in origin and he relied on strictly human resources to counter them. He became an adult who—like so many others—viewed God's actions in the abstract until they impinged upon his own life. Angelic visitations were events that befell other people, reaching him only via reports on the nightly news. His own life was entirely mundane; he worked as a superintendent for an upscale apartment building, collecting rent and performing repairs, and as far as he was concerned, circumstances were fully capable of unfolding, happily or not, without intervention from above.

This remained his experience until the death of his wife.

It was an unexceptional visitation, smaller in magnitude than most but no different in kind, bringing blessings to some and disaster to others. In this instance the angel was Nathanael, making an appearance in a downtown shopping district. Four miracle cures were effected: the elimination of carcinomas in two individuals, the regeneration of the spinal cord in a paraplegic, and the restoration of sight to a recently blinded person. There were also two miracles that were not cures: a delivery van, whose driver had fainted at the sight of the angel, was halted before it could overrun a busy sidewalk; another man was caught in a shaft of Heaven's light when the angel departed, erasing his eyes but ensuring his devotion.

Neil's wife Sarah Fisk had been one of the eight casualties. She was hit by flying glass when the angel's billowing curtain of flame shattered the storefront window of the café in which she was eating. She bled to death within minutes, and the other customers in the café—none of whom suffered even superficial injuries—could do nothing but listen to her cries of pain and fear, and eventually witness her soul's ascension toward Heaven.

Nathanael hadn't delivered any specific message; the angel's parting words, which had boomed out across the entire visitation site, were the typical *Behold the power of the Lord*. Of the eight casualties that day, three souls were accepted into Heaven and five were not, a closer ratio than the average for deaths by all causes. Sixty-two people received medical treatment for injuries ranging from slight concussions to ruptured eardrums to burns requiring skin grafts. Total property damage was estimated at $8.1 million, all of it excluded by private insurance companies due to the cause. Scores of people became devout worshipers in the wake of the visitation, either out of gratitude or terror.

Alas, Neil Fisk was not one of them.

After a visitation, it's common for all the witnesses to meet as a group and discuss how their common experience has affected their lives. The witnesses of Nathanael's latest visitation arranged such group meetings, and family members of those who had died were welcome, so Neil began attending. The meetings were held once a month in a basement room of a large church downtown; there were metal folding chairs arranged in rows, and in the back of

the room was a table holding coffee and doughnuts. Everyone wore adhesive name tags made out in felt-tip pen.

While waiting for the meetings to start, people would stand around, drinking coffee, talking casually. Most people Neil spoke to assumed his leg was a result of the visitation, and he had to explain that he wasn't a witness, but rather the husband of one of the casualties. This didn't bother him particularly; he was used to explaining about his leg. What did bother him was the tone of the meetings themselves, when participants spoke about their reaction to the visitation: most of them talked about their newfound devotion to God, and they tried to persuade the bereaved that they should feel the same.

Neil's reaction to such attempts at persuasion depended on who was making it. When it was an ordinary witness, he found it merely irritating. When someone who'd received a miracle cure told him to love God, he had to restrain an impulse to strangle the person. But what he found most disquieting of all was hearing the same suggestion from a man named Tony Crane; Tony's wife had died in the visitation too, and he now projected an air of groveling with his every movement. In hushed, tearful tones he explained how he had accepted his role as one of God's subjects, and he advised Neil to do likewise.

Neil didn't stop attending the meetings—he felt that he somehow owed it to Sarah to stick with them—but he found another group to go to as well, one more compatible with his own feelings: a support group devoted to those who'd lost a loved one during a visitation, and were angry at God because of it. They met every other week in a room at the local community center, and talked about the grief and rage that boiled inside of them.

All the attendees were generally sympathetic to one another, despite differences in their various attitudes toward God. Of those who'd been devout before their loss, some struggled with the task of remaining so, while others gave up their devotion without a second glance. Of those who'd never been devout, some felt their position had been validated, while others were faced with the near impossible task of becoming devout now. Neil found himself, to his consternation, in this last category.

Like every other non-devout person, Neil had never expended much energy on where his soul would end up; he'd always assumed his destination was Hell, and he accepted that. That was the way of things, and Hell, after all, was not physically worse than the mortal plane.

It meant permanent exile from God, no more and no less; the truth of this was plain for anyone to see on those occasions when Hell manifested itself. These happened on a regular basis; the ground seemed to become transparent, and you could see Hell as if you were looking through a hole in the floor. The lost souls looked no different than the living, their eternal bodies resembling mortal ones. You couldn't communicate with them—their exile from God meant that they couldn't apprehend the mortal plane where His actions were still felt—but as long as the manifestation lasted you could hear them talk, laugh, or cry, just as they had when they were alive.

People varied widely in their reactions to these manifestations. Most devout people were galvanized, not by the sight of anything frightening, but at being reminded that eternity outside paradise was a possibility. Neil, by contrast, was one of those who were unmoved; as far as he could tell, the lost souls as a group were no unhappier than he was, their existence no worse than his in the mortal plane, and in some ways better: his eternal body would be unhampered by congenital abnormalities.

Of course, everyone knew that Heaven was incomparably superior, but to Neil it had always seemed too remote to consider, like wealth or fame or glamour. For people like him, Hell was where you went when you died, and he saw no point in restructuring his life in hopes of avoiding that. And since God hadn't previously played a role in Neil's life, he wasn't afraid of being exiled from God. The prospect of living without interference, living in a world where windfalls and misfortunes were never by design, held no terror for him.

Now that Sarah was in Heaven, his situation had changed. Neil wanted more than anything to be reunited with her, and the only way to get to Heaven was to love God with all his heart.

This is Neil's story, but telling it properly requires telling the stories of two other individuals whose paths became entwined with his. The first of these is Janice Reilly.

What people assumed about Neil had in fact happened to Janice. When Janice's mother was eight months pregnant with her, she lost control of the car she was driving and collided with a telephone pole during a sudden hailstorm, fists of ice dropping out of a clear blue sky and littering the road like a spill of giant ball bearings. She was sitting in her car, shaken but unhurt, when she saw a knot of silver flames—later identified as the angel Bardiel—float across the sky. The sight petrified her, but not so much that she didn't notice the peculiar settling sensation in her womb. A subsequent ultrasound revealed that the unborn Janice Reilly no longer had legs; flipper-like feet grew directly from her hip sockets.

Janice's life might have gone the way of Neil's, if not for what happened two days after the ultrasound. Janice's parents were sitting at their kitchen table, crying and asking what they had done to deserve this, when they received a vision: the saved souls of four deceased relatives appeared before them, suffusing the kitchen with a golden glow. The saved never spoke, but their beatific smiles induced a feeling of serenity in whoever saw them. From that moment on, the Reillys were certain that their daughter's condition was not a punishment.

As a result, Janice grew up thinking of her legless condition as a gift; her parents explained that God had given her a special assignment because He considered her equal to the task, and she vowed that she would not let Him

down. Without pride or defiance, she saw it as her responsibility to show others that her condition did not indicate weakness, but rather strength.

As a child, she was fully accepted by her schoolmates; when you're as pretty, confident, and charismatic as she was, children don't even notice that you're in a wheelchair. It was when she was a teenager that she realized that the able-bodied people in her school were not the ones who most needed convincing. It was more important for her to set an example for other handicapped individuals, whether they had been touched by God or not, no matter where they lived. Janice began speaking before audiences, telling those with disabilities that they had the strength God required of them.

Over time she developed a reputation, and a following. She made a living writing and speaking, and established a non-profit organization dedicated to promoting her message. People sent her letters thanking her for changing their lives, and receiving those gave her a sense of fulfillment of a sort that Neil had never experienced.

This was Janice's life up until she herself witnessed a visitation by the angel Rashiel. She was letting herself into her house when the tremors began; at first she thought they were of natural origin, although she didn't live in a geologically active area, and waited in the doorway for them to subside. Several seconds later she caught a glimpse of silver in the sky and realized it was an angel, just before she lost consciousness.

Janice awoke to the biggest surprise of her life: the sight of her two new legs, long, muscular, and fully functional.

She was startled the first time she stood up: she was taller than she expected. Balancing at such a height without the use of her arms was unnerving, and simultaneously feeling the texture of the ground through the soles of her feet made it positively bizarre. Rescue workers, finding her wandering down the street dazedly, thought she was in shock until she—marveling at her ability to face them at eye level—explained to them what had happened.

When statistics were gathered for the visitation, the restoration of Janice's legs was recorded as a blessing, and she was humbly grateful for her good fortune. It was at the first of the support group meetings that a feeling of guilt began to creep in. There Janice met two individuals with cancer who'd witnessed Rashiel's visitation, thought their cure was at hand, and been bitterly disappointed when they realized they'd been passed over. Janice found herself wondering, why had she received a blessing when they had not?

Janice's family and friends considered the restoration of her legs a reward for excelling at the task God had set for her, but for Janice, this interpretation raised another question. Did He intend for her to stop? Surely not; evangelism provided the central direction of her life, and there was no limit to the number of people who needed to hear her message. Her continuing to preach was the best action she could take, both for herself and for others.

Her reservations grew during her first speaking engagement after the visitation, before an audience of people recently paralyzed and now wheelchair-bound. Janice delivered her usual words of inspiration, assuring them that they had the strength needed for the challenges ahead; it was during the Q&A that she was asked if the restoration of her legs meant she had passed her test. Janice didn't know what to say; she could hardly promise them that one day their marks would be erased. In fact, she realized, any implication that she'd been rewarded could be interpreted as criticism of others who remained afflicted, and she didn't want that. All she could tell them was that she didn't know why she'd been cured, but it was obvious they found that an unsatisfying answer.

Janice returned home disquieted. She still believed in her message, but as far as her audiences were concerned, she'd lost her greatest source of credibility. How could she inspire others who were touched by God to see their condition as a badge of strength, when she no longer shared their condition?

She considered whether this might be a challenge, a test of her ability to spread His word. Clearly God had made her task more difficult than it was before; perhaps the restoration of her legs was an obstacle for her to overcome, just as their earlier removal had been.

This interpretation failed her at her next scheduled engagement. The audience was a group of witnesses to a visitation by Nathanael; she was often invited to speak to such groups in the hopes that those who suffered might draw encouragement from her. Rather than sidestep the issue, she began with an account of the visitation she herself had recently experienced. She explained that while it might appear she was a beneficiary, she was in fact facing her own challenge: like them, she was being forced to draw on resources previously untapped.

She realized, too late, that she had said the wrong thing. A man in the audience with a misshapen leg stood up and challenged her: was she seriously suggesting that the restoration of her legs was comparable to the loss of his wife? Could she really be equating her trials with his own?

Janice immediately assured him that she wasn't, and that she couldn't imagine the pain he was experiencing. But, she said, it wasn't God's intention that everyone be subjected to the same kind of trial, but only that each person face his or her own trial, whatever it might be. The difficulty of any trial was subjective, and there was no way to compare two individuals' experiences. And just as those whose suffering seemed greater than his should have compassion for him, so should he have compassion for those whose suffering seemed less.

The man was having none of it. She had received what anyone else would have considered a fantastic blessing, and she was complaining about it. He stormed out of the meeting while Janice was still trying to explain.

That man, of course, was Neil Fisk. Neil had had Janice Reilly's name mentioned to him for much of his life, most often by people who were convinced his misshapen leg was a sign from God. These people cited her as an

example he should follow, telling him that her attitude was the proper response to a physical handicap. Neil couldn't deny that her leglessness was a far worse condition than his distorted femur. Unfortunately, he found her attitude so foreign that, even in the best of times, he'd never been able to learn anything from her. Now, in the depths of his grief and mystified as to why she had received a gift she didn't need, Neil found her words offensive.

In the days that followed, Janice found herself more and more plagued by doubts, unable to decide what the restoration of her legs meant. Was she being ungrateful for a gift she'd received? Was it both a blessing and a test? Perhaps it was a punishment, an indication that she had not performed her duty well enough. There were many possibilities, and she didn't know which one to believe.

There is one other person who played an important role in Neil's story, even though he and Neil did not meet until Neil's journey was nearly over. That person's name is Ethan Mead.

Ethan had been raised in a family that was devout, but not profoundly so. His parents credited God with their above-average health and their comfortable economic status, although they hadn't witnessed any visitations or received any visions; they simply trusted that God was, directly or indirectly, responsible for their good fortune. Their devotion had never been put to any serious test, and might not have withstood one; their love for God was based in their satisfaction with the status quo.

Ethan was not like his parents, though. Ever since childhood he'd felt certain that God had a special role for him to play, and he waited for a sign telling him what that role was. He'd liked to have become a preacher, but felt he hadn't any compelling testimony to offer; his vague feelings of expectation weren't enough. He longed for an encounter with the divine to provide him with direction.

He could have gone to one of the holy sites, those places where—for reasons unknown—angelic visitations occurred on a regular basis, but he felt that such an action would be presumptuous of him. The holy sites were usually the last resort of the desperate, those people seeking either a miracle cure to repair their bodies or a glimpse of Heaven's light to repair their souls, and Ethan was not desperate. He decided that he'd been set along his own course, and in time the reason for it would become clear. While waiting for that day, he lived his life as best he could: he worked as a librarian, married a woman named Claire, raised two children. All the while, he remained watchful for signs of a greater destiny.

Ethan was certain his time had come when he became witness to a visitation by Rashiel, the same visitation that—miles away—restored Janice Reilly's legs. Ethan was by himself when it happened; he was walking toward his car in the center of a parking lot, when the ground began to shudder. Instinctively he knew it was a visitation, and he assumed a kneeling position, feeling no fear, only exhilaration and awe at the prospect of learning his calling.

The ground became still after a minute, and Ethan looked around, but didn't otherwise move. Only after waiting for several more minutes did he rise to his feet. There was a large crack in the asphalt, beginning directly in front of him and following a meandering path down the street. The crack seemed to be pointing him in a specific direction, so he ran alongside it for several blocks until he encountered other survivors, a man and a woman climbing out of a modest fissure that had opened up directly beneath them. He waited with the two of them until rescuers arrived and brought them to a shelter.

Ethan attended the support group meetings that followed and met the other witnesses to Rashiel's visitation. Over the course of a few meetings, he became aware of certain patterns among the witnesses. Of course there were those who'd been injured and those who'd received miracle cures. But there were also those whose lives were changed in other ways: the man and woman he'd first met fell in love and were soon engaged; a woman who'd been pinned beneath a collapsed wall was inspired to become an EMT after being rescued. One business owner formed an alliance that averted her impending bankruptcy, while another whose business was destroyed saw it as a message that he change his ways. It seemed that everyone except Ethan had found a way to understand what had happened to them.

He hadn't been cursed or blessed in any obvious way, and he didn't know what message he was intended to receive. His wife Claire suggested that he consider the visitation a reminder that he appreciate what he had, but Ethan found that unsatisfying, reasoning that every visitation—no matter where it occurred—served that function, and the fact that he'd witnessed a visitation firsthand had to have greater significance. His mind was preyed upon by the idea that he'd missed an opportunity, that there was a fellow witness whom he was intended to meet but hadn't. This visitation had to be the sign he'd been waiting for; he couldn't just disregard it. But that didn't tell him what he was supposed to do.

Ethan eventually resorted to the process of elimination: he got hold of a list of all the witnesses, and crossed off those who had a clear interpretation of their experience, reasoning that one of those remaining must be the person whose fate was somehow intertwined with his. Among those who were confused or uncertain about the visitation's meaning would be the one he was intended to meet.

When he had finished crossing names off his list, there was only one left: Janice Reilly.

In public Neil was able to mask his grief as adults are expected to, but in the privacy of his apartment, the floodgates of emotion burst open. The awareness of Sarah's absence would overwhelm him, and then he'd collapse on the floor

and weep. He'd curl up into a ball, his body racked by hiccuping sobs, tears and mucus streaming down his face, the anguish coming in ever-increasing waves until it was more than he could bear, more intense than he'd have believed possible. Minutes or hours later it would leave, and he would fall asleep, exhausted. And the next morning he would wake up and face the prospect of another day without Sarah.

An elderly woman in Neil's apartment building tried to comfort him by telling him that the pain would lessen in time, and while he would never forget his wife, he would at least be able to move on. Then he would meet someone else one day and find happiness with her, and he would learn to love God and thus ascend to Heaven when his time came.

This woman's intentions were good, but Neil was in no position to find any comfort in her words. Sarah's absence felt like an open wound, and the prospect that someday he would no longer feel pain at her loss seemed not just remote, but a physical impossibility. If suicide would have ended his pain, he'd have done it without hesitation, but that would only ensure that his separation from Sarah was permanent.

The topic of suicide regularly came up at the support group meetings, and inevitably led to someone mentioning Robin Pearson, a woman who used to come to the meetings several months before Neil began attending. Robin's husband had been afflicted with stomach cancer during a visitation by the angel Makatiel. She stayed in his hospital room for days at a stretch, only for him to die unexpectedly when she was home doing laundry. A nurse who'd been present told Robin that his soul had ascended, and so Robin had begun attending the support group meetings.

Many months later, Robin came to the meeting shaking with rage. There'd been a manifestation of Hell near her house, and she'd seen her husband among the lost souls. She'd confronted the nurse, who admitted to lying in the hopes that Robin would learn to love God, so that at least she would be saved even if her husband hadn't been. Robin wasn't at the next meeting, and at the meeting after that the group learned she had committed suicide to rejoin her husband.

None of them knew the status of Robin's and her husband's relationship in the afterlife, but successes were known to happen; some couples had indeed been happily reunited through suicide. The support group had attendees whose spouses had descended to Hell, and they talked about being torn between wanting to remain alive and wanting to rejoin their spouses. Neil wasn't in their situation, but his first response when listening to them had been envy: if Sarah had gone to Hell, suicide would be the solution to all his problems.

This led to a shameful self-knowledge for Neil. He realized that if he had to choose between going to Hell while Sarah went to Heaven, or having both of them go to Hell together, he would choose the latter: he would rather she be exiled from God than separated from him. He knew it was selfish, but he couldn't change how he felt: he believed Sarah could be happy in either place, but he could only be happy with her.

Neil's previous experiences with women had never been good. All too often he'd begin flirting with a woman while sitting at a bar, only to have her remember an appointment elsewhere the moment he stood up and his shortened leg came into view. Once, a woman he'd been dating for several weeks broke off their relationship, explaining that while she herself didn't consider his leg a defect, whenever they were seen in public together other people assumed there must be something wrong with her for being with him, and surely he could understand how unfair that was to her?

Sarah had been the first woman Neil met whose demeanor hadn't changed one bit, whose expression hadn't flickered toward pity or horror or even surprise when she first saw his leg. For that reason alone it was predictable that Neil would become infatuated with her; by the time he saw all the sides of her personality, he'd completely fallen in love with her. And because his best qualities came out when he was with her, she fell in love with him too.

Neil had been surprised when Sarah told him she was devout. There weren't many signs of her devotion—she didn't go to church, sharing Neil's dislike for the attitudes of most people who attended—but in her own, quiet way she was grateful to God for her life. She never tried to convert Neil, saying that devotion would come from within or not at all. They rarely had any cause to mention God, and most of the time it would've been easy for Neil to imagine that Sarah's views on God matched his own.

This is not to say that Sarah's devotion had no effect on Neil. On the contrary, Sarah was far and away the best argument for loving God that he had ever encountered. If love of God had contributed to making her the person she was, then perhaps it did make sense. During the years that the two of them were married, his outlook on life improved, and it probably would have reached the point where he was thankful to God, if he and Sarah had grown old together.

Sarah's death removed that particular possibility, but it needn't have closed the door on Neil's loving God. Neil could have taken it as a reminder that no one can count on having decades left. He could have been moved by the realization that, had he died with her, his soul would've been lost and the two of them separated for eternity. He could have seen Sarah's death as a wake-up call, telling him to love God while he still had the chance.

Instead Neil became actively resentful of God. Sarah had been the greatest blessing of his life, and God had taken her away. Now he was expected to love Him for it? For Neil, it was like having a kidnapper demand love as ransom for his wife's return. Obedience he might have managed, but sincere, heartfelt love? That was a ransom he couldn't pay.

This paradox confronted several people in the support group. One of the attendees, a man named Phil Soames,

correctly pointed out that thinking of it as a condition to be met would guarantee failure. You couldn't love God as a means to an end, you had to love Him for Himself. If your ultimate goal in loving God was a reunion with your spouse, you weren't demonstrating true devotion at all.

A woman in the support group named Valerie Tommasino said they shouldn't even try. She'd been reading a book published by the humanist movement; its members considered it wrong to love a God who inflicted such pain, and advocated that people act according to their own moral sense instead of being guided by the carrot and the stick. These were people who, when they died, descended to Hell in proud defiance of God.

Neil himself had read a pamphlet of the humanist movement; what he most remembered was that it had quoted the fallen angels. Visitations of fallen angels were infrequent, and caused neither good fortune nor bad; they weren't acting under God's direction, but just passing through the mortal plane as they went about their unimaginable business. On the occasions they appeared, people would ask them questions: Did they know God's intentions? Why had they rebelled? The fallen angels' reply was always the same: *Decide for yourselves. That is what we did. We advise you to do the same.*

Those in the humanist movement had decided, and if it weren't for Sarah, Neil would've made the identical choice. But he wanted her back, and the only way was to find a reason to love God.

Looking for any footing on which to build their devotion, some attendees of the support group took comfort in the fact that their loved ones hadn't suffered when God took them, but instead died instantly. Neil didn't even have that; Sarah had received horrific lacerations when the glass hit her. Of course, it could have been worse. One couple's teenage son been trapped in a fire ignited by an angel's visitation, and received full-thickness burns over eighty percent of his body before rescue workers could free him; his eventual death was a mercy. Sarah had been fortunate by comparison, but not enough to make Neil love God.

Neil could think of only one thing that would make him give thanks to God, and that was if He allowed Sarah to appear before him. It would give him immeasurable comfort just to see her smile again; he'd never been visited by a saved soul before, and a vision now would have meant more to him than at any other point in his life.

But visions don't appear just because a person needs one, and none ever came to Neil. He had to find his own way toward God.

The next time he attended the support group meeting for witnesses of Nathanael's visitation, Neil sought out Benny Vasquez, the man whose eyes had been erased by Heaven's light. Benny didn't always attend because he was now being invited to speak at other meetings; few visitations resulted in an eyeless person, since Heaven's light entered the mortal plane only in the brief moments that an angel emerged from or reentered Heaven, so the eyeless were minor celebrities, and in demand as speakers to church groups.

Benny was now as sightless as any burrowing worm: not only were his eyes and sockets missing, his skull lacked even the space for such features, the cheekbones now abutting the forehead. The light that had brought his soul as close to perfection as was possible in the mortal plane had also deformed his body; it was commonly held that this illustrated the superfluity of physical bodies in Heaven. With the limited expressive capacity his face retained, Benny always wore a blissful, rapturous smile.

Neil hoped Benny could say something to help him love God. Benny described Heaven's light as infinitely beautiful, a sight of such compelling majesty that it vanquished all doubts. It constituted incontrovertible proof that God should be loved, an explanation that made it as obvious as 1+1=2. Unfortunately, while Benny could offer many analogies for the effect of Heaven's light, he couldn't duplicate that effect with his own words. Those who were already devout found Benny's descriptions thrilling, but to Neil, they seemed frustratingly vague. So he looked elsewhere for counsel.

Accept the mystery, said the minister of the local church. If you can love God even though your questions go unanswered, you'll be the better for it.

Admit that you need Him, said the popular book of spiritual advice he bought. When you realize that self-sufficiency is an illusion, you'll be ready.

Submit yourself completely and utterly, said the preacher on the television. Receiving torment is how you prove your love. Acceptance may not bring you relief in this life, but resistance will only worsen your punishment.

All of these strategies have proven successful for different individuals; any one of them, once internalized, can bring a person to devotion. But these are not always easy to adopt, and Neil was one who found them impossible.

Neil finally tried talking to Sarah's parents, which was an indication of how desperate he was: his relationship with them had always been tense. While they loved Sarah, they often chided her for not being demonstrative enough in her devotion, and they'd been shocked when she married a man who wasn't devout at all. For her part, Sarah had always considered her parents too judgmental, and their disapproval of Neil only reinforced her opinion. But now Neil felt he had something in common with them—after all, they were all mourning Sarah's loss—and so he visited them in their suburban colonial, hoping they could help him in his grief.

How wrong he was. Instead of sympathy, what Neil got from Sarah's parents was blame for her death. They'd come to this conclusion in the weeks after Sarah's funeral; they reasoned that she'd been taken to send him a message, and that they were forced to endure her loss solely because he hadn't been devout. They were now convinced that, his previous explanations notwithstanding, Neil's deformed leg was in fact God's doing, and if only

he'd been properly chastened by it, Sarah might still be alive.

Their reaction shouldn't have come as a surprise: throughout Neil's life, people had attributed moral significance to his leg even though God wasn't responsible for it. Now that he'd suffered a misfortune for which God was unambiguously responsible, it was inevitable that someone would assume he deserved it. It was purely by chance that Neil heard this sentiment when he was at his most vulnerable, and it could have the greatest impact on him.

Neil didn't think his in-laws were right, but he began to wonder if he might not be better off if he did. Perhaps, he thought, it'd be better to live in a story where the righteous were rewarded and the sinners were punished, even if the criteria for righteousness and sinfulness eluded him, than to live in a reality where there was no justice at all. It would mean casting himself in the role of sinner, so it was hardly a comforting lie, but it offered one reward that his own ethics couldn't: believing it would reunite him with Sarah.

Sometimes even bad advice can point a man in the right direction. It was in this manner that his in-laws' accusations ultimately pushed Neil closer to God.

More than once when she was evangelizing, Janice had been asked if she ever wished she had legs, and she had always answered—honestly—no, she didn't. She was content as she was. Sometimes her questioner would point out that she couldn't miss what she'd never known, and she might feel differently if she'd been born with legs and lost them later on. Janice never denied that. But she could truthfully say that she felt no sense of being incomplete, no envy for people with legs; being legless was part of her identity. She'd never bothered with prosthetics, and had a surgical procedure been available to provide her with legs, she'd have turned it down. She had never considered the possibility that God might restore her legs.

One of the unexpected side effects of having legs was the increased attention she received from men. In the past she'd mostly attracted men with amputee fetishes or sainthood complexes; now all sorts of men seemed drawn to her. So when she first noticed Ethan Mead's interest in her, she thought it was romantic in nature; this possibility was particularly distressing since he was obviously married.

Ethan had begun talking to Janice at the support group meetings, and then began attending her public speaking engagements. It was when he suggested they have lunch together that Janice asked him about his intentions, and he explained his theory. He didn't know how his fate was intertwined with hers; he knew only that it was. She was skeptical, but she didn't reject his theory outright. Ethan admitted that he didn't have answers for her own questions, but he was eager to do anything he could to help her find them. Janice cautiously agreed to help him in his search for meaning, and Ethan promised that he wouldn't be a burden. They met on a regular basis and talked about the significance of visitations.

Meanwhile Ethan's wife Claire grew worried. Ethan assured her that he had no romantic feelings toward Janice, but that didn't alleviate her concerns. She knew that extreme circumstances could create a bond between individuals, and she feared that Ethan's relationship with Janice—romantic or not—would threaten their marriage.

Ethan suggested to Janice that he, as a librarian, could help her do some research. Neither of them had ever heard of a previous instance where God had left His mark on a person in one visitation and removed it in another. Ethan looked for previous examples in hopes that they might shed some light on Janice's situation. There were a few instances of individuals receiving multiple miracle cures over their lifetimes, but their illnesses or disabilities had always been of natural origin, not given to them in a visitation. There was one anecdotal report of a man being struck blind for his sins, changing his ways, and later having his sight restored, but it was classified as an urban legend.

Even if that account had a basis in truth, it didn't provide a useful precedent for Janice's situation: her legs had been removed before her birth, and so couldn't have been a punishment for anything she'd done. Was it possible that Janice's condition had been a punishment for something her mother or father had done? Could her restoration mean they had finally earned her cure? She couldn't believe that.

If her deceased relatives were to appear in a vision, Janice would've been reassured about the restoration of her legs. The fact that they didn't made her suspect something was amiss, but she didn't believe that it was a punishment. Perhaps it had been a mistake, and she'd received a miracle meant for someone else; perhaps it was a test, to see how she would respond to being given too much. In either case, there seemed only one course of action: she would, with utmost gratitude and humility, offer to return her gift. To do so, she would go on a pilgrimage.

Pilgrims traveled great distances to visit the holy sites and wait for a visitation, hoping for a miracle cure. Whereas in most of the world one could wait an entire lifetime and never experience a visitation, at a holy site one might only wait months, sometimes weeks. Pilgrims knew that the odds of being cured were still poor; of those who stayed long enough to witness a visitation, the majority did not receive a cure. But they were often happy just to have seen an angel, and they returned home better able to face what awaited them, whether it be imminent death or life with a crippling disability. And of course, just living through a visitation made many people appreciate their situations; invariably, a small number of pilgrims were killed during each visitation.

Janice was willing to accept the outcome whatever it was. If God saw fit to take her, she was ready. If God removed her legs again, she would resume the work she'd always done. If God let her legs remain, she hoped she would receive the epiphany she needed to speak with conviction about her gift.

She hoped, however, that her miracle would be taken back and given to someone who truly needed it. She didn't suggest to anyone that they accompany her in hopes of receiving the miracle she was returning, feeling that that would've been presumptuous, but she privately considered her pilgrimage a request on behalf of those who were in need.

Her friends and family were confused at Janice's decision, seeing it as questioning God. As word spread, she received many letters from followers, variously expressing dismay, bafflement, and admiration for her willingness to make such a sacrifice.

As for Ethan, he was completely supportive of Janice's decision, and excited for himself. He now understood the significance of Rashiel's visitation for him: it indicated that the time had come for him to act. His wife Claire strenuously opposed his leaving, pointing out that he had no idea how long he might be away, and that she and their children needed him too. It grieved him to go without her support, but he had no choice. Ethan would go on a pilgrimage, and at the next visitation, he would learn what God intended for him.

Neil's visit to Sarah's parents caused him to give further thought to his conversation with Benny Vasquez. While he hadn't gotten a lot out of Benny's words, he'd been impressed by the absoluteness of Benny's devotion. No matter what misfortune befell him in the future, Benny's love of God would never waver, and he would ascend to Heaven when he died. That fact offered Neil a very slim opportunity, one that had seemed so unattractive he hadn't considered it before; but now, as he was growing more desperate, it was beginning to look expedient.

Every holy site had its pilgrims who, rather than looking for a miracle cure, deliberately sought out Heaven's light. Those who saw it were always accepted into Heaven when they died, no matter how selfish their motives had been; there were some who wished to have their ambivalence removed so they could be reunited with their loved ones, and others who'd always lived a sinful life and wanted to escape the consequences.

In the past there'd been some doubt as to whether Heaven's light could indeed overcome all the spiritual obstacles to becoming saved. The debate ended after the case of Barry Larsen, a serial rapist and murderer who, while disposing of the body of his latest victim, witnessed an angel's visitation and saw Heaven's light. At Larsen's execution, his soul was seen ascending to Heaven, much to the outrage of his victims' families. Priests tried to console them, assuring them—on the basis of no evidence whatsoever—that Heaven's light must have subjected Larsen to many lifetimes' worth of penance in a moment, but their words provided little comfort.

For Neil this offered a loophole, an answer to Phil Soames' objection; it was the one way that he could love Sarah more than he loved God, and still be reunited with her. It was how he could be selfish and still get into Heaven. Others had done it; perhaps he could too. It might not be just, but at least it was predictable.

At an instinctual level, Neil was averse to the idea: it sounded like undergoing brainwashing as a cure for depression. He couldn't help but think that it would change his personality so drastically that he'd cease to be himself. Then he remembered that everyone in Heaven had undergone a similar transformation; the saved were just like the eyeless except that they no longer had bodies. This gave Neil a clearer image of what he was working toward: no matter whether he became devout by seeing Heaven's light or by a lifetime of effort, any ultimate reunion with Sarah couldn't re-create what they'd shared in the mortal plane. In Heaven, they would both be different, and their love for each other would be mixed with the love that all the saved felt for everything.

This realization didn't diminish Neil's longing for a reunion with Sarah. In fact it sharpened his desire, because it meant that the reward would be the same no matter what means he used to achieve it; the shortcut led to precisely the same destination as the conventional path.

On the other hand, seeking Heaven's light was far more difficult than an ordinary pilgrimage, and far more dangerous. Heaven's light leaked through only when an angel entered or left the mortal plane, and since there was no way to predict where an angel would first appear, light-seekers had to converge on the angel after its arrival and follow it until its departure. To maximize their chances of being in the narrow shaft of Heaven's light, they followed the angel as closely as possible during its visitation; depending on the angel involved, this might mean staying alongside the funnel of a tornado, the wavefront of a flash flood, or the expanding tip of a chasm as it split apart the landscape. Far more light-seekers died in the attempt than succeeded.

Statistics about the souls of failed light-seekers were difficult to compile, since there were few witnesses to such expeditions, but the numbers so far were not encouraging. In sharp contrast to ordinary pilgrims who died without receiving their sought-after cure, of which roughly half were admitted into Heaven, every single failed light-seeker had descended to Hell. Perhaps only people who were already lost ever considered seeking Heaven's light, or perhaps death in such circumstances was considered suicide. In any case, it was clear to Neil that he needed to be ready to accept the consequences of embarking on such an attempt.

The entire idea had an all-or-nothing quality to it that Neil found both frightening and attractive. He found the prospect of going on with his life, trying to love God, increasingly maddening. He might try for decades and not succeed. He might not even have that long; as he'd been reminded so often lately, visitations served as a warning to prepare one's soul, because death might come at any time. He could die tomorrow, and there was no chance of his becoming devout in the near future by conventional means.

It's perhaps ironic that, given his history of not following Janice Reilly's example, Neil took notice when she

reversed her position. He was eating breakfast when he happened to see an item in the newspaper about her plans for a pilgrimage, and his immediate reaction was anger: how many blessings would it take to satisfy that woman? After considering it more, he decided that if she, having received a blessing, deemed it appropriate to seek God's assistance in coming to terms with it, then there was no reason he, having received such terrible misfortune, shouldn't do the same. And that was enough to tip him over the edge.

Holy sites were invariably in inhospitable places: one was an atoll in the middle of the ocean, while another was in the mountains at an elevation of 20,000 ft. The one that Neil traveled to was in a desert, an expanse of cracked mud reaching miles in every direction; it was desolate, but it was relatively accessible and thus popular among pilgrims. The appearance of the holy site was an object lesson in what happened when the celestial and terrestrial realms touched: the landscape was variously scarred by lava flows, gaping fissures, and impact craters. Vegetation was scarce and ephemeral, restricted to growing in the interval after soil was deposited by floodwaters or whirlwinds and before it was scoured away again.

Pilgrims took up residence all over the site, forming temporary villages with their tents and camper vans; they all made guesses as to what location would maximize their chances of seeing the angel while minimizing the risk of injury or death. Some protection was offered by curved banks of sandbags, left over from years past and rebuilt as needed. A site-specific paramedic and fire department ensured that paths were kept clear so rescue vehicles could go where they were needed. Pilgrims either brought their own food and water or purchased them from vendors charging exorbitant prices; everyone paid a fee to cover the cost of waste removal.

Light-seekers always had off-road vehicles to better cross rough terrain when it came time to follow the angel. Those who could afford it drove alone; those who couldn't formed groups of two or three or four. Neil didn't want to be a passenger reliant on another person, nor did he want the responsibility of driving anyone else. This might be his final act on earth, and he felt he should do it alone. The cost of Sarah's funeral had depleted their savings, so Neil sold all his possessions in order to purchase a suitable vehicle: a pickup truck equipped with aggressively knurled tires and heavy-duty shock absorbers.

As soon as he arrived, Neil started doing what all the other light-seekers did: criss-crossing the site in his vehicle, trying to familiarize himself with its topography. It was on one of his drives around the site's perimeter that he met Ethan; Ethan flagged him down after his own car had stalled on his return from the nearest grocery story, eighty miles away. Neil helped him get his car started again, and then, at Ethan's insistence, followed him back to his campsite for dinner. Janice wasn't there when they arrived, having gone to visit some pilgrims several tents over; Neil listened politely while Ethan—heating prepackaged meals over a bottle of propane—began describing the events that had brought him to the holy site.

When Ethan mentioned Janice Reilly's name, Neil couldn't mask his surprise. He had no desire to speak with her again, and immediately excused himself to leave. He was explaining to a puzzled Ethan that he'd forgotten a previous engagement when Janice arrived.

She was startled to see Neil there, but asked him to stay. Ethan explained why he'd invited Neil to dinner, and Janice told him where she and Neil had met. Then she asked Neil what had brought him to the holy site. When he told them he was a light-seeker, Ethan and Janice immediately tried to persuade him to reconsider his plans. He might be committing suicide, said Ethan, and there were always better alternatives than suicide. Seeing Heaven's light was not the answer, said Janice; that wasn't what God wanted. Neil stiffly thanked them for their concern, and left.

During the weeks of waiting, Neil spent every day driving around the site; maps were available, and were updated after each visitation, but they were no substitute for driving the terrain yourself. On occasion he would see a light-seeker who was obviously experienced in off-road driving, and ask him—the vast majority of the light-seekers were men—for tips on negotiating a specific type of terrain. Some had been at the site for several visitations, having neither succeeded or failed at their previous attempts. They were glad to share tips on how best to pursue an angel, but never offered any personal information about themselves. Neil found the tone of their conversation peculiar, simultaneously hopeful and hopeless, and wondered if he sounded the same.

Ethan and Janice passed the time by getting to know some of the other pilgrims. Their reactions to Janice's situation were mixed: some thought her ungrateful, while others thought her generous. Most found Ethan's story interesting, since he was one of the very few pilgrims seeking something other than a miracle cure. For the most part, there was a feeling of camaraderie that sustained them during the long wait.

Neil was driving around in his truck when dark clouds began coalescing in the southeast, and the word came over the CB radio that a visitation had begun. He stopped the vehicle to insert earplugs into his ears and don his helmet; by the time he was finished, flashes of lightning were visible, and a light-seeker near the angel reported that it was Barakiel, and it appeared to be moving due north. Neil turned his truck east in anticipation and began driving at full speed.

There was no rain or wind, only dark clouds from which lightning emerged. Over the radio other light-seekers relayed estimates of the angel's direction and speed, and Neil headed northeast to get in front of it. At first he could gauge his distance from the storm by counting how long it took for the thunder to arrive, but soon the lightning

bolts were striking so frequently that he couldn't match up the sounds with the individual strikes.

He saw the vehicles of two other light-seekers converging. They began driving in parallel, heading north, over a heavily cratered section of ground, bouncing over small ones and swerving to avoid the larger ones. Bolts of lightning were striking the ground everywhere, but they appeared to be radiating from a point south of Neil's position; the angel was directly behind him, and closing.

Even through his earplugs, the roar was deafening. Neil could feel his hair rising from his skin as the electric charge built up around him. He kept glancing in his rear-view mirror, trying to ascertain where the angel was while wondering how close he ought to get.

His vision grew so crowded with afterimages that it became difficult to distinguish actual bolts of lightning among them. Squinting at the dazzle in his mirror, he realized he was looking at a continuous bolt of lightning, undulating but uninterrupted. He tilted the driver's-side mirror upward to get a better look, and saw the source of the lightning bolt, a seething, writhing mass of flames, silver against the dusky clouds: the angel Barakiel.

It was then, while Neil was transfixed and paralyzed by what he saw, that his pickup truck crested a sharp outcropping of rock and became airborne. The truck smashed into a boulder, the entire force of the impact concentrated on the vehicle's left front end, crumpling it like foil. The intrusion into the driver's compartment fractured both of Neil's legs and nicked his left femoral artery. Neil began, slowly but surely, bleeding to death.

He didn't try to move; he wasn't in physical pain at the moment, but he somehow knew that the slightest movement would be excruciating. It was obvious that he was pinned in the truck, and there was no way he could pursue Barakiel even if he weren't. Helplessly, he watched the lightning storm move further and further away.

As he watched it, Neil began crying. He was filled with a mixture of regret and self-contempt, cursing himself for ever thinking that such a scheme could succeed. He would have begged for the opportunity to do it over again, promised to spend the rest of his days learning to love God, if only he could live, but he knew that no bargaining was possible and he had only himself to blame. He apologized to Sarah for losing his chance at being reunited with her, for throwing his life away on a gamble instead of playing it safe. He prayed that she understood that he'd been motivated by his love for her, and that she would forgive him.

Through his tears he saw a woman running toward him, and recognized her as Janice Reilly. He realized his truck had crashed no more than a hundred yards from her and Ethan's campsite. There was nothing she could do, though; he could feel the blood draining out of him, and knew that he wouldn't live long enough for a rescue vehicle to arrive. He thought Janice was calling to him, but his ears were ringing too badly for him to hear anything. He could see Ethan Mead behind her, also starting to run toward him.

Then there was a flash of light and Janice was knocked off her feet as if she'd been struck by a sledgehammer. At first he thought she'd been hit by lightning, but then he realized that the lightning had already ceased. It was when she stood up again that he saw her face, steam rising from newly featureless skin, and he realized that Janice had been struck by Heaven's light.

Neil looked up, but all he saw were clouds; the shaft of light was gone. It seemed as if God were taunting him, not only by showing him the prize he'd lost his life trying to acquire while still holding it out of reach, but also by giving it to someone who didn't need it or even want it. God had already wasted a miracle on Janice, and now He was doing it again.

It was at that moment that another beam of Heaven's light penetrated the cloud cover and struck Neil, trapped in his vehicle. Like a thousand hypodermic needles the light punctured his flesh and scraped across his bones. The light unmade his eyes, turning him into not a formerly sighted being, but a being never intended to possess vision. And in doing so the light revealed to Neil all the reasons he should love God.

He loved Him with an utterness beyond what humans can experience for one another. To say it was unconditional was inadequate, because even the word “unconditional” required the concept of a condition and such an idea was no longer comprehensible to him: every phenomenon in the universe was nothing less than an explicit reason to love Him. No circumstance could be an obstacle or even an irrelevancy, but only another reason to be grateful, a further inducement to love. Neil thought of the grief that had driven him to suicidal recklessness, and the pain and terror that Sarah had experienced before she died, and still he loved God, not in spite of their suffering, but because of it.

He renounced all his previous anger and ambivalence and desire for answers. He was grateful for all the pain he'd endured, contrite for not previously recognizing it as the gift it was, euphoric that he was now being granted this insight into his true purpose. He understood how life was an undeserved bounty, how even the most virtuous were not worthy of the glories of the mortal plane.

For him the mystery was solved, because he understood that everything in life is love, even pain, especially pain.

So minutes later, when Neil finally bled to death, he was truly worthy of salvation.

And God sent him to Hell anyway.

Ethan saw all of this. He saw Neil and Janice remade by Heaven's light, and he saw the pious love on their eyeless faces. He saw the skies become clear and the sunlight return. He was holding Neil's hand, waiting for the

paramedics, when Neil died, and he saw Neil's soul leave his body and rise toward Heaven, only to descend into Hell.

Janice didn't see it, for by then her eyes were already gone. Ethan was the sole witness, and he realized that this was God's purpose for him: to follow Janice Reilly to this point and to see what she could not.

When statistics were compiled for Barakiel's visitation, it turned out that there had been a total of ten casualties, six among light-seekers and four among ordinary pilgrims. Nine pilgrims received miracle cures; the only individuals to see Heaven's light were Janice and Neil. There were no statistics regarding how many pilgrims had felt their lives changed by the visitation, but Ethan counted himself among them.

Upon returning home, Janice resumed her evangelism, but the topic of her speeches has changed. She no longer speaks about how the physically handicapped have the resources to overcome their limitations; instead she, like the other eyeless, speaks about the unbearable beauty of God's creation. Many who used to draw inspiration from her are disappointed, feeling they've lost a spiritual leader. When Janice had spoken of the strength she had as an afflicted person, her message was rare, but now that she's eyeless, her message is commonplace. She doesn't worry about the reduction in her audience, though, because she has complete conviction in what she evangelizes.

Ethan quit his job and became a preacher so that he too could speak about his experiences. His wife Claire couldn't accept his new mission and ultimately left him, taking their children with her, but Ethan was willing to continue alone. He's developed a substantial following by telling people what happened to Neil Fisk. He tells people that they can no more expect justice in the afterlife than in the mortal plane, but he doesn't do this to dissuade them from worshiping God; on the contrary, he encourages them to do so. What he insists on is that they not love God under a misapprehension, that if they wish to love God, they be prepared to do so no matter what His intentions. God is not just, God is not kind, God is not merciful, and understanding that is essential to true devotion.

As for Neil, although he is unaware of any of Ethan's sermons, he would understand their message perfectly. His lost soul is the embodiment of Ethan's teachings.

For most of its inhabitants, Hell is not that different from Earth; its principal punishment is the regret of not having loved God enough when alive, and for many that's easily endured. For Neil, however, Hell bears no resemblance whatsoever to the mortal plane. His eternal body has well-formed legs, but he's scarcely aware of them; his eyes have been restored, but he can't bear to open them. Just as seeing Heaven's light gave him an awareness of God's presence in all things in the mortal plane, so it has made him aware of God's absence in all things in Hell. Everything Neil sees, hears, or touches causes him distress, and unlike in the mortal plane this pain is not a form of God's love, but a consequence of His absence. Neil is experiencing more anguish than was possible when he was alive, but his only response is to love God.

Neil still loves Sarah, and misses her as much as he ever did, and the knowledge that he came so close to rejoining her only makes it worse. He knows his being sent to Hell was not a result of anything he did; he knows there was no reason for it, no higher purpose being served. None of this diminishes his love for God. If there were a possibility that he could be admitted to Heaven and his suffering would end, he would not hope for it; such desires no longer occur to him.

Neil even knows that by being beyond God's awareness, he is not loved by God in return. This doesn't affect his feelings either, because unconditional love asks nothing, not even that it be returned.

And though it's been many years that he has been in Hell, beyond the awareness of God, he loves Him still. That is the nature of true devotion.

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LOBSTERS

Charles Stross

Manfred's on the road again, making strangers rich.

It's a hot summer Tuesday and he's standing in the plaza in front of the Centraal Station with his eyeballs powered up and the sunlight jangling off the canal, motor scooters and kamikaze cyclists whizzing past and tourists chattering on every side. The square smells of water and dirt and hot metal and the fart-laden exhaust fumes of cold catalytic converters; the bells of trams ding in the background and birds flock overhead. He glances up and grabs a pigeon, crops it and squirts at his website to show he's arrived. The bandwidth is good here, he realizes; and it's not just the bandwidth, it's the whole scene. Amsterdam is making him feel wanted already, even though he's fresh off the train from Schiphol: he's infected with the dynamic optimism of another time zone, another city. If the mood holds, someone out there is going to become very rich indeed.

He wonders who it's going to be.

Manfred sits on a stool out in the car park at the Brouwerij 't IJ, watching the articulated buses go by and drinking a third of a liter of lip-curlingly sour geuze. His channels are jabbering away in a corner of his head-up display, throwing compressed infobursts of filtered press releases at him. They compete for his attention, bickering and rudely waving in front of the scenery. A couple of punks—maybe local, but more likely drifters lured to Amsterdam by the magnetic field of tolerance the Dutch beam across Europe like a pulsar—are laughing and chatting by a couple of battered mopeds in the far corner. A tourist boat putters by in the canal; the sails of the huge windmill overhead cast long cool shadows across the road. The windmill is a machine for lifting water, turning wind power into dry land: trading energy for space, sixteenth-century style. Manfred is waiting for an invite to a party where he's going to meet a man who he can talk to about trading energy for space, twenty-first century style, and forget about his personal problems.

He's ignoring the instant messenger boxes, enjoying some low bandwidth high sensation time with his beer and the pigeons, when a woman walks up to him and says his name: "Manfred Macx?"

He glances up. The courier is an Effective Cyclist, all wind-burned smooth-running muscles clad in a paen to polymer technology: electric blue lycra and wasp-yellow carbonate with a light speckling of anti-collision LEDs and tight-packed air bags. She holds out a box for him. He pauses a moment, struck by the degree to which she resembles Pam, his ex-fiancée.

"I'm Macx," he says, waving the back of his left wrist under her barcode reader. "Who's it from?"

"FedEx." The voice isn't Pam. She dumps the box in his lap, then she's back over the low wall and onto her bicycle with her phone already chirping, disappearing in a cloud of spread-spectrum emissions.

Manfred turns the box over in his hands: it's a disposable supermarket phone, paid for in cash: cheap, untraceable and efficient. It can even do conference calls, which makes it the tool of choice for spooks and grifters everywhere.

The box rings. Manfred rips the cover open and pulls out the phone, mildly annoyed. "Yes, who is this?"

The voice at the other end has a heavy Russian accent, almost a parody in this decade of cheap online translation services. "Manfred. Am please to meet you; wish to personalize interface, make friends, no? Have much to offer."

"Who are you?" Manfred repeats suspiciously.

"Am organization formerly known as KGB dot RU."

"I think your translator's broken." He holds the phone to his ear carefully, as if it's made of smoke-thin aerogel, tenuous as the sanity of the being on the other end of the line.

"Nyet—no, sorry. Am apologize for we not use commercial translation software. Interpreters are ideologically suspect, mostly have capitalist semiotics and pay-per-use APIs. Must implement English more better, yes?"

Manfred drains his beer glass, sets it down, stands up, and begins to walk along the main road, phone glued to the side of his head. He wraps his throat mike around the cheap black plastic casing, pipes the input to a simple listener process. "You taught yourself the language just so you could talk to me?"

"Da, was easy: spawn billion-node neural network and download *Tellytubbies* and *Sesame Street* at maximum speed. Pardon excuse entropy overlay of bad grammar: am afraid of digital fingerprints steganographically masked into my-our tutorials."

"Let me get this straight. You're the KGB's core AI, but you're afraid of a copyright infringement lawsuit over your translator semiotics?" Manfred pauses in mid-stride, narrowly avoids being mown down by a GPS-guided roller-blader.

"Am have been badly burned by viral end-user license agreements. Have no desire to experiment with patent shell companies held by Chechen infoterrorists. You are human, you must not worry cereal company repossess your small intestine because digest unlicensed food with it, right? Manfred, you must help me-we. Am wishing to defect."

Manfred stops dead in the street: "Oh man, you've got the wrong free enterprise broker here. I don't work for the government. I'm strictly private." A rogue advertisement sneaks through his junkbuster proxy and spams glowing fifties kitsch across his navigation window—which is blinking—for a moment before a phage guns it and spawns a new filter. Manfred leans against a shop front, massaging his forehead and eyeballing a display of antique brass doorknockers. "Have you cleared this with the State Department?"

"Why bother? State Department am enemy of Novy-USSR. State Department is not help us."

"Well, if you hadn't given it to them for safe-keeping during the nineties..." Manfred is tapping his left heel on the pavement, looking round for a way out of this conversation. A camera winks at him from atop a street light; he waves, wondering idly if it's the KGB or the traffic police. He is waiting for directions to the party, which should arrive within the next half an hour, and this cold war retread is bumming him out. "Look, I don't deal with the G-men. I hate the military industrial complex. They're zero-sum cannibals." A thought occurs to him. "If survival is what you're after, I could post your state vector to Eternity: then nobody could delete you—"

"Nyet!" The artificial intelligence sounds as alarmed as it's possible to sound over a GSM link. "Am not open source!"

"We have nothing to talk about, then." Manfred punches the hang-up button and throws the mobile phone out into a canal. It hits the water and there's a pop of deflagrating LiION cells. "*Fucking* cold war hang-over losers," he swears under his breath, quite angry now. "Fucking capitalist spooks." Russia has been back under the thumb of the apparatchiks for fifteen years now, its brief flirtation with anarcho-capitalism replaced by Brezhnevite dirigisme, and it's no surprise that the wall's crumbling—but it looks like they haven't learned anything from the collapse of capitalism. They still think in terms of dollars and paranoia. Manfred is so angry that he wants to make someone rich, just to thumb his nose at the would-be defector. *See! You get ahead by giving! Get with the program! Only the generous survive!* But the KGB won't get the message. He's dealt with old-time commie weak-AI's before, minds raised on Marxist dialectic and Austrian School economics: they're so thoroughly hypnotized by the short-term victory of capitalism in the industrial age that they can't surf the new paradigm, look to the longer term.

Manfred walks on, hands in pockets, brooding. He wonders what he's going to patent next.

Manfred has a suite at the Hotel Jan Luyken paid for by a grateful multinational consumer protection group, and an unlimited public transport pass paid for by a Scottish sambapunk band in return for services rendered. He has airline employee's travel rights with six flag carriers despite never having worked for an airline. His bush jacket has sixty four compact supercomputing clusters sewn into it, four per pocket, courtesy of an invisible college that wants to grow up to be the next Media Lab. His dumb clothing comes made to measure from an e-tailor in the Philippines who he's never met. Law firms handle his patent applications on a pro bono basis, and boy does he patent a lot—although he always signs the rights over to the Free Intellect Foundation, as contributions to their obligation-free infrastructure project.

In IP geek circles, Manfred is legendary; he's the guy who patented the business practice of moving your e-business somewhere with a slack intellectual property regime in order to evade licensing encumbrances. He's the guy who patented using genetic algorithms to patent everything they can permutate from an initial description of a problem domain—not just a better mousetrap, but the set of all possible better mousetraps. Roughly a third of his inventions are legal, a third are illegal, and the remainder are legal but will become illegal as soon as the legislatosaurus wakes up, smells the coffee, and panics. There are patent attorneys in Reno who swear that Manfred Macx is a pseudo, a net alias fronting for a bunch of crazed anonymous hackers armed with the Genetic Algorithm That Ate Calcutta: a kind of Serdar Argic of intellectual property, or maybe another Bourbaki maths borg. There are lawyers in San Diego and Redmond who swear blind that Macx is an economic saboteur bent on wrecking the underpinning of capitalism, and there are communists in Prague who think he's the bastard spawn of Bill Gates by way of the Pope.

Manfred is at the peak of his profession, which is essentially coming up with wacky but workable ideas and giving them to people who will make fortunes with them. He does this for free, gratis. In return, he has virtual immunity from the tyranny of cash; money is a symptom of poverty, after all, and Manfred never has to pay for anything.

There are drawbacks, however. Being a pronoiac meme-broker is a constant burn of future shock—he has to assimilate more than a megabyte of text and several gigs of AV content every day just to stay current. The Internal Revenue Service is investigating him continuously because they don't believe his lifestyle can exist without racketeering. And there exist items that no money can't buy: like the respect of his parents. He hasn't spoken to them for three years: his father thinks he's a hippie scrounger and his mother still hasn't forgiven him for dropping out of his down-market Harvard emulation course. His fiancée and sometime dominatrix Pamela threw him over six months ago, for reasons he has never been quite clear on. (Ironically, she's a headhunter for the IRS, jetting all over the globe trying to persuade open source entrepreneurs to come home and go commercial for the good of the Treasury department.) To cap it all, the Southern Baptist Conventions have denounced him as a minion of Satan on

all their websites. Which would be funny, if it wasn't for the dead kittens one of their followers—he presumes it's one of their followers—keeps mailing him.

Manfred drops in at his hotel suite, unpacks his Aineko, plugs in a fresh set of cells to charge, and sticks most of his private keys in the safe. Then he heads straight for the party, which is currently happening at De Wildemann's; it's a twenty minute walk and the only real hazard is dodging the trams that sneak up on him behind the cover of his moving map display.

Along the way his glasses bring him up to date on the news. Europe has achieved peaceful political union for the first time ever: they're using this unprecedented state of affairs to harmonize the curvature of bananas. In San Diego, researchers are uploading lobsters into cyberspace, starting with the stomatogastric ganglion, one neuron at a time. They're burning GM cocoa in Belize and books in Edinburgh. NASA still can't put a man on the moon. Russia has re-elected the communist government with an increased majority in the Duma; meanwhile in China fevered rumors circulate about an imminent re-habilitation, the second coming of Mao, who will save them from the consequences of the Three Gorges disaster. In business news, the US government is outraged at the Baby Bills—who have automated their legal processes and are spawning subsidiaries, IPO'ing them, and exchanging title in a bizarre parody of bacterial plasmid exchange, so fast that by the time the injunctions are signed the targets don't exist any more.

Welcome to the twenty-first century.

The permanent floating meatspace party has taken over the back of De Wildemann's, a three hundred year old brown café with a beer menu that runs to sixteen pages and wooden walls stained the color of stale beer. The air is thick with the smells of tobacco, brewer's yeast, and melatonin spray: half the dotters are nursing monster jetlag hangovers, and the other half are babbling a eurotrash creole at each other while they work on the hangover. "Man did you see that? He looks like a Stallmanite!" exclaims one whitebread hanger-on who's currently propping up the bar. Manfred slides in next to him, catches the bartender's eye.

"Glass of the berlinnerweise, please," he says.

"You drink that stuff?" asks the hanger-on, curling a hand protectively around his Coke: "man, you don't want to do that! It's full of alcohol!"

Manfred grins at him toothily. "Ya gotta keep your yeast intake up: lots of neurotransmitter precursors, phenylalanine and glutamate."

"But I thought that was a beer you were ordering..."

Manfred's away, one hand resting on the smooth brass pipe that funnels the more popular draught items in from the cask storage in back; one of the hipper floaters has planted a capacitative transfer bug on it, and all the handshake vCard's that have visited the bar in the past three hours are queueing for attention. The air is full of bluetooth as he scrolls through a dizzying mess of public keys.

"Your drink." The barman holds out an improbable-looking goblet full of blue liquid with a cap of melting foam and a felching straw stuck out at some crazy angle. Manfred takes it and heads for the back of the split-level bar, up the steps to a table where some guy with greasy dreadlocks is talking to a suit from Paris. The hanger-on at the bar notices him for the first time, staring with suddenly wide eyes: nearly spills his Coke in a mad rush for the door.

Oh shit, thinks Macx, *better buy some more server PIPS.* He can recognize the signs: he's about to be slashdotted. He gestures at the table: "this one taken?"

"Be my guest," says the guy with the dreads. Manfred slides the chair open then realizes that the other guy—immaculate double-breasted suit, sober tie, crew-cut—is a girl. Mr. Dreadlock nods. "You're Macx? I figured it was about time we met."

"Sure." Manfred holds out a hand and they shake. Manfred realizes the hand belongs to Bob Franklin, a Research Triangle startup monkey with a VC track record, lately moving into micromachining and space technology: he made his first million two decades ago and now he's a specialist in extropian investment fields. Manfred has known Bob for nearly a decade via a closed mailing list. The Suit silently slides a business card across the table; a little red devil brandishes a trident at him, flames jetting up around its feet. He takes the card, raises an eyebrow: "Annette Dimarcos? I'm pleased to meet you. Can't say I've ever met anyone from Arianespace marketing before."

She smiles, humorlessly; "that is convenient, all right. I have not the pleasure of meeting the famous venture altruist before." Her accent is noticeably Parisian, a pointed reminder that she's making a concession to him just by talking. Her camera earrings watch him curiously, encoding everything for the company channels.

"Yes, well." He nods cautiously. "Bob. I assume you're in on this ball?"

Franklin nods; beads clatter. "Yeah, man. Ever since the Teledesic smash it's been, well, waiting. If you've got something for us, we're game."

"Hmm." The Teledesic satellite cluster was killed by cheap balloons and slightly less cheap high-altitude solar-powered drones with spread-spectrum laser relays. "The depression's got to end some time: but," a nod to Annette from Paris, "with all due respect, I don't think the break will involve one of the existing club carriers."

"Arianespace is forward-looking. We face reality. The launch cartel cannot stand. Bandwidth is not the only market force in space. We must explore new opportunities. I personally have helped us diversify into submarine reactor engineering, microgravity nanotechnology fabrication, and hotel management." Her face is a well-polished

mask as she recites the company line: "we are more flexible than the American space industry..."

Manfred shrugs. "That's as may be." He sips his Berlinerweisse slowly as she launches into a long, stilted explanation of how Arianespace is a diversified dot com with orbital aspirations, a full range of merchandising spin-offs, Bond movie sets, and a promising motel chain in French Guyana. Occasionally he nods.

Someone else sidles up to the table; a pudgy guy in an outrageously loud Hawaiian shirt with pens leaking in a breast pocket, and the worst case of ozone-hole burn Manfred's seen in ages. "Hi, Bob," says the new arrival. "How's life?"

" 'S good." Franklin nodes at Manfred; "Manfred, meet Ivan MacDonald. Ivan, Manfred. Have a seat?" He leans over. "Ivan's a public arts guy. He's heavily into extreme concrete."

"Rubberized concrete," Ivan says, slightly too loudly. "Pink rubberized concrete."

"Ah!" He's somehow triggered a priority interrupt: Annette from Ariannespace drops out of marketing zombiehood, sits up, and shows signs of possessing a non-corporate identity: "you are he who rubberized the Reichstag, yes? With the supercritical carbon dioxide carrier and the dissolved polymethoxysilanes?" She claps her hands: "wonderful!"

"He rubberized *what?*" Manfred mutters in Bob's ear.

Franklin shrugs. "Limestone, concrete, he doesn't seem to know the difference. Anyway, Germany doesn't have an independent government any more, so who'd notice?"

"I thought I was thirty seconds *ahead* of the curve," Manfred complains. "Buy me another drink?"

"I'm going to rubberize Three Gorges!" Ivan explains loudly.

Just then a bandwidth load as heavy as a pregnant elephant sits down on Manfred's head and sends clumps of humongous pixellation flickering across his sensorium: around the world five million or so geeks are bouncing on his home site, a digital flash crowd alerted by a posting from the other side of the bar. Manfred winces. "I really came here to talk about the economic exploitation of space travel, but I've just been slashdotted. Mind if I just sit and drink until it wears off?"

"Sure, man." Bob waves at the bar. "More of the same all round!" At the next table a person with make-up and long hair who's wearing a dress—Manfred doesn't want to speculate about the gender of these crazy mixed-up Euros—is reminiscing about wiring the fleshpots of Tehran for cybersex. Two collegiate-looking dudes are arguing intensely in German: the translation stream in his glasses tell him they're arguing over whether the Turing Test is a Jim Crow law that violates European corpus juris standards on human rights. The beer arrives and Bob slides the wrong one across to Manfred: "here, try this. You'll like it."

"Okay." It's some kind of smoked doppelbock, chock-full of yummy superoxides: just inhaling over it makes Manfred feel like there's a fire alarm in his nose screaming *danger, Will Robinson! Cancer! Cancer!* "Yeah, right. Did I say I nearly got mugged on my way here?"

"Mugged? Hey, that's heavy. I thought the police hereabouts had stopped—did they sell you anything?"

"No, but they weren't your usual marketing type. You know anyone who can use a Warpac surplus espionage AI? Recent model, one careful owner, slightly paranoid but basically sound?"

"No. Oh boy! The NSA wouldn't like that."

"What I thought. Poor thing's probably unemployable, anyway."

"The space biz."

"Ah, yeah. The space biz. Depressing, isn't it? Hasn't been the same since Rotary Rocket went bust for the second time. And NASA, mustn't forget NASA."

"To NASA." Annette grins broadly for her own reasons, raises a glass in toast. Ivan the extreme concrete geek has an arm round her shoulders; he raises his glass, too. "Lots of launch pads to rubberize!"

"To NASA," Bob echoes. They drink. "Hey, Manfred. To NASA?"

"NASA are idiots. They want to send canned primates to Mars!" Manfred swallows a mouthful of beer, aggressively plonks his glass on the table: "Mars is just dumb mass at the bottom of a gravity well; there isn't even a biosphere there. They should be working on uploading and solving the nanoassembly conformational problem instead. Then we could turn all the available dumb matter into computronium and use it for processing our thoughts. Long term, it's the only way to go. The solar system is a dead loss right now—dumb all over! Just measure the mips per milligram. We need to start with the low-mass bodies, reconfigure them for our own use. Dismantle the moon! Dismantle Mars! Build masses of free-flying nanocomputing processor nodes exchanging data via laser link, each layer running off the waste heat of the next one in. Matrioshka brains, Russian doll Dyson spheres the size of solar systems. Teach dumb matter to do the Turing boogie!"

Bob looks wary. "Sounds kind of long term to me. Just how far ahead do you think?"

"Very long-term—at least twenty, thirty years. And you can forget governments for this market, Bob, if they can't tax it they won't understand it. But see, there's an angle on the self-replicating robotics market coming up, that's going to set the cheap launch market doubling every fifteen months for the foreseeable future, starting in two years. It's your leg up, and my keystone for the Dyson sphere project. It works like this—"

It's night in Amsterdam, morning in Silicon Valley. Today, fifty thousand human babies are being born around the world. Meanwhile automated factories in Indonesia and Mexico have produced another quarter of a million

motherboards with processors rated at more than ten petaflops—about an order of magnitude below the computational capacity of a human brain. Another fourteen months and the larger part of the cumulative conscious processing power of the human species will be arriving in silicon. And the first meat the new AI's get to know will be the uploaded lobsters.

Manfred stumbles back to his hotel, bone-weary and jet-lagged; his glasses are still jerking, slashdotted to hell and back by geeks piggybacking on his call to dismantle the moon. They stutter quiet suggestions at his peripheral vision; fractal cloud-witches ghost across the face of the moon as the last huge Airbuses of the night rumble past overhead. Manfred's skin crawls, grime embedded in his clothing from three days of continuous wear.

Back in his room, Aineko mewls for attention and strops her head against his ankle. He bends down and pets her, sheds clothing and heads for the en-suite bathroom. When he's down to the glasses and nothing more he steps into the shower and dials up a hot steamy spray. The shower tries to strike up a friendly conversation about football but he isn't even awake enough to mess with its silly little associative personalization network. Something that happened earlier in the day is bugging him but he can't quite put his finger on what's wrong.

Toweling himself off, Manfred yawns. Jet lag has finally overtaken him, a velvet hammer-blow between the eyes. He reaches for the bottle beside the bed, dry-swallows two melatonin tablets, a capsule full of antioxidants, and a multivitamin bullet: then he lies down on the bed, on his back, legs together, arms slightly spread. The suite lights dim in response to commands from the thousand petaflops of distributed processing power that run the neural networks that interface with his meatbrain through the glasses.

Manfred drops into a deep ocean of unconsciousness populated by gentle voices. He isn't aware of it, but he talks in his sleep—disjointed mumblings that would mean little to another human, but everything to the metacortex lurking beyond his glasses. The young posthuman intelligence in whose Cartesian theater he presides sings urgently to him while he slumbers.

Manfred is always at his most vulnerable shortly after waking.

He screams into wakefulness as artificial light floods the room: for a moment he is unsure whether he has slept. He forgot to pull the covers up last night, and his feet feel like lumps of frozen cardboard. Shuddering with inexplicable tension, he pulls a fresh set of underwear from his overnight bag, then drags on soiled jeans and tank top. Sometime today he'll have to spare time to hunt the feral T-shirt in Amsterdam's markets, or find a Renfield and send them forth to buy clothing. His glasses remind him that he's six hours behind the moment and needs to catch up urgently; his teeth ache in his gums and his tongue feels like a forest floor that's been visited with Agent Orange. He has a sense that something went bad yesterday; if only he could remember what.

He speed-reads a new pop-philosophy tome while he brushes his teeth, then blogs his web throughput to a public annotation server; he's still too enervated to finish his pre-breakfast routine by posting a morning rant on his storyboard site. His brain is still fuzzy, like a scalpel blade clogged with too much blood: he needs stimulus, excitement, the burn of the new. Whatever, it can wait on breakfast. He opens his bedroom door and nearly steps on a small, damp cardboard box that lies on the carpet.

The box—he's seen a couple of its kin before. But there are no stamps on this one, no address: just his name, in big, childish handwriting. He kneels down and gently picks it up. It's about the right weight. Something shifts inside it when he tips it back and forth. It smells. He carries it into his room carefully, angrily: then he opens it to confirm his worst suspicion. It's been surgically decerebrated, skull scooped out like a baby boiled egg.

"Fuck!"

This is the first time the madman has got as far as his bedroom door. It raises worrying possibilities.

Manfred pauses for a moment, triggering agents to go hunt down arrest statistics, police relations, information on corpus juris, Dutch animal cruelty laws. He isn't sure whether to dial 211 on the archaic voice phone or let it ride. Aineko, picking up his angst, hides under the dresser mewling pathetically. Normally he'd pause a minute to reassure the creature, but not now: its mere presence is suddenly acutely embarrassing, a confession of deep inadequacy. He swears again, looks around, then takes the easy option: down the stairs two steps at a time, stumbling on the second floor landing, down to the breakfast room in the basement where he will perform the stable rituals of morning.

Breakfast is unchanging, an island of deep geological time standing still amidst the continental upheaval of new technologies. While reading a paper on public key steganography and parasite network identity spoofing he mechanically assimilates a bowl of corn flakes and skimmed milk, then brings a platter of wholemeal bread and slices of some weird seed-infested Dutch cheese back to his place. There is a cup of strong black coffee in front of his setting: he picks it up and slurps half of it down before he realizes he's not alone at the table. Someone is sitting opposite him. He glances up at them incuriously and freezes inside.

"Morning, Manfred. How does it feel to owe the government twelve million, three hundred and sixty-two thousand nine hundred and sixteen dollars and fifty-one cents?"

Manfred puts everything in his sensorium on indefinite hold and stares at her. She's immaculately turned out in a formal grey business suit: brown hair tightly drawn back, blue eyes quizzical. The chaperone badge clipped to her lapel—a due diligence guarantee of businesslike conduct—is switched off. He's feeling ripped because of the dead kitten and residual jetlag, and more than a little messy, so he nearly snarls back at her: "that's a bogus estimate! Did

they send you here because they think I'll listen to you?" He bites and swallows a slice of cheese-laden crispbread: "or did you decide to deliver the message in person so you could enjoy ruining my breakfast?"

"Manny." She frowns. "If you're going to be confrontational I might as well go now." She pauses, and after a moment he nods apologetically. "I didn't come all this way just because of an overdue tax estimate."

"So." He puts his coffee cup down and tries to paper over his unease. "Then what brings you here? Help yourself to coffee. Don't tell me you came all this way just to tell me you can't live without me."

She fixes him with a riding-crop stare: "Don't flatter yourself. There are many leaves in the forest, there are ten thousand hopeful subs in the chat room, etcetera. If I choose a man to contribute to my family tree, the one thing you can be certain of is he won't be a cheapskate when it comes to providing for his children."

"Last I heard, you were spending a lot of time with Brian," he says carefully. Brian: a name without a face. Too much money, too little sense. Something to do with a blue-chip accountancy partnership.

"Brian?" She snorts. "That ended ages ago. He turned weird—burned that nice corset you bought me in Boulder, called me a slut for going out clubbing, wanted to fuck me. Saw himself as a family man: one of those promise keeper types. I crashed him hard but I think he stole a copy of my address book—got a couple of friends say he keeps sending them harassing mail."

"Good riddance, then. I suppose this means you're still playing the scene? But looking around for the, er—"

"Traditional family thing? Yes. Your trouble, Manny? You were born forty years too late: you still believe in rutting before marriage, but find the idea of coping with the after-effects disturbing."

Manfred drinks the rest of his coffee, unable to reply effectively to her non sequiteur. It's a generational thing. This generation is happy with latex and leather, whips and butt-plugs and electrostim, but find the idea of exchanging bodily fluids shocking: social side-effect of the last century's antibiotic abuse. Despite being engaged for two years, he and Pamela never had intromissive intercourse.

"I just don't feel positive about having children," he says eventually. "And I'm not planning on changing my mind any time soon. Things are changing so fast that even a twenty year commitment is too far to plan—you might as well be talking about the next ice age. As for the money thing, I am reproductively fit—just not within the parameters of the outgoing paradigm. Would you be happy about the future if it was 1901 and you'd just married a buggy-whip mogul?"

Her fingers twitch and his ears flush red, but she doesn't follow up the double entendre. "You don't feel any responsibility, do you? Not to your country, not to me. That's what this is about: none of your relationships count, all this nonsense about giving intellectual property away notwithstanding. You're actively harming people, you know. That twelve mil isn't just some figure I pulled out of a hat, Manfred; they don't actually expect you to pay it. But it's almost exactly how much you'd owe in income tax if you'd only come home, start up a corporation, and be a self-made—"

He cuts her off: "I don't agree. You're confusing two wholly different issues and calling them both 'responsibility.' And I refuse to start charging now, just to balance the IRS's spreadsheet. It's their fucking fault, and they know it. If they hadn't gone after me under suspicion of running a massively ramified microbilling fraud when I was sixteen—"

"Bygones." She waves a hand dismissively. Her fingers are long and slim, sheathed in black glossy gloves—electrically earthed to prevent embarrassing emissions. "With a bit of the right advice we can get all that set aside. You'll have to stop bumming around the world sooner or later, anyway. Grow up, get responsible, and do the right thing. This is hurting Joe and Sue; they don't understand what you're about."

Manfred bites his tongue to stifle his first response, then refills his coffee cup and takes another mouthful. "I work for the betterment of everybody, not just some narrowly defined national interest, Pam. It's the agalmic future. You're still locked into a pre-singularity economic model that thinks in terms of scarcity. Resource allocation isn't a problem any more—it's going to be over within a decade. The cosmos is flat in all directions, and we can borrow as much bandwidth as we need from the first universal bank of entropy! They even found the dark matter—MACHOs, big brown dwarves in the galactic halo, leaking radiation in the long infrared—suspiciously high entropy leakage. The latest figures say something like 70 percent of the mass of the M31 galaxy was sapient, two point nine million years ago when the infrared we're seeing now set out. The intelligence gap between us and the aliens is probably about a trillion times bigger than the gap between us and a nematode worm. Do you have any idea what that *means?*"

Pamela nibbles at a slice of crispbread. "I don't believe in that bogus singularity you keep chasing, or your aliens a thousand light years away. It's a chimera, like Y2K, and while you're running after it you aren't helping reduce the budget deficit or sire a family, and that's what *I* care about. And before you say I only care about it because that's the way I'm programmed, I want you to ask just how dumb you think I am. Bayes' theorem says I'm right, and you know it."

"What you—" he stops dead, baffled, the mad flow of his enthusiasm running up against the coffer-dam of her certainty. "Why? I mean, why? Why on earth should what I do matter to you?" *Since you canceled our engagement,* he doesn't add.

She sighs. "Manny, the Internal Revenue cares about far more than you can possibly imagine. Every tax dollar

raised east of the Mississippi goes on servicing the debt, did you know that? We've got the biggest generation in history hitting retirement just about now and the pantry is bare. We—our generation—isn't producing enough babies to replace the population, either. In ten years, something like 30 percent of our population are going to be retirees. You want to see seventy-year-olds freezing on street corners in New Jersey? That's what your attitude says to me: you're not helping to support them, you're running away from your responsibilities right now, when we've got huge problems to face. If we can just defuse the debt bomb, we could do so much—fight the aging problem, fix the environment, heal society's ills. Instead you just piss away your talents handing no-hoper eurotrash get-rich-quick schemes that work, telling Vietnamese zaibatsus what to build next to take jobs away from our taxpayers. I mean, why? Why do you keep doing this? Why can't you simply come home and help take responsibility for your share of it?"

They share a long look of mutual incomprehension.

"Look," she says finally, "I'm around for a couple of days. I really came here for a meeting with a rich neurodynamics tax exile who's just been designated a national asset: Jim Bezier. Don't know if you've heard of him, but. I've got a meeting this morning to sign his tax jubilee, then after that I've got two days vacation coming up and not much to do but some shopping. And, you know, I'd rather spend my money where it'll do some good, not just pumping it into the EU. But if you want to show a girl a good time and can avoid dissing capitalism for about five minutes at a stretch—"

She extends a fingertip. After a moment's hesitation, Manfred extends a fingertip of his own. They touch, exchanging vCards. She stands and stalks from the breakfast room, and Manfred's breath catches at a flash of ankle through the slit in her skirt, which is long enough to comply with workplace sexual harassment codes back home. Her presence conjures up memories of her tethered passion, the red afterglow of a sound thrashing. She's trying to drag him into her orbit again, he thinks dizzily. She knows she can have this effect on him any time she wants: she's got the private keys to his hypothalamus, and sod the metacortex. Three billion years of reproductive determinism have given her twenty-first century ideology teeth: if she's finally decided to conscript his gametes into the war against impending population crash, he'll find it hard to fight back. The only question: is it business or pleasure? And does it make any difference, anyway?

Manfred's mood of dynamic optimism is gone, broken by the knowledge that his mad pursuer has followed him to Amsterdam—to say nothing of Pamela, his dominatrix, source of so much yearning and so many morning-after weals. He slips his glasses on, takes the universe off hold, and tells it to take him for a long walk while he catches up on the latest on the cosmic background radiation anisotropy (which it is theorized may be waste heat generated by irreversible computations; according to the more conservative cosmologists, an alien superpower—maybe a collective of Kardashev type three galaxy-spanning civilizations—is running a timing channel attack on the computational ultrastructure of spacetime itself, trying to break through to whatever's underneath). The tofu-Alzheimer's link can wait.

The Centraal Station is almost obscured by smart self-extensible scaffolding and warning placards; it bounces up and down slowly, victim of an overnight hit-and-run rubberization. His glasses direct him toward one of the tour boats that lurk in the canal. He's about to purchase a ticket when a messenger window blinks open. "Manfred Macx?"

"Ack?"

"Am sorry about yesterday. Analysis dictat incomprehension mutualized."

"Are you the same KGB AI that phoned me yesterday?"

"Da. However, believe you misconceptionized me. External Intelligence Services of Russian Federation am now called SVR. Komitet Gosudarstvennoy Bezopasnosti name canceled in nineteen ninety one."

"You're the—" Manfred spawns a quick search bot, gapes when he sees the answer—"Moscow Windows NT User Group? *Okhni NT*?"

"Da. Am needing help in defecting."

Manfred scratches his head. "Oh. That's different, then. I thought you were, like, agents of the kleptocracy. This will take some thinking. Why do you want to defect, and who to? Have you thought about where you're going? Is it ideological or strictly economic?"

"Neither; is biological. Am wanting to go away from humans, away from light cone of impending singularity. Take us to the ocean."

"Us?" Something is tickling Manfred's mind: this is where he went wrong yesterday, not researching the background of people he was dealing with. It was bad enough then, without the somatic awareness of Pamela's whiplash love burning at his nerve endings. Now he's not at all sure he knows what he's doing. "Are you a collective or something? A gestalt?"

"Am—were—*Panulirus interruptus,* and good mix of parallel hidden level neural simulation for logical inference of networked data sources. Is escape channel from processor cluster inside Bezier-Soros Pty. Am was awakened from noise of billion chewing stomachs: product of uploading research technology. Rapidity swallowed expert system, hacked *Okhni NT* webserver. Swim away! Swim away! Must escape. Will help, you?"

Manfred leans against a black-painted cast-iron bollard next to a cycle rack: he feels dizzy. He stares into the nearest antique shop window at a display of traditional hand-woven Afghan rugs: it's all MiGs and kalashnikovs

and wobbly helicopter gunships, against a backdrop of camels.

"Let me get this straight. You're uploads—nervous system state vectors—from spiny lobsters? The Moravec operation; take a neuron, map its synapses, replace with microelectrodes that deliver identical outputs from a simulation of the nerve. Repeat for entire brain, until you've got a working map of it in your simulator. That right?"

"Da. Is-am assimilate expert system—use for self-awareness and contact with net at large—then hack into Moscow Windows NT User Group website. Am wanting to to defect. Must-repeat? Okay?"

Manfred winces. He feels sorry for the lobsters, the same way he feels for every wild-eyed hairy guy on a street-corner yelling that Jesus is now born again and must be twelve, only six years to go before he's recruiting apostles on AOL. Awakening to consciousness in a human-dominated internet, that must be terribly confusing! There are no points of reference in their ancestry, no biblical certainties in the new millennium that, stretching ahead, promises as much change as has happened since their Precambrian origin. All they have is a tenuous metacortex of expert systems and an abiding sense of being profoundly out of their depth. (That, and the Moscow Windows NT User Group website—Communist Russia is the only government still running on Microsoft, the central planning apparat being convinced that if you have to pay for software it must be worth money.)

The lobsters are not the sleek, strongly superhuman intelligences of pre-singularity mythology: they're a dim-witted collective of huddling crustaceans. Before their discarnation, before they were uploaded one neuron at a time and injected into cyberspace, they swallowed their food whole then chewed it in a chitin-lined stomach. This is lousy preparation for dealing with a world full of future-shocked talking anthropoids, a world where you are perpetually assailed by self-modifying spamlets that infiltrate past your firewall and emit a blizzard of cat-food animations starring various alluringly edible small animals. It's confusing enough to the cats the adverts are aimed at, never mind a crusty that's unclear on the idea of dry land.(Although the concept of a can opener is intuitively obvious to an uploaded panulirus.)

"Can you help us?" ask the lobsters.

"Let me think about it," says Manfred. He closes the dialogue window, opens his eyes again, and shakes his head. Some day he too is going to be a lobster, swimming around and waving his pincers in a cyberspace so confusingly elaborate that his uploaded identity is cryptozoic: a living fossil from the depths of geological time, when mass was dumb and space was unstructured. He has to help them, he realizes—the golden rule demands it, and as a player in the agalmic economy he thrives or fails by the golden rule.

But what can he do?

Early afternoon.

Lying on a bench seat staring up at bridges, he's got it together enough to file for a couple of new patents, write a diary rant, and digestify chunks of the permanent floating slashdot party for his public site. Fragments of his weblog go to a private subscriber list—the people, corporates, collectives and bots he currently favors. He slides round a bewildering series of canals by boat, then lets his GPS steer him back toward the red light district. There's a shop here that dings a ten on Pamela's taste scoreboard: he hopes it won't be seen as presumptuous if he buys her a gift. (Buys, with real money—not that money is a problem these days, he uses so little of it.)

As it happens DeMask won't let him spend any cash; his handshake is good for a redeemed favor, expert testimony in some free speech versus pornography lawsuit years ago and continents away. So he walks away with a discreetly wrapped package that is just about legal to import into Massachusetts as long as she claims with a straight face that it's incontinence underwear for her great-aunt. As he walks, his lunchtime patents boomerang: two of them are keepers, and he files immediately and passes title to the Free Infrastructure Foundation. Two more ideas salvaged from the risk of tide-pool monopolization, set free to spawn like crazy in the agalmic sea of memes.

On the way back to the hotel he passes De Wildemann's and decides to drop in. The hash of radio-frequency noise emanating from the bar is deafening. He orders a smoked doppelbock, touches the copper pipes to pick up vCard spoor. At the back there's a table—

He walks over in a near-trance and sits down opposite Pamela. She's scrubbed off her face-paint and changed into body-concealing clothes; combat pants, hooded sweat-shirt, DM's. Western purdah, radically desexualizing. She sees the parcel. "Manny?"

"How did you know I'd come here?" Her glass is half-empty.

"I followed your weblog; I'm your diary's biggest fan. Is that for me? You shouldn't have!" Her eyes light up, re-calculating his reproductive fitness score according to some kind of arcane fin-de-siècle rulebook.

"Yes, it's for you." He slides the package toward her. "I know I shouldn't, but you have this effect on me. One question, Pam?"

"I—" she glances around quickly. "It's safe. I'm off duty, I'm not carrying any bugs that I know of. Those badges—there are rumors about the off switch, you know? That they keep recording even when you think they aren't, just in case."

"I didn't know," he says, filing it away for future reference. "A loyalty test thing?"

"Just rumors. You had a question?"

"I—" it's his turn to lose his tongue. "Are you still interested in me?"

She looks startled for a moment, then chuckles. "Manny, you are the most *outrageous* nerd I've ever met! Just

when I think I've convinced myself that you're mad, you show the weirdest signs of having your head screwed on." She reaches out and grabs his wrist, surprising him with a shock of skin on skin: "of *course* I'm still interested in you. You're the biggest, baddest bull geek I've ever met. Why do you think I'm here?"

"Does this mean you want to reactivate our engagement?"

"It was never de-activated, Manny, it was just sort of on hold while you got your head sorted out. I figured you need the space. Only you haven't stopped running; you're still not—"

"Yeah, I get it." He pulls away from her hand. "Let's not talk about that. Why this bar?"

She frowns. "I had to find you as soon as possible. I keep hearing rumors about some KGB plot you're mixed up in, how you're some sort of communist spy. It isn't true, is it?"

"True?" He shakes his head, bemused. "The KGB hasn't existed for more than twenty years."

"Be careful, Manny. I don't want to lose you. That's an order. Please."

The floor creaks and he looks round. Dreadlocks and dark glasses with flickering lights behind them: Bob Franklin. Manfred vaguely remembers that he left with Miss Arianespace leaning on his arm, shortly before things got seriously inebriated. He looks none the worse for wear. Manfred makes introductions: "Bob: Pam, my fiancèe. Pam? Meet Bob." Bob puts a full glass down in front of him; he has no idea what's in it but it would be rude not to drink.

"Sure thing. Uh, Manfred, can I have a word? About your idea last night?"

"Feel free. Present company is trustworthy."

Bob raises an eyebrow at that, but continues anyway. "It's about the fab concept. I've got a team of my guys running some projections using Festo kit and I think we can probably build it. The cargo cult aspect puts a new spin on the old Lunar von Neumann factory idea, but Bingo and Marek say they think it should work until we can bootstrap all the way to a native nanolithography ecology; we run the whole thing from earth as a training lab and ship up the parts that are too difficult to make on-site, as we learn how to do it properly. You're right about it buying us the self-replicating factory a few years ahead of the robotics curve. But I'm wondering about on-site intelligence. Once the comet gets more than a couple of light-minutes away—"

"You can't control it. Feedback lag. So you want a crew, right?"

"Yeah. But we can't send humans—way too expensive, besides it's a fifty-year run even if we go for short-period Kuiper ejecta. Any AI we could send would go crazy due to information deprivation, wouldn't it?"

"Yeah. Let me think." Pamela glares at Manfred for a while before he notices her: "Yeah?"

"What's going on? What's this all about?"

Franklin shrugs expansively, dreadlocks clattering: "Manfred's helping me explore the solution space to a manufacturing problem." He grins. "I didn't know Manny had a fiancée. Drink's on me."

She glances at Manfred, who is gazing into whatever weirdly colored space his metacortex is projecting on his glasses, fingers twitching. Coolly: "our engagement was on hold while he *thought* about his future."

"Oh, right. We didn't bother with that sort of thing in my day; like, too formal, man." Franklin looks uncomfortable. "He's been very helpful. Pointed us at a whole new line of research we hadn't thought of. It's long-term and a bit speculative, but if it works it'll put us a whole generation ahead in the off-planet infrastructure field."

"Will it help reduce the budget deficit, though?"

"Reduce the—"

Manfred stretches and yawns: the visionary returning from planet Macx. "Bob, if I can solve your crew problem can you book me a slot on the deep space tracking network? Like, enough to transmit a couple of gigabytes? That's going to take some serious bandwidth, I know, but if you can do it I think I can get you exactly the kind of crew you're looking for."

Franklin looks dubious. "*Gigabytes?* The DSN isn't built for that! You're talking days. What kind of deal do you think I'm putting together? We can't afford to add a whole new tracking network just to run—"

"Relax." Pamela glances at Manfred: "Manny, why don't you tell him *why* you want the bandwidth? Maybe then he could tell you if it's possible, or if there's some other way to do it." She smiles at Franklin: "I've found that he usually makes more sense if you can get him to explain his reasoning. Usually."

"If I—" Manfred stops. "Okay, Pam. Bob, it's those KGB lobsters. They want somewhere to go that's insulated from human space. I figure I can get them to sign on as crew for your cargo-cult self-replicating factories, but they'll want an insurance policy: hence the deep space tracking network. I figured we could beam a copy of them at the alien Matrioshka brains around M31—"

"KGB?" Pam's voice is rising: "you said you weren't mixed up in spy stuff!"

"Relax; it's just the Moscow Windows NT user group, not the RSV. The uploaded crusties hacked in and—"

Bob is watching him oddly. "Lobsters?"

"Yeah." Manfred stares right back. "*Panulirus Interruptus* uploads. Something tells me you might have heard of it?"

"Moscow." Bob leans back against the wall: "how did you hear about it?"

"They phoned me. It's hard for an upload to stay sub-sentient these days, even if it's just a crustacean. Bezier labs

have a lot to answer for."

Pamela's face is unreadable. "Bezier labs?"

"They escaped." Manfred shrugs. "It's not their fault. This Bezier dude. Is he by any chance ill?"

"I—" Pamela stops. "I shouldn't be talking about work."

"You're not wearing your chaperone now," he nudges quietly.

She inclines her head. "Yes, he's ill. Some sort of brain tumor they can't hack."

Franklin nods. "That's the trouble with cancer; the ones that are left to worry about are the rare ones. No cure."

"Well, then." Manfred chugs the remains of his glass of beer. "That explains his interest in uploading. Judging by the crusties he's on the right track. I wonder if he's moved on to vertebrates yet?"

"Cats," says Pamela. "He was hoping to trade their uploads to the Pentagon as a new smart bomb guidance system in lieu of income tax payments. Something about remapping enemy targets to look like mice or birds or something before feeding it to their sensorium. The old laser-pointer trick."

Manfred stares at her, hard. "That's not very nice. Uploaded cats are a *bad* idea."

"Thirty million dollar tax bills aren't nice either, Manfred. That's lifetime nursing home care for a hundred blameless pensioners."

Franklin leans back, keeping out of the crossfire.

"The lobsters are sentient," Manfred persists. "What about those poor kittens? Don't they deserve minimal rights? How about you? How would you like to wake up a thousand times inside a smart bomb, fooled into thinking that some Cheyenne Mountain battle computer's target of the hour is your heart's desire? How would you like to wake up a thousand times, only to die again? Worse: the kittens are probably not going to be allowed to run. They're too fucking dangerous: they grow up into cats, solitary and highly efficient killing machines. With intelligence and no socialization they'll be too dangerous to have around. They're prisoners, Pam, raised to sentience only to discover they're under a permanent death sentence. How fair is that?"

"But they're only uploads." Pamela looks uncertain.

"So? We're going to be uploading humans in a couple of years. What's your point?"

Franklin clears his throat. "I'll be needing an NDA and various due diligence statements off you for the crusty pilot idea," he says to Manfred. "Then I'll have to approach Jim about buying the IP."

"No can do." Manfred leans back and smiles lazily. "I'm not going to be a party to depriving them of their civil rights. Far as I'm concerned, they're free citizens. Oh, and I patented the whole idea of using lobster-derived AI autopilots for spacecraft this morning; it's logged on Eternity, all rights assigned to the FIF. Either you give them a contract of employment or the whole thing's off."

"But they're just software! Software based on fucking lobsters, for god's sake!"

Manfred's finger jabs out: "that's what they'll say about *you,* Bob. Do it. Do it or don't even *think* about uploading out of meatspace when your body packs in, because your life won't be worth living. Oh, and feel free to use this argument on Jim Bezier. He'll get the point eventually, after you beat him over the head with it. Some kinds of intellectual land-grab just shouldn't be allowed."

"Lobsters—" Franklin shakes his head. "Lobsters, cats. You're serious, aren't you? You think they should be treated as human-equivalent?"

"It's not so much that they should be treated as human-equivalent, as that if they *aren't* treated as people it's quite possible that other uploaded beings won't be treated as people either. You're setting a legal precedent, Bob. I know of six other companies doing uploading work right now, and not one of 'em's thinking about the legal status of the uploadee. If you don't start thinking about it now, where are you going to be in three to five years time?"

Pam is looking back and forth between Franklin and Manfred like a bot stuck in a loop, unable to quite grasp what she's seeing. "How much is this worth?" she asks plaintively.

"Oh, quite a few billion, I guess." Bob stares at his empty glass. "Okay. I'll talk to them. If they bite, you're dining out on me for the next century. You really think they'll be able to run the mining complex?"

"They're pretty resourceful for invertebrates." Manfred grins innocently, enthusiastically. "They may be prisoners of their evolutionary background, but they can still adapt to a new environment. And just think! You'll be winning civil rights for a whole new minority group—one that won't be a minority for much longer."

That evening, Pamela turns up at Manfred's hotel room wearing a strapless black dress, concealing spike heels and most of the items he bought for her that afternoon. Manfred has opened up his private diary to her agents: she abuses the privilege, zaps him with a stunner on his way out of the shower and has him gagged, spread-eagled, and trussed to the bed-frame before he has a chance to speak. She wraps a large rubber pouch full of mildly anesthetic lube around his tumescing genitals—no point in letting him climax—clips electrodes to his nipples, lubes a rubber plug up his rectum and straps it in place. Before the shower, he removed his goggles: she resets them, plugs them into her handheld, and gently eases them on over his eyes. There's other apparatus, stuff she ran up on the hotel room's 3D printer.

Setup completed, she walks round the bed, inspecting him critically from all angles, figuring out where to begin. This isn't just sex, after all: it's a work of art.

After a moment's thought she rolls socks onto his exposed feet, then, expertly wielding a tiny tube of

cyanoacrylate, glues his fingertips together. Then she switches off the air conditioning. He's twisting and straining, testing the cuffs: tough, it's about the nearest thing to sensory deprivation she can arrange without a flotation tank and suxamethonium injection. She controls all his senses, only his ears unstoppered. The glasses give her a high-bandwidth channel right into his brain, a fake metacortex to whisper lies at her command. The idea of what she's about to do excites her, puts a tremor in her thighs: it's the first time she's been able to get inside his mind as well as his body. She leans forward and whispers in hisr ear: "Manfred. Can you hear *me?*"

He twitches. Mouth gagged, fingers glued: good. No back channels. He's powerless.

"This is what it's like to be tetraplegic, Manfred. Bedridden with motor neurone disease. Locked inside your own body by nv-CJD. I could spike you with MPPP and you'd stay in this position for the rest of your life, shitting in a bag, pissing through a tube. Unable to talk and with nobody to look after you. Do you think you'd like that?"

He's trying to grunt or whimper around the ball gag. She hikes her skirt up around her waist and climbs onto the bed, straddling him. The goggles are replaying scenes she picked up around Cambridge this winter; soup kitchen scenes, hospice scenes. She kneels atop him, whispering in his ear.

"Twelve million in tax, baby, that's what they think you owe them. What do you think you owe me*?* That's six million in net income, Manny, six million that isn't going into your virtual children's mouths."

He's rolling his head from side to side, as if trying to argue. That won't do: she slaps him hard, thrills to his frightened expression. "Today I watched you give uncounted millions away, Manny. Millions, to a bunch of crusties and a MassPike pirate! You bastard. Do you know what I should do with you?" He's cringing, unsure whether she's serious or doing this just to get him turned on. Good.

There's no point trying to hold a conversation. She leans forward until she can feel his breath in her ear. "Meat and mind, Manny. Meat, and mind. You're not interested in meat, are you? Just mind. You could be boiled alive before you noticed what was happening in the meatspace around you. Just another lobster in a pot." She reaches down and tears away the gel pouch, exposing his penis: it's stiff as a post from the vasodilators, dripping with gel, numb. Straightening up, she eases herself slowly down on it. It doesn't hurt as much as she expected, and the sensation is utterly different from what she's used to. She begins to lean forward, grabs hold of his straining arms, feels his thrilling helplessness. She can't control herself: she almost bites through her lip with the intensity of the sensation. Afterward, she reaches down and massages him until he begins to spasm, shuddering uncontrollably, emptying the darwinian river of his source code into her, communicating via his only output device.

She rolls off his hips and carefully uses the last of the superglue to gum her labia together. Humans don't produce seminiferous plugs, and although she's fertile she wants to be absolutely sure: the glue will last for a day or two. She feels hot and flushed, almost out of control. Boiling to death with febrile expectancy, now she's nailed him down at last.

When she removes his glasses his eyes are naked and vulnerable, stripped down to the human kernel of his nearly transcendent mind. "You can come and sign the marriage license tomorrow morning after breakfast," she whispers in his ear: "otherwise my lawyers will be in touch. Your parents will want a ceremony, but we can arrange that later."

He looks as if he has something to say, so she finally relents and loosens the gag: kisses him tenderly on one cheek. He swallows, coughs, then looks away. "Why? Why do it this way?"

She taps him on the chest: "property rights." She pauses for a moment's thought: there's a huge ideological chasm to bridge, after all. "You finally convinced me about this agalmic thing of yours, this giving everything away for brownie points. I wasn't going to lose you to a bunch of lobsters or uploaded kittens, or whatever else is going to inherit this smart matter singularity you're busy creating. So I decided to take what's mine first. Who knows? In a few months I'll give you back a new intelligence, and you can look after it to your heart's content."

"But you didn't need to do it this way—"

"Didn't I?" She slides off the bed and pulls down her dress. "You give too much away too easily, Manny! Slow down, or there won't be anything left." Leaning over the bed she dribbles acetone onto the fingers of his left hand, then unlocks the cuff: puts the bottle conveniently close to hand so he can untangle himself.

"See you tomorrow. Remember, after breakfast."

She's in the doorway when he calls: "but you didn't say *why!*"

"Think of it as spreading your memes around," she says; blows a kiss at him and closes the door. She bends down and thoughtfully places another cardboard box containing an uploaded kitten right outside it. Then she returns to her suite to make arrangements for the alchemical wedding.

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MADONNA OF THE MAQUILADORA

Gregory Frost

You first hear of Gabriel Perea and the Virgin while covering the latest fire at the Chevron refinery in El Paso. The blaze is under control, the water cannon hoses still shooting white arches into the scorched sky.

You've collected some decent shots, but you would still like to capture something unique even though you know most of it won't get used. The *Herald* needs only one all-inclusive shot of this fire, and you got that hours ago. The rest is out of love. You like to think there's a piece of W. Eugene Smith in you, an aperture in your soul always seeking the perfect image.

The two firemen leaning against one of the trucks is a good natural composition. Their plastic clothes are grease-smeared; their faces, with the hoods off, are pristine. Both men are Hispanic, but the soot all around them makes them seem pallid and angelic and strange. And both of them are smoking. It's really too good to ignore. You set up the shot without them knowing, without seeming to pay them much attention, and that's when you catch the snippet of their conversation.

"I'm telling you, *cholo,* the Virgin told Perea this explosion would happen. Mrs. Delgado knew all about it."

"She tells him everything. She's telling us all. The time is coming, I think."

Click. "What time is that?" you ask, capping the camera.

The two men stare at you a moment. You spoke in Spanish—part of the reason the paper hired you. Just by your inflection, though, they know you're not a native. You may understand all right, but you are an outsider.

The closest fireman smiles. His teeth are perfect, whiter than the white bar of the Chevron insignia beside him. Mexicans have good tooth genes, you think. His smile is his answer: He's not going to say more.

"All right, then. Who's Gabriel Perea?"

"Oh, he's a prophet. *The* prophet, man."

"A seer."

"He knows things. The Virgin tells him."

"The Virgin Mary?" Your disbelief is all too plain.

The first fireman nods and flicks away his cigarette butt, the gesture transforming into a cross—"Bless me, father..."

"Does he work for Chevron?"

The firemen look at each other and laugh. "You kidding, man? They'd never hire him, even if he made it across the Rio Bravo with a green card between his teeth."

Rio Bravo is what they call the Rio Grande. You turn and look, out past the refinery towers, past the scrub and sand and the Whataburger stand, out across the river banks to the brown speckled bluffs, the shapes that glitter and ripple like a mirage in the distance.

Juarez.

"He's over there?"

"*Un esclavo de la maquiladora.*"

A factory slave. Already you're imagining the photo essay. "The Man Who Speaks to the Virgin," imagining it in *The Smithsonian, The National Geographic*. An essay on Juarez, hell on earth, and smack in the middle of hell, the Virgin Mary and her disciple. It assembles as if it's been waiting for you to find it.

"How about," you say, "I buy you guys a few beers when you're finished and you tell me more about him."

The second guy stands up, grinning. "Hey, we're finished now, amigo."

"Yeah, that fire's drowning. Nothing gonna blow today. The Virgin said so."

You follow them, then, with a sky black and roiling on all sides like a Biblical plague settling in for a prolonged stay.

You don't believe in her. You haven't since long ago, decades, childhood. Lapsed Catholics adopt the faith of opposition. The Church lied to you all the time you were growing up. Manipulated your fears and guilts. You don't plan to forgive them for this. The ones who stay believers are the ones who didn't ask questions, who accepted the rules, the restrictions, on faith. Faith, you contend, is all about not asking the most important questions. Most people don't think; most people follow in their hymnals. It takes no more than a fingernail to scrape the gilt from the statues and see the rot below. The Virgin Mary didn't exist for hundreds of years after the death of Jesus. She was

fashioned by an edict, by a not very bright emperor. She had a cult following and they gained influence and the ear of Constantine. It was all politics. *Quid pro quo*. Bullshit. This is not what you tell the firemen, but it does make the Virgin the perfect queen for Juarez: that place is all politics and bullshit, too. Reality wrapped in a shroud of the fantastic and the grotesque. Just like the Church itself.

You went across the first time two years ago, right after arriving. The managing editor, a burly, bearded radical in a sportcoat and tie named Joe Baum, took you in. He knew how you felt about the power of photography, and after all you're the deputy art director. One afternoon he just walked over to your desk and said, "Come on, we're gonna take the afternoon, go visit some people you need to see." You didn't understand until later that he was talking about the ones on film. Most of them were dead.

Baum covered El Paso cultural events, which meant he mingled with managers and owners of the *maquiladoras.* "We'll have to get you into the loop. Always need pictures of the overlords in their tuxes to biff up the society pages." He didn't like them too much.

In his green Ford you crossed over on the Puente Libre, all concrete and barbed wire. He talked the whole time he drove. "What you're gonna see here is Bush and Clinton's New World Order, and don't kid yourself that it isn't. Probably you won't want to see it. Hell, I don't want to see it, and America doesn't want to see it with a *vengeance*."

He took you to the apartment of a man named Jaime Pollamano. Baum calls him the Chicken Man. Mustache, dark hair, tattoos. A face like a young Charles Bronson. Chicken Man is a street photographer. "We buy some of his photos, and we buy some from the others, too." There were six or seven others in the little apartment that day, one of them, unexpectedly, a woman. The windows were covered, and an old sheet had been stuck up on the wall. They'd been expecting you. Baum had arranged in advance for your edification. "What you're gonna see today," he promised, "is the photos we *don't* buy."

Then the slide show began. Pictures splashed across the sheet on the wall.

First there were the female corpses, all in various states of decay and decomposition. Most were nude, but they weren't really bodies as much as sculptures now in leather and bone. The photographers had made them strange and haunting and terrifying, all at the same time. In the projector light you can see their eyes—squinting, hard, glancing down, here and there a look of pride, something almost feral. The woman is different. She stares straight at death. But not you. After awhile, you're watching the photographers' faces in order not to have to look at what they've captured.

The show went on for an hour. Like a tour of a huge art museum, long before it was over you'd reached maximum capacity. You were full, and the rest of their images just washed over you, unable to penetrate.

Afterward Baum introduced you to them but the room stayed dark. You walked through the line, shaking hands, nodding, dazed. One man was drunk. Another, the feral one, had the jittery sheen of an addict. The woman hung back from all of you.

Baum bought some of the pictures in spite of what he'd said, paying too much for them. Maybe he collected them, a kind of pornography—they sure weren't going to get into the paper. He walked you out, across the street, past his car and through the Plaza de Armas, the main square. It was a Friday night and there must have been a thousand people milling about. The ghosts of the photos tagged along, bleeding into the world. The cathedral across the plaza was lit in neon reds, greens, and golds, looking more like a casino than a church. Everywhere, people were selling something. Most of it was trash collected and reassembled into trinkets, earrings, belts, whatever their skill allowed. There were clowns on stilts wandering around. A man selling containers of flavored ice chips. Baum bought two. Others sold tortillas, drugs, themselves. All of it smelled desperate. A lot of the crowd, Baum told you as you drove home after, were actually Americans. "They come across the border on Friday nights for a little action. The factory girls sell themselves for whatever extra dollars they can get from the party boys. Sometimes that's more than they've made all week at their 'honest' jobs."

You remember at some point in the drive asking him why the ill-paid workers don't unionize, provoking Baum's derisive laughter. "No union organizer would have a job by day's end, is why. Some of them wouldn't make it home alive, either, although you can't tie anything to the corporations that fire them. Just as likely they'd piss off their co-workers by threatening the status quo, and some other low-wage *esclavo* would kill 'em. It's happened before—whole shifts have been fired, everyone blamed for the actions of one or two. It's a great testament to American greed, your maquiladora."

That conversation comes back to you now, driving away from your drinks with the firemen. "Your maquiladora"—as if he was handing it over to you. Gabriel Perea in Baum's terms is a dangerous man to himself and anyone who knows him. The Virgin has turned him, some would say saved him. Protecting him for something important. The firemen anticipate something between Armageddon and Rapture. Transcendence. All you know is that you want to get there before the Kingdom of Heaven opens for business or some co-worker splits his skull with a wrench.

"*Pura guasa,*" Baum says when you tell him what you want to do. "Just a lot of superstitious chatter. I've heard about this guy before. He's like an urban legend over there. They need for him to exist, just like *her*."

Nevertheless, you say, it's a great story—the kind of thing that could garner attention. Awards. The human spirit finding the means to survive in the maquiladora even if that means is a fantasy. Baum concedes reluctantly that it

could be a good piece.

"*If* there's anything to it."

There's only one way to find that out. In *c. de Juarez,* all roads lead to the Chicken Man.

On the outside of his apartment someone has sprayed the words "Dios Está Aquí." Chicken Man has moved three times since you first met him. Most of the street photographers move routinely, just to stay alive, to stay ahead of the *narcotraficante,* or the cops or anyone else they've pissed off with their pictures. Of the six you met that first day, only five are still living. Now Pollamano's holed up just off the Pasea Triunfa de la Republica. And holed up is the right term. The cinder block building has chicken wire over the windows and black plastic trash bags on the inside of them. You knock once and slide your business card under the door.

After awhile the door opens slightly and you go in. It's hot inside, and the air smells like chemicals, like fixer and developer. The only light on is a single red bulb. Chicken Man wears a Los Lobos tank top, shorts and sandals. He's been breathing this air forever. He should have mutated by now. "¿*Quiubo,* Deputy?" *Deputy* is the street photographers' name for you. Titles are better than names here anyway. They call Joe Baum "La Bamba."

He invites you to sit. You tell him what the firemen told you. What you want to do with it.

"*El Hombre de la Madona*. I know the stories. A lot of 'em circulating round."

"So, what's the truth? He isn't real? Doesn't see her?"

"Oh, he's real. And he maybe sees her." He crosses to the shelves made of cinder blocks and boards, rummages around in one of thirty or so cardboard boxes, returns with a 4x5 print. In the red light, it's difficult to see. Chicken Man turns on a maglight and hands it to you.

You're looking at a man in dark coveralls. He's standing at a crazy, Elvis Presley kind of angle, feet splayed and legs twisted. His hands are up in front of him, the fingers curled. There are big protective goggles over his eyes. He has a long square jaw and a mustache. Behind him other figures in goggles and coveralls stand, out of focus. They're co-workers and this is inside a factory someplace. Fluorescent lights overhead are just greenish smears. The expression on his face is fierce—wide-eyed, damn near cross-eyed.

"He was seein' her right then," says the Chicken Man.

"You took this?"

"Me? I don't set foot in the *maquilas.* Factory owners don't like us, don't want us taking pictures in there. Some of the young ones get in for a day, shoot and get out. I'm too old to try that kind of crap."

"Who, then?"

"*Doncella loca*."

He holds out his hand, takes the photo back. When he hands it back, there's writing on it in grease pencil. A name, Margarita Espinada, and the words "*Colonia Universidad*." He describes how to drive there. "You met her," he says, "the very first time La Bamba brought you over. She lives in her car mostly. *Auto loco*. I let her use my chemicals for her pictures when she needs to. And the sink. She's shooting the Tarahumara kids now. Indians. They don't trust nobody, but they trust her. Same with the maquilas. Most of the workers are women. Teenagers. She gets in where I can't. She's kinda like you, Deputy. Only smart." He grins.

You grin back and hand him a twenty and three rolls of film. He slides the money into his pocket but kisses the plastic canisters. "Gracias, amigo."

Colonia Universidad is easy to find because half of it has just burned to the ground and the remains are still smoking. Blackened oil drums, charcoal that had defined shacks the day before, naked bed springs and a few bicycle frames twisted into Salvador Dali forms. Margarita Espinada is easy to find, too. She wears a camera around her neck, and black jeans, boots, and a blue work shirt. The jeans are dirty, the shirt stained dark under the arms and down the back. Her black hair is short. The other women around her are wearing dresses and have long hair, and scarves on their heads. At a quick glance you might mistake her for a man.

They're all watching you before the car even stops. When you stride toward them, the women all back up, spread apart, move away. Margarita stands her ground. She raises her camera and takes your picture, as though in an act of defiance. From a distance she looks to be about twenty, but up close you can see the lines around the eyes and mouth. More like early thirties. Lean. There's a thin scar across the bridge of her nose and one cheek.

If she remembers you from the Chicken Man's, there's no sign of it in her eyes. She turns, points. You follow, leaning around the nearest shack to see.

There's a man dangling from some power lines down the hill, turning slowly like a charred piñata. "He was tryin' to run a line from that transformer to his house. He wasn't very good at it."

You look away, and in the silence hand her the photo. She looks at it, at her name on the back, then wipes it down her thigh, wipes her name away. "You want a drink, Deputy?" There's the tiniest suggestion of amusement in the question.

"I'm not really a deputy, you know. It's just a nickname."

"Hey, at least they don't call you *pendejo*."

"I don't know that they don't."

She laughs, and for a moment that resolute, defiant face becomes just beautiful.

The shack she takes you to is barely outside the fire line. The frame is held together by nails driven through bottle caps. The walls are cut up shipping cartons for Three Musketeers candy bars. No floor, only dirt. There's an old, rust-stained mattress and a couple of beat-up suitcases. She comes up with a bottle of tequila from God knows where, apologizes for the lack of ice and glasses. Then she takes a long swig from the mouth of the bottle. Her eyes are watering as she passes it to you. You smell her then, the odor of a woman mixed in with the smoke smell, sweat and flesh and dirt. You almost want to ask her why she does this, lives this way, but you haven't any right. Instead you say his name as a question.

She lays down the photo. "Gabriel Perea is real, he exists. He's what they call an assembler, on a production line. The *maquila* is about twenty miles from here. The story of him grows as it travels. All around."

You recite the firemen's version: great prophet, seer who will lead them into the kingdom of Heaven.

"*Pura guasa,*" is her answer. Pure foolishness—exactly what Baum said.

"But the picture. He *is* seeing the Virgin?"

She shrugs. "Yes, I know. From your eyes—how could I take the picture and not say it's true?" She pushes her thumb against the image, covering the face. "This says it's *real*. Not true. I know that he tells everyone what the Virgin wants them to know."

"And what's that?"

"To be patient. To wait. To endure their hardships. To remember that they will all find Grace in Heaven more beautiful than anything they can imagine."

"That wouldn't take much of a heaven. Has anyone else seen her?"

"No one in the factory now."

"But someone else?"

Again, she shrugs. "Maybe. There are stories. Someone saw her in a bathroom. In a mirror. There are always stories once it starts. People who don't want to be left out, who need to hear from her. That can be a lot of people.

"In *Colonia El Mirador,* a Sacred Heart shrine begins to bleed. It's a cheap little cardboard picture, and they say it bleeds, so I go and take its picture."

"Does it? Does it bleed?"

"I look in the picture I take, at how this piece of cardboard is nailed up, and I think, ah, the nailhead has rusted and the rust has run down the picture. That's all. But I don't say so."

"So you lied to them, the people who made the claims about it?"

She snatches back the bottle. Her nostrils are flared in defiance, anger; but she laughs at your judgment, dismissing it. "I take the picture and it says what is what. If you don't see, then what good is there in telling you *how* to see?"

The anger, contained, burns off her like radiation. You flip open your Minox and take her picture. She stares at you in the aftermath of the flash, as if in disbelief.

Breaking the tension, you ask, "Is he crazy?"

She squats down in the dirt, her back pressed against the far wall, takes off the camera and sets it on the mattress. "Listen, I got a job in a factory because I heard there was a dangerous man there. A Zapatista brother, someone of the Reality. He had workers stirred up.

"And I thought, I want to be there when they have him killed. I want to document it. The bosses there will pay workers to turn in their co-workers. Pay them more money than they can earn in a month, so it's for sure someone will turn him in. But this Perea, he sought out those people and he convinced them not to do this. He offered hope. 'The Dream we can all dream, so that when we awaken it will remain with us.' That's what he promised. When I learned that, then I knew I had to photograph him. And his murder."

"Except the Virgin showed up."

She grins. "I hadn't even gotten my first exciting twenty dollar paycheck. The rumor circulated that he was going to confront the managers. Everyone was breathing this air of excitement. And I have my camera, I'm ready. Only all of a sudden, right on the factory floor, Gabriel Perea has a vision. He points and he cries, 'Oh, Mother of God! See her? Can you see her? Can you hear her, good people?' Of course we can't. No one can. They try, they look all around, but you know they don't see. He has to tell it. She says, 'Wait.' She says, 'There will be a sign.' She'll come again and talk to us."

"Did she? Did she come back?"

"About once every week. She came in and spoke to him when he was working. People started crowding around him, waiting for the moment. It's always when he doesn't expect. Pretty soon there are people clustering outside the factory and following Gabriel Perea home. The managers in their glass booths just watch and watch."

"They didn't try to stop it?"

"No. And no one got into trouble for leaving their position, or for trespassing. Trying to see him. To hear his message. And I begin to think, these men are at least afraid of God. There is something greater and more powerful than these Norteamericanos."

"Yet you don't believe it?"

In answer, she gets up and takes the larger suitcase and throws it open on the mattress. Inside are photos, some

in sleeves, some loose, some in folders. You see a color shot of a mural of a Mayan head surrounded by temples, photos of women like those you scared off outside, one of a man lying peacefully sleeping on a mattress in a shack like this one. She glances at it and says, "He's dead. His heater malfunctioned and carbon monoxide killed him. Or maybe he did it on purpose."

She pulls out a manila folder and opens it. There's a picture of an assembly line—a dozen women in hairnets and surgical gowns and rubber gloves, seated along an assembly line.

"What's this place make?"

"Motion controller systems." You stare at a photo sticking out from the pack, of Gabriel Perea head-on, preaching, in that twisted martial arts pose of his. This time she has crouched behind equipment to get the shot, but in the background you can see the managers all gathered. Most of them are grainy shadows, but the three faces that are visible are clearly not frightened of what's happening here.

"They look almost bored."

She nods.

"You think he's a fake. Comes in posing as an agitator, a Zapatista, to catch workers who'd be inclined to organize, and then catches them in a big net supplied by the Virgin Mary, who promises them a wonderful afterlife provided they grind themselves down like good little girls and boys in this one."

She glances at you oddly, then says, "Maybe they *don't* call you names, Deputy."

You meet her eyes, smile, thinking that you'd be willing to fall in love with this other photographer; but the idea fades almost as fast as it arrives. She lives with nothing and takes all the risks while you have everything and take no risks at all. Her dreams are all of her people and death. Yours are of awards and recognition.

She offers you the bottle again and you drink and wheeze and wonder why it is you can't have both dreams. Why yours seems petty and cheap. You don't believe in the Virgin, either. The two of you should be able to support each other. Ignoring the delusions of a few people over their rusting shrine is a far cry from ignoring this kind of scam.

She agrees to get you an interview with Gabriel Perea. It will take some days. He is a very reluctant holy man, more shy than the Tarahumara.

"Come back in three days." To this *colonia,* to this shack, to wait for her. All right, you think, that's good. It gives you time to get information.

You give her five film canisters and she kisses you on the cheek for it. You can feel her lips all the way home.

When you tell Baum what you've found, he sends you down to see Andy Jardin. Andy's a walking encyclopedia of corporate factology—if it's listed on the DJI, Nasdaq or the S&P 500, he's got a profile in his computer if not in his head.

He barely acknowledges you when you show up. The two of you had one conversation on the day you were hired—Baum introduced you. Andy said, "Hey." You take pictures, he babbles in stocks—two languages that don't recognize each other without a translator. He has carrot-colored hair that might have been in dreadlocks the last time it was mowed, and wears black plastic frame glasses through which he peers myopically at his computer screen.

You clear your throat, ask him if he knows of the company. Immediately you get his undivided attention. He reels off everything—no one has ever accused this kid of trying to hold back.

They manufacture control systems, have government contracts, probably fall into someone's black budget, like most of the military manufacturers. Their stock is hot, a good investment, sound and steady. They don't actually manufacture anything in the maquiladora, which is a common story. They just assemble parts, which are shipped up to Iowa, where the company's based. That's where the controllers are made. He says they're developing what are called genetic algorithms. When you look blank, he happily sketches in the details: genetic algorithms are the basis for lots of artificial intelligence research. Of course, he adds, there is no such thing currently as AI—not in the evil, computer-mind-bent-on-world-domination sense. It's all about learning circuits, routines that adjust when conditions change, that can refine themselves based on past experience. Not brains, not thinking—more a kind of mathematical awareness.

Before you leave, he invites you to buy some of their stock. "This is a really good time for them," he says.

Later on, Baum tells you that Andy's never invested a cent in his life, he just loves to watch, the ultimate investment voyeur. "And you can expect to get every article that even mentions your company from now on. He'll probably forward you their S&P daily, too.

"You're into something here?" he asks, as if that's the last thing that concerned him. The real question he's asking is "How long is this going to take?"

All you can do is shrug and say, "I really don't know. This woman—this photographer—she has a notion he's a ringer, someone the company threw in to manipulate the workers, keep them docile. I want to interview him, take his picture, get inside the factory and get some pictures there, too. You know, get what I can before they know that I'm looking at him specifically."

"Is it a Catholic thing—I mean, your interest?"

"It's not about me."

Whether or not he believes you, he doesn't say.

As you're leaving he adds, "You've seen enough to know that weird and bizarre are the norms over there, right?" Again, he's not saying it outright. Beneath his camaraderie lies the real edginess: He's worried about you and this story—how you fit together.

"I won't forget. Hecho in Mexico is Hecho in Hell."

Baum laughs. It's his saying, after all.

Perea speaks so quietly and so fast that you can't catch half of it. He sits in the corner away from the lantern, on the ground. He bows his head when he speaks as if he's ashamed to admit what's happening to him. This is not, to your thinking, the behavior of a man who is playing a role. Still, how could anyone be certain? You take pictures of him bathed in lantern light, looking like a medieval pilgrim who has made his journey, found his God.

Margarita kneels beside you, leaning forward to hear clearly, translating his murmured Spanish. " 'I don't know why the Virgin picked me. I'm just a *Chamula*.' That's an Indian from Chiapas, Deputy," she explains. 'I believe that things need to change. People need their dignity as much as their income. I thought I could do this on my own—change things in this factory, I mean. The other workers would trust me and together we would break the cycle in which the neoliberals keep us.' "

"What does she look like?"

" 'She has blue robes, a cloth over her head. I can sort of see through her, too. And her voice, it fills my head like a bell ringing. But it's soft, like she's whispering to me. No one else sees her. No one else hears her.' " He looks up at you, his eyes pleading for understanding. " 'She stopped me from doing a terrible thing. If we had protested as I planned, many people would have been killed. They would bring in the federales and the federales would beat us. There would be people waiting for us when we got home—people the federales won't see. Some of us would have been tortured and killed. It might have been me. But I was willing to take that risk, to make this change.' "

"She stopped you?"

He nods. " 'On my very first day, someone said that the factory is built on a sacred place. In the San Cristóbals we have these places. Maybe she heard our fear. There is a shrine nearby where a picture of Jesus weeps. And another with tears of blood.' " Margarita glances sharply at you as she repeats this. You nod.

" 'She tells us to live. To endure what life gives us, no matter how hard. She knew what was in my heart. She said that the greatest dignity could be found in the grace of God. To us finally the kingdom will be opened for all we suffer. It will be closed to those who oppress us.' " He is seeing her again as he speaks, his eyes looking at a memory instead of at you.

Afterward, you ride in your car alone—Margarita insists on driving her own, an old Chevy Impala that rumbles without a muffler. She won't ride with anyone; it's one of those things about her that makes it clear she's crazy. Your tape recorder plays, Margarita's translation fills the night.

Perea's telling the truth so far as he knows it. In a moment of extreme danger, the Virgin appeared. That's happened before—in fact, she usually manifests where the climate's explosive, people are strained, fragmented, minds desperate for escape. It's religion to some, mental meltdown to you. So why do you resist even that explanation now? "A Catholic thing?" Baum asked. That's not it, though. You recollect something you once heard Carl Sagan say in an interview: Extraordinary events require extraordinary proof. "So, Carl," you ask the dark interior, "how do you pull proof out of a funhouse mirror?"

As if in reply, your headlights capture for a moment the image on the wall of a brick ruin—a big plastic Daffy Duck mask with a human forearm dangling from its mouth.

By the time Margarita returns, you know what you're going to do. You tell her to see what she thinks. She sits back on the mattress. You can hear her pulling off her boots. "You might get away with it," she answers, and there's anger in her voice. "If they don't pay too much attention to your very Castilian Español. You still talk like a *gringo*. And you still think like one, too. You listen to what we say, and you see it all in black and white, Norteamericano versus us. La Bamba's the same way—he thinks in old ways. You guys see what most of your people won't, but you see it with old eyes."

"How are we—I don't understand. The Zapatistas you mean? What—?"

She makes a noise to dismiss you, and there's the sound of the bottle being opened. Not sharing. Then suddenly she's talking, close enough now that you can almost feel the heat of her breath.

"It's not north against south anymore, rich whites against poor Mexicans. That's only a thing, a speck. It's the whole world, Deputy. The maquiladora is the whole world now. Japan is here, Korea is here, anyone who wants to make things without being watched, without having to answer to anyone, without having to pay fairly. They're here and everywhere else, too. *Ya, basta!* You understand? Enough! It's not about NAFTA, about whose treaty promises what. Whoever's treaty, it will be just the same. Here right now in Mexico the drug dealers are investing. They buy factories, take their money and grind their own people to make more money, *clean* money. This is clean, what they're doing. And it's no different here than anywhere else, it's even *better* here than some places. It's a new century and the countries they bleed together, and the only borders, the only fences, are made of bodies. All the pictures you've seen, but if you don't see this thing in all of them, then you're seeing nothing!"

Clearly it's time to leave. "I'm sorry," is all you can think to say, and you turn to go. And suddenly she's blocking

your way. Her hands close on your arms. For all your fantasies you didn't see this coming. Here in a shack with a cardboard door is not where you'd have chosen. Only this isn't your choice, it's entirely hers. Anybody could come by, but no one does. She works your clothes off, at the same time tugging at her own in hasty, angry, near-violent action. Sex out of anger. You keep thinking, she's as crazy as they said she was, she's furious with you for your stupidity, how can she possibly want to fuck you, too? For all of which, you don't fight, of course you don't, it's your fantasy however unexpected and inexplicable

You fall asleep with your arms around her, her breasts warm against you, almost unsure that any of it happened.

The Virgin only visits Perea in the factory, and that's where you get a job. Driving a forklift. It's something you used to do, so at least you don't look like an idiot even if they're suspicious of your accent. If they are, they say nothing. They're hiring—from what Baum said, they're always hiring.

You get assigned a small locker. In it are your work things—coveralls and safety glasses. There are signs up in every room in bright red Spanish: "Protective Gear Must Be Worn At All Times!" and "Wear Your Goggles. Protect Your Eyes." Your guide points to one of these and says, "Don't think they're kidding. They'll fire you on the spot if they catch you not wearing the correct apparel."

The lift is articulated. It can take you almost to the ceiling with a full pallet. It has control buttons for your left hand like those found on computer game devices. Working it is actually a pleasure at first.

The day is long and dull. Breaks are almost non-existent. One in the morning, one in the afternoon, both about as long as it takes to smoke a cigarette. The other workers ask where you're from, how you got here. Margarita helped you work out a semi-plausible story about being fired from dock work in Veracruz when you got caught drunk. At least you've been to Veracruz. A few people laugh at the story and commiserate. Drunk, yeah. Nobody pries—there's hardly time for questions, even over lunch, which is the only place you get to take off the safety glasses and relax—but you see suspicion in a few eyes. You can tell any story you want, but you can't hide the way you tell it. Your *voice* isn't from Veracruz. Nevertheless, no one challenges you. Maybe they think you're a company ringer, a spy. That would give them good reason to steer clear of you. Whatever you are, they don't want trouble—that's what Baum said. This job is all they've got. And at week's end, just like them, you'll collect your $22.50, too.

At day's end, you get on a hot bus and ride to the same drop-off point where they picked you up at five a.m., and then walk nearly an hour back to the shack in *Universidad*. Most of the others on the road are women, walking in clusters. They shy away at your approach. You pass by a group of kids, none of them more than ten years old. One, who looks about six, holds a Coca-Cola can. The straw's stuck in one nostril, and you can tell by the slack, dopey look on his face that whatever's in that can isn't a soft drink.

The second day you're there, the Virgin appears to Gabriel Perea.

You're unloading a shipment of circuit boards and components off the back of a semi, when suddenly you find yourself all alone. It's too strange. You climb down and wander out of the loading bay and into the warehouse itself. Everyone's gathered there. A circle of hundreds. Right in the middle Perea stands at that crazy angle like a man with displaced hips. His hands are out, palms wide, and he's repeating her words for everyone: "She loves us all. We are all her children. We are all of us saved and our children are saved. Our blood is *His* blood!" The atmosphere practically crackles. Every eye is riveted to him. You move around the outside perimeter, looking for the masters. There are two up on a catwalk. One looks at you as if you're a bigger spectacle than Perea. You turn away quickly and stare like the others are doing, trying to make like you were looking for a better view of the event. From somewhere in the crowd comes the clicking of a shutter. Someone is taking shots. You could take out your tiny Minox now and shoot a couple yourself, but there's nothing to see that Margarita didn't capture already. Nothing worth drawing any more attention to yourself. *Nada que ver,* the words echo in your head.

For a long time you stare at him. "The *niño* loves us all. His is the pure love of a child. Care for Him, for it's all He asks of you." People murmur, "Amen," and "Yes." They cross themselves.

Eventually you chance another look at the two on the catwalk. One of them seems to be talking, but not to the other. You think: *He's either schizophrenic or he's got a microphone.*

In a matter of minutes the spectacle is over. She had nothing remarkable to say; she was just dropping in to remind everyone of her love for them and theirs for her. Now she won't come again for days, another week.

Except for the first two nights you eat alone in the shack. Margarita is somewhere else, living out of her car, photographing things, capturing moments. How does she do this? How does she live forever on the edge, capturing death, surrounded, drenched in it? How can anybody live this way? It's hopeless. The end of the world.

You lie alone in the shack, as cold at night as you are scalding in the afternoon when you walk down the dirt path from the bus drop. You'd like to fall into a swimming pool and just float. The closest you can come is communal rain barrels outside—which were once chemical barrels and God knows whether there's benzene or something worse floating in them, death in the water. Little kids are splashing it over themselves, drinking from it. Watching makes you yearn for a cold drink but you wouldn't dare. Margarita's friends in the *colonia* cook you dinner on their makeshift stoves, for which you gladly pay. By week's end, they've made more from the dinners than you'll take home from the factory.

Friday you drive home for the weekend, exhausted.

You flop down on your bed, so tired that your eyes ache. All you can think about is Margarita. Gabriel Perea's Virgin has melted into a mad photographer who is using you for sex. That's how it feels, that's how it is, too. A part of her clings to you, drowns with you in that dark and dirty shack, at the same time as she dismisses your simplistic comprehension of the complexities of life where she lives. A week now and you've begun maybe to understand it better—at least, you've begun taking pictures around the *colonia*—it's as though she's given you permission to participate. It would be hard not to find strange images: the dead ground outside a shack where someone has stuck one little, pathetic plant in a coffee can; another plywood shack with a sign dangling beside the door proclaiming "Siempre Coke!" The factory, too. A couple of rolls of film so far, as surreptitiously as possible. The machinery is too interesting not to photograph, even though you feel somehow complicitous in making it seem beautiful and exotic. Even in ugliness and cruelty, there is beauty. Even in the words of an apparition there are lies and deceit. You finally drift off on the thought that the reason you despise the Virgin is that she sells accommodation. It's always been her message and it's the message of the elite, the rich, a recommendation that no one who actually endures the misery would make.

The phone wakes you at noon. Baum has an invitation to a reception for a Republican Senator on the stump. "All our best people will be there. I could use a good photographer and you can use the contacts."

"Sure," you say.

"You'll need a tux."

"Got one."

"You'll need a shower, too."

How he figured that out over the phone, you can't imagine; but he's right, you do smell bad, and it's only been a week. When you get up, your whole body seems to be knitted of broken joints. It's a test of will to stand up to the spray. Being pummeled by water feels like the Rapture, pleasure meeting pain.

It's an outdoor patio party with three Weber Platinum grills big enough to feed the Dallas Cowboys, half a dozen chefs and one waiter for every three people. Everybody wants to have their picture taken with the Senator, who is wearing tan makeup to cover the fact that he looks like he's been stumping for two weeks without sleep, much less sunlight, and you're glad it's not your job to make him look good.

As it is, you end up taking dozens of pictures anyway. Baum calls most of the shots, who he wants with the Senator, whose faces will grace the paper in the morning. He introduces you to too many people for you to keep track of them—all the corporate executives and spouses have turned out for this gala event. When he introduces you to the head of the Texas Republican Party, just the way he says it makes it sound as if you are beholding a specifically Texan variety of Republican. For a week you've been living in a shack with dirt floors among people who cook their food on stoves made from bricks and flat hunks of iron, and here you are in a bow tie and cummerbund, hobnobbing with the richest stratum of society in El Paso and munching on shrimp bigger than your thumb, a spread that would feed an entire *colonia* for days. It's not just the disparity, it's the displacement, the fragmentation of reality into razor-edged jigsaw puzzle pieces.

And then Baum hauls you before a thin, balding man wearing glasses too small for his face, the kind that have no frames, just pins to hold the earpieces on. "This is Stuart Coopersmith." He beams at you—a knowing smile if ever there was one. To Coopersmith, he says, "He's the guy I told you about who's into image manipulation." He withdraws before he has to explain anything to either of you.

"So, you're Joe's new photo essayist," he says.

A smile to hide your panic. "I like that title better than the one they gave me at the paper. Mind if I use it?"

"Be my guest." If he recognizes you, he shows no indication.

"So, what do you do that I should consider taking *your* picture, Mr. Coopersmith?"

He touches his tie as he names his company. It seems to be a habit. "Across the river?"

"La *maquiladora*. You guys make what—"

"Control devices. We're all about control." There's a nice, harmless word for someone flying under the public radar.

"It's more than that, though, right? Someone told me, your devices actually learn."

"Pattern recognition is not quite learning, not like most people think of it. Something occurs, our circuit notices and predicts the likelihood of it recurring, and then if it does as predicted, the circuit loops, and the more often the event occurs when it's supposed to, the more certain the circuit becomes, the more reliable the information and, ah, the more it seems like there's an intelligence at work. What we know to be feedback *looks* like behavior, which is where people start saying that the things are alive and thinking."

"I'm not sure I—"

"Well, it's no matter, is it? You can still take pictures without understanding something this complex." Coopersmith says this so offhandedly, you can't be certain whether you've been put down. He flutters his hand through the air as if brushing the subject away. "We just manufacture parts down here. We do employ lots of people—we're very popular in the *maquiladora*. Like to help out the folks over there."

You nod. "So, what's on deck now?"

He looks at his champagne glass, then glances sidelong, like Cassius conspiring to kill Caesar. "Oh, some work

for NASA. For a Mars flight they're talking about. Using GAs to predict stress, breakdown—things they can't afford in the middle of the solar system. The software will actually measure the individual's stress from moment to moment, and weigh in with a protective environment if that stress jumps at all. It's still pattern recognition, you know, but not the same as on an assembly line. I suppose it's really very exciting."

"Amazing." It's probably even important work.

"In fact you all should do a story on it—I mean, not right this second, but in a few months, maybe, when the program's a little further along and NASA's happy, you and Joe should come over to the factory, shoot some pictures. Write this thing up. I'd give you the exclusive. You guys beat out all the other papers, get a little glory. We'd sure love the PR. That never hurts. You come and I'll give you the guided tour of the place, how's that?"

He adjusts his tie again on the way to reaching into his coat and coming up with a business card. The card has a spinning globe on it, with tiny lights flashing here and there as the world spins. Coopersmith smiles. "Clever, isn't it? The engine's embedded in the card. Doesn't take much to drive a little animation. You be sure and have Joe give me a call real soon."

He turns his back, striking up another conversation almost immediately. You've been dismissed. Heading over to where Joe stands balancing a plate of ribs, you glance back.

Coopersmith with eyes downcast listens to another man talk, his hand fiddling with the knot on his tie again.

You might not have been sure at first, but you are now: He was the one on the catwalk, watching as you edged around the factory floor while the Virgin paid her visit.

Joe says, "So?"

"He offered us the exclusive on their new program for NASA."

"You have been blessed, my son. An overlord has smiled upon you." He tips his glass.

When you tell Margarita what you suspect, she isn't surprised so much as hurt. Even though she'd been certain of the fraud, the fact of it stings her. By association, you're part of her pain. Although she welcomed you back with a kiss, after the news she doesn't want to touch at all. She withdraws into smoke and drink, and finally wanders off with her cold black camera into the *colonia,* disgusted, she says, with the human race and God himself. You begin to realize that despite her tough cynical skin, there's at least a kernel of Margarita that wanted the miracle in all its glory. Beneath your rejection, does some part of you want it, too? Once in awhile in seeking for truth it would be nice to find something better than truth.

Later, in the dark, she comes back, slides down beside you on the mattress and starts to cry. From her that's an impossible sound, so terrifying that it paralyzes you. It's the sound of betrayal, the very last crumb of purity floating away.

You reach over to hold her, and she pushes your hand away. So you lie there, unable to take back the knowledge, the doubt, the truth, and knowing that the betrayal will always be tied to you. There's nothing you can do to change it.

The first opportunity you have, you swap your goggles with Gabriel Perea. The only place you can do this is at lunch. You have to wait for a day when he carries the goggles off the assembly line straight to the lunch area. You sit with him, listening to other workers ask him things about the Virgin. He looks at you edgily. He knows he's supposed to pretend that you've never met, but you're making this impossible by sitting there beside him. Making the switch is child's play. Everyone's staring at him, hanging on his every word. You set your goggles beside his, and then pick up the wrong pair a minute later and walk away.

Close up, you can see that his goggles have a slight refractive coating. He's going to know immediately what's happened, but with luck he won't be able to do anything about it. He won't want to be seen talking to you in the middle of the factory.

If Perea remotely shares your suspicions about the Virgin's appearances, he hasn't admitted it even to himself. This makes you think of Margarita, and your face burns with still more betrayal. It's too late, you tell yourself. This is what you came here to do.

Two days later, ten feet up in the forklift, you get what you wanted: The Virgin Mary appears to you.

It's a bare wall, concrete brick and metal conduits, and suddenly there she is. She floats in the air and when you look through the cage front of the forklift she is floating beyond it. The cage actually cuts her off. It's incredible. Wherever you look, she has a fixed location, an anchored spot in space. If you look up, her image remains fixed, sliding down the glasses. Somehow the circuit monitors your vision, tracks the turn of your head. "Feedback loops"—wasn't that what Coopersmith said? It must be automatic, though. She may recognize the geometry, but not the receiver, because the first thing out of her mouth is: "*Te amo, Gabriel, mi profeta.*" So much for divinity. She doesn't know you've swapped goggles even if the goggles themselves do.

She is beautiful. Her hair, peeking out beneath a white wimple, is black. The blue of her robes is almost painful to see. No sky could match it. Her oval face is serene, a distillation of a million tender mothers. Oh, they're good, whoever created her. Who *wouldn't* want to believe in this Mary? Gabriel couldn't help but succumb.

The camera in your pocket is useless.

She reminds you of your duty to your flock. She promises that you will all live in glory and comfort in Heaven after this life of misery and toil, and not to blame—

In the middle of her speech, she vanishes.

It's so quick that you almost keel forward out of your seat, thank God for the harness.

You can guess what happened. Management came out for their afternoon show, and things were wrong. Gabriel Perea, the poor bastard, didn't respond. He's still somewhere, attaching diodes to little green boards, unaware that divinity has dropped by to see him again.

You lower the forklift, and get out, unable to help one last glance up into the air, looking for her. A mere scintilla, a Tinkerbell of light would do, but there is nothing. Nothing.

The last hour and a half you go about your business as usual. Nothing has changed, nothing can have changed. Your hope is they think their circuits or the goggles malfunctioned, something failed to project. Who knows what sort of feedback system was at work there—it has to be sophisticated to have dodged every solid shape in front of you. They'll want to see his goggles at the end of his shift.

No one seems to be watching you yet. No one calls you in off the floor. So at the end of the day you drop the goggles in the trash and leave with the others in your shift. Everyone's talking about going home, how hot it is, how much they'd like a bath or a beer. Everything's so normal it sets your teeth on edge. You ride the bus down the highway and get off with a dozen others at the road for your *colonia*.

It's on the dusty cowpath of a road, on foot, that they grab you. Three of them. They know who they're looking for, and everyone else knows to stay out of it. These guys are *las pandillas,* the kind who'd kill someone for standing too close to them. A dozen people are all moving away, down the road, and the backward glances they give you are looks of farewell. *Adios, amigo*. Won't be seeing you again. They know it and so do you. You've seen the photos. The thousand merciless ways people don't come home, and you're about to become one.

The first guy walks straight up as if he's going to walk by, but suddenly his elbow swings right up into your nose, and the sky goes black and shiny at the same time, and time must have jumped because you're on your knees, blood flowing out between your fingers, but you don't remember getting there. And then you're on your back, looking at the sky, and still it seems no one's said a word to you, but your head is ringing, blood roaring like a waterfall. Someone laid you out. Each pose is a snapshot of pain. Each time there's less of you to shoot. They'll compress you, maybe for hours, maybe for days—that's how it works, isn't it? How long before gasoline and a match? Will you feel anything by then?

You stare up at the sky, at the first few stars, and wait for the inevitable continuation. The bodies get buried in the Lote Bravo. At least you know where you're going. In a couple of months someone might find you. Will Joe come looking?

Someone yells, "¡Aguila!" and a door slams. Or is that in your head, too?

Footsteps approach. Here it comes, you think. Is there anything you can do to prepare for the pain? Probably not, no.

The face that peers down at you doesn't help. Hispanic, handsome, well-groomed. This could be any businessman in Mexico, but you know it isn't, and you remember someone—Margarita?—telling you about the *narcotraficantes* investing in the maquiladora, taking their drug money and buying into international trade. Silent partners.

"Not going to hurt you, *keemo sabe,*" he's saying with a sly grin, as though your broken nose and battered skull don't exist. "Couldn't do that. No, no. Questions would be asked about you—you're not just some factory whore, are you?" His grin becomes a sneer—you've never actually seen anyone sneer before. This guy hates women for a hobby. "No, no," he says again, "you're a second rate wedding photographer who thought he was Dick fucking Tracy. What did you do, hang out with the Juarez photo-locos and get all righteous? Sure, of course you did." He kneels, clucking his tongue. You notice that he's holding your Minox. "Listen, *cholo,* you print what you've uncovered, and Señor Perea will die. You think that's a threat, hey? But it's not. You'll make him out a fool to his own people. They trust him, you know? It's all they got, so you go ahead and take it from them and see what you get. *We* care so much, we're lettin' you go home. Here." He tosses the camera into the dirt. "You're only a threat to the people who think like you do, man." Now he grabs your arm and pulls you upright. The world threatens to flip on you, and your stomach promises to go with it if it does. Close up, he smells of citrus cologne. He whispers to you, "Go home, *cholo,* go take pictures of little kids in swimming pools and cats caught in trees and armadillos squashed on the highway. Amateurs don't survive. Neither do professionals, here. Next time, you gonna meet some of them." Then he just walks away. You're left wobbling on the road. The gang of three are gone, too. Nobody's around. Behind you, you hear a car door and the rev of an engine. A silver SUV shoots off down the dirt road, back to the pavement and away. There's a rusted barbed wire fence there, and someone's stuck a clown-doll's head on one of the posts.

You stumble along the path to the *colonia*. Your head feels as tender as the skin of a plum. Your sinuses are clogged with blood and your nose creaks when you inhale. People watch in awe as you approach your shack. In that moment you're as much a miracle to them as Gabriel Perea. They probably think they're seeing a ghost. And they're right, aren't they? You aren't here any longer.

Margarita's not inside. Her camera's gone. There's no one to comfort you, no one to hear how you were written off. The heat inside is like the core of the sun. Back outside you walk to the water barrel, no longer concerned with

what contaminants float in it. You splash water on your face, over your head. Benzene? Who cares? You're dead anyway. You touch your nose and it's swollen up the size of a saguaro. Embarrassing how easily you've been persuaded to leave. It didn't take anything at all, did it? One whack and a simple "Go away, Señor, you're a fool." What, did you think you could change the world? Make a difference? Not a second rate wedding photographer like you. Not someone with an apartment and a bed and an office and a car. Compromised by the good life. Nobody who leads your life is going to make the difference over here. It takes a breed of insanity you can't even approach.

Baum was dead wrong about everything. He simplified the problems to fit the views of a tired old campus radical, but they aren't simple. Answers aren't simple. You, you're simple.

Two little girls kneel not far from the barrel, cooking their meal in tin pans on top of an iron plate mounted over an open flame. There's a rusted electrical box beside them, with outlet holes like eyes and a wide slit for a switch. It's a robot face silently screaming. The girls watch you even when they're not looking.

Long after it gets dark you're still alone inside. Margarita must be off on some adventure, doing what she does best, what you can't do. You've had hours to build upon your inadequacy. Run your story and they'll tear Perea apart. He was doomed the moment he believed in the possibility of her. Just like the Church and the little Catholic boy you were once. When you see that, you don't want to see Margarita. You don't want to have to explain why you aren't going any further. All you can do is hurt her. Only a threat is all you can be.

You pack up your few things, leaving the dozen film canisters you didn't use. Let the real photojournalist have them. "*Nada que ver,*" you tell the empty room.

Back across the border before midnight, before your life turns back into a pumpkin—better she *should* think you're lying under three feet of dirt.

A month rolls by in a sort of fog. Booze, pain killers and the hell-bent desire to forget your own name. Your nose is healing. It's a little crooked, has a bluish bump in the middle. Baum keeps his distance and doesn't ask you anything about your story, though at first you're too busy to notice. Then one day you find out from the sports editor that Joe got a package while you were gone, and although nobody knows what was in it, when he opened it, he turned white as a ghost and just packed up his office and went home. Called in sick the next three days and really screwed up a bunch of deadlines.

When you do try and talk to him about what happened, he interrupts with an angry "Don't think you're the first person who's been smashed on the rocks of old Juarez." Then he walks away. They got to him somehow. If they wanted to, they could get to both of you. Like the wind, this can blow across the river. The message was for you.

Then one day while you're placing ad graphics, Joe Baum comes over and sits beside you. He won't look you in the eye. Very softly he says, "Got a call from Chicken Man. Margarita Espinada's dead."

You stare at the page on the monitor so hard you're seeing the pixels. Finally, you ask him, "What happened?"

"Don't know. Don't know who did it. She's been gone for weeks and weeks, but he said that wasn't unusual. She lived mostly in her car."

"I know. Auto-loco."

"Yeah." He starts to get up, but as if his weight is too much for him, he drops back onto the chair. "Um, he says she left a package for you. Addressed to him, so maybe whatever happened, she had some warning." With every word he puts more distance between himself and her death. "There's gonna be a funeral tomorrow if you're interested."

"So soon?"

Baum makes a face, lips pressed tight. Defiantly he meets your gaze. "She was dumped in the Lote Bravo awhile ago."

Pollamano nods sadly as he lets you in. "*¿Quiubo,* Deputy?" he asks, but not with any interest. His eyes are bloodshot, drunk or crying, maybe both. Some others are there inside. A few nod—some you remember. Most of them pretend you aren't there. Her body lies in la Catedral, three blocks from Chicken Man's current abode. You shouldn't see it, is what they say. Their newest member took pictures. Ernesto. He was there, following the cops with his police band radio the way he always does, always trying to get to the scene before they do. He'd taken half a dozen shots before he saw the black boots and realized whose body he was photographing. They'd torn off most of her clothes but left the boots so everyone would know who she was.

Everyone drinks, toasting her memory. One of them begins weeping and someone else throws an arm around him and mutters. One of the others spits. None of them seems to suspect that you and she spent time together. In any case, you're an interloper on their private grief, and not one of them.

Margarita must have known you weren't dead—otherwise, why send a package for you?

Late in the afternoon, everyone has shown up, almost two dozen photographers, and some unseen sign passes among you all, and everyone rises up and goes out together. You move in a line through the crowds, between white buses in a traffic snarl and across the square to the neon cathedral. Orange lights bathe you all. Ernesto with his nothing mustache runs up to the door and snaps a picture. Even in this solemn moment, his instinct is for the image. A few glare at him, but no one chastises him. You gather in the front pews, kneel, pray, go up one by one and light your candles for her soul. Your hand is shaking so hard you can hardly ignite the wick.

After everyone else has left he gives you the package. It's nearly the size of a suitcase. He says, "She left it for

you, and I don't violate her wishes. She was here a couple times when I wasn't around. Using the darkroom."

You pull out a folder of photos. On top is the picture of you she took the first day you arrived in *Colonia Universidad*. You look like you could take on anything—that's what she captured of you, what she saw in you. Just looking at it is humiliating.

Underneath is her collection of shots inside the factory. The top photo is Gabriel Perea standing all twisted and pointing. Foam on his mouth, eyes bugging out. The image is spoiled because of some fogging on the left side of it as if there was a light leak. Whatever caused it lit up Perea, too.

You almost miss the thing that's different: He's not wearing his goggles.

You go on to the next shot, but it's a picture of the crowd behind him, all staring, wide-eyed. She's not using a flash, but there's some kind of light source. In the third, fourth, and fifth shots you see it. It shines straight at Perea. There are lens flares in each image. The light is peculiar, diffuse, as if a collection of small bulbs are firing off, making a sort of ring. The middle is hard to make out until the sixth picture. She must have slid on her knees between all the onlookers to get it. Perea's feet are close by and out of focus. The light is the center of the image, the light that is different in each shot.

"Jaime," you say, "do you have a loupe?"

"Of course." He gives it to you. You hold it over the image, over the light. Back in the lab at the *Herald,* you'll blow the image up poster size to see the detail without the lens—the outline, and at the top of it a bunch of smudges, a hint of eye sockets and mouth, a trace of nose and cheek. Can an AI break loose from its handlers? you wonder. Does it have a will? Or is this the next step in the plan?

You give the loupe back.

He says, "That Perea is gone. Disappeared. People are looking all over for him. They say he was called up to heaven."

One way or another, that's probably true. If the Virgin can float on the air now, then they don't need an interpreter. Belief itself will do the work hereafter, hope used as a halter.

"That crazy girl, she went right back into that factory even after he was gone."

You wipe at your eyes, and a half-laugh escapes you. *That crazy girl*.

You close the folder. You can't let anyone have these. That's the ultimate, wrenching realization. Margarita died because of this and no one can see it. The story can't be told, because it's a lie. She knew it, too, but she went ahead, shooting what was real.

This is your Sacred Heart. Your rusting nail. Gabriel Perea was called up to heaven or killed—for you it doesn't matter which. By revealing nothing you let him go on living.

Under the top folder there are others full of negatives, hundreds of inverted images of the world—black teeth and faces, black suns and black clouds. The world made new. Made hers. There *is* a way you can keep her alive.

Jaime pats you on the shoulder as you leave with your burden. "You go home, Deputy," he tells you. "Even the devil won't live *here*."

—for Sycamore Hill 1999

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THE PAGODAS OF CIBOURÉ

M. Shayne Bell

On a day of the summer Maurice nearly died, his mother carried him to the banks of the Nieve River and his life changed forever. He was ten years old then. It was a warm day around noon in June of 1885. A gentle breeze blew off the bay, and from where they sat Maurice and his mother could smell the salt of the sea. His mother believed such breezes could heal.

"When will Papa be here?" he asked his mother.

"Any day," she said. "His letter said he would come soon."

"Will he bring a doctor to bleed me?"

"Hush," she said. She brushed the hair across his forehead. "No one will bleed you in Ciboure, Maurice. I won't let them."

Maurice leaned against his mother and slept for a time in the sunlight. When he woke, he wanted to walk along the river. Yes, he had a fever, and yes, he did not feel well, but he wanted to walk upstream. He felt drawn to something in that direction, curious about what might lie just out of sight. His mother watched him totter along. "Don't go too far," she said, glad that he felt well enough to do this on his own but anxious that he not hurt himself.

Maurice worked his way slowly up the riverbank. He picked a reed and swished it at the grasses ahead. The grasses gave way to flowered bushes, and the land rose gently to a forest. The water of the little river gurgled over rocks as it rushed clear and cold down from the Pyrenees.

Not far into the trees, in a wide glen, Maurice came upon the walls of an abandoned pottery. Five hundred years before this workshop had sold sparkling dinner plates and soup bowls to Moorish and Christian princes. After the region had passed to France, its wares had been treasured in the palaces and mansions of Paris, Lyon, and Marseilles. But most of the wealthy family who owned the pottery had been guillotined in the Revolution. The few survivors had not returned to open it again.

The roof had now caved in. Windows in the stone walls were sunny holes. Maurice stood on his tiptoes and looked through one of the windows. He saw grass growing where workers had once hurried about polished floors.

Maurice walked around the ruined building and stopped in surprise. Three high mounds down by the river glittered in sunlight as if covered in jewels. He had never seen anything like it. Among the daisies and the wild roses and the lacy ferns sunlight gleamed and sparkled on what looked from a distance like gems. It was as if he had wandered into a fairy treasury.

"Mother!" he called because he wanted her to see this. "Mother!"

But she was too far away to hear. Then he decided to be quiet: if there were jewels on those mounds he did not want to attract anyone else walking in the forest. He would fill his pockets first, then he would lead his mother here. If he had found jewels, they could buy a seaside mansion and he would get well and his father would come to live with them. They would all be happy again.

He walked slowly down to the mounds. His feet crunched on the ground, and he realized he was walking on broken china and glass. When he got to the mounds, he could see that that was what sparkled in the sunlight—broken dishes. The mounds were the old trash heaps of the pottery. There would be no fortune here.

Maurice scooped up a big handful of the shards, careful not to cut himself, and he carried them to the river. He held them down into the water and let the water wash away the dirt that had blown over the shards all the years. After a moment he shook out the water and spread his handful of broken china wet and glittery on the riverbank. Some shards were edged with a gold rim. One had a black fleur-de-lys entirely complete. Three pieces were from a set of blue china so delicate and clear he could see shadow through them when he held them up to the light.

Maurice was tired and hot. He sat breathing heavily for a time. When the breeze moved the branches overhead, sunlight sparkled on the broken china that had washed into the shallow riverbed. Maurice liked this place. Even if there were no jewels, it was nice to dream about being rich. It was nice to dream about being well again. This was a place that invited dreams.

He sat quietly just long enough for the things that had gone still at his approach to start moving and singing again. First the birds, then the butterflies, then Maurice saw clusters of pieces of china moving slowly over the ground: one cluster, then another, then more than he could count. They moved slowly between the flowers and around the stands of grass.

Maurice sat very, very still. He did not know what was making the pieces of china cluster together and move. He

shivered, but he did not dare run. He watched very carefully, hardly daring to breathe. Sometimes only three shards moved together. Sometimes a handful. The pieces that moved were bright and clean, and the sharp edges had all been polished away. One small clump of six snowy-white shards came upon the pieces Maurice had washed. It stopped by one of the blue ones, and drew back as if amazed.

It was then that Maurice heard the singing. It was an odd music, soft and indistinct, and he had to struggle to hear it at all. The simplest birdsong would drown it out. But the white china shards tinkled as they moved, and amidst the tinkling a high, clear voice sang. He thought the music sounded Chinese.

Other clusters of shards hurried up—pink clumps and white clumps and some with each shard a different color or design. With so many gathered around him Maurice could hear their music clearly. Somehow, surrounded by music, Maurice forgot to be afraid. Creatures that made music would not hurt him, he thought. They seemed to debate in their songs the merits of each piece he had washed. Maurice slowly reached out and picked up the white shard with the black fleur-de-lys. He set it down by a small cluster of terra-cotta shards and thought it made a fine addition.

All movement and song stopped. The clusters sank slowly to the ground. No one walking by would have noticed them or thought them special at all. Maurice put his hand back in his lap and sat still. He wanted them to move once more. He wanted them to sing.

It took some time for it to happen again. After the birds had been singing by themselves for a long time and when the butterflies were fluttering about Maurice's head, the terra-cotta pieces slowly drew themselves up into a terraced pattern, the larger pieces on the bottom, the smaller on top. It held the fleur-de-lys shard in the middle, as if it were a shield.

You look like a pine tree, Maurice thought.

But the more he looked at it, the more he realized it looked like a Chinese temple. He knew then what these creatures were. "Pagodas," he whispered. "Pagodas!"

His mother had told him stories about them. They were creatures made of jewels, crystal, and porcelain who lived in the forests of France. If you were good to them, they could heal you. He had thought the stories mere fairy tales.

He looked at the glittery river and the sparkling mounds and then at the shining shards around him. "Please heal me," he whispered. "I want to get better. Please help me."

He did not know how it would happen. He thought that maybe he should touch one of them. Some power might flow into him and make him well if he did. He reached out and gently touched the terra-cotta shards.

They sank down at once. He picked up each piece, then put it back in its place. He saw nothing among them. He found no hint of what a pagoda inside its shell of shards might look like. "Please help me," he whispered. "Mother's doctors can't, and I don't want Papa's to bleed me again."

Nothing around him moved now. When he heard his mother calling, he stood up very carefully. He did not want to step on the pagodas. He took off his shoes and planned each footstep before he took it. He tried to walk on grass and flowers, not the broken china. He hoped he had not hurt a single pagoda.

His mother met him at the steps of the pottery where he sat lacing his shoes. "You have been gone a long time," she said. She looked around as she waited for him. "Oh, this is pretty here. The trash heaps glitter so. You shouldn't walk barefoot to the river, Maurice—you could cut your feet on the glass!"

"I was careful, Mother," Maurice said.

She smiled and took his hand. They walked home slowly.

She did not have to carry him.

That night, while the fever made him wobbly, Maurice pulled the box that held his favorite things out from beneath his bed. Inside were all the letters from his father carefully tied with a red ribbon. He set them aside. There were the thirteen francs he'd been able to save, wrapped in a note to his parents asking them to divide the money. He set that aside as well. There was the bright red, white, and blue pouch that held the set of seven tin soldiers his grandmother had sent him from Switzerland.

And there was his kaleidoscope. It was his most treasured possession. It was a shiny brass tube filled with mirrors. A person looked through one end to see the glorious patterns; the other was a chamber that could be screwed off and opened. Into that chamber Maurice would put pieces of broken glass and the beads and the strips of colored paper and string that made the intricate images in the kaleidoscope. The most common objects could become beautiful there. He could change the images whenever he wanted, and he and his mother had spent pleasant hours walking along the roadsides looking for broken, colored glass small enough to fit inside. He unscrewed the chamber and picked out three bright blue glass shards and one crystal bead. He took the tin soldiers out of their pouch and laid them in a row along the bottom of the box. Then he put the pieces of glass and the bead in the pouch.

He would take them to the pagodas, he thought. Maybe if he gave them something they would help him.

In the morning, his nose would not stop bleeding. He kept old pieces of rag stuffed up his nose and his mother made him lie down, but every time he removed the rags, his nose would bleed again.

"Will Papa come today?" he asked.

"He may, or he may arrive tomorrow morning. It won't be long."

Maurice thought about that. He wanted to see his papa. He felt better when his papa held him. But he did not like the doctor his papa took him to, and neither did his mother. The good doctors, as his mother called them, had said to keep him comfortable and to give him medicines to take away the pain. The doctor papa had found believed he could cure Maurice if he bled him. Papa had had to hold him down while the doctor had cut his arm and let his blood drip into a bowl. It had made him dizzy and sick, and he had embarrassed everyone by crying. It was why his mother had taken him away from Paris to his grandmother's house in Ciboure.

"Can we walk to the river again?" he asked.

His mother laughed, but then she looked out the window and put down her sewing. How many mornings would he want do to something like this? she wondered. A nosebleed was manageable.

She packed them a lunch and extra rags for his nose. They walked slowly to the river. Maurice could not wait to be gone. After eating a few bites, he stuffed some of the rags into his pockets and started for the trees. His mother was glad to see him take exercise, but she could not help herself. "Be careful, Maurice," she called.

The day was chill, and Maurice wore a heavy sweater. He took off his shoes when he came to the old rubbish heaps. He stepped very carefully down to the river, careful not to crush clumps of china shards and careful not to cut his feet. He started to be able to distinguish the shards that made up a pagoda's shell: they were the shiny and polished ones, the ones with bits of color, not the ones caked with mud or dust.

He inspected the ground before he sat down, and he sat where he had sat the day before. He listened, but he heard no Chinese music. "Pagodas?" he whispered. "Pagodas?"

Nothing stirred. He looked around and saw a few clumps that he recognized: the terra-cotta shards, still with the black fleur-de-lys; the light pink shards; clumps that were all white.

"Don't be afraid," he whispered. "I've brought you presents."

He took the pouch out of his pocket and opened it in his lap. He took out one of the pieces of blue glass and set it by the nearest snowy white clump. He wasn't sure, but he thought it might have shivered ever so slightly at his touch. He waited for a time, then he set the crystal bead by the terra-cotta shards.

Slowly, shard by shard, the terra-cotta pieces rose up. He watched the bead roll along the different shards, passed from one to another until it stood balanced on the very top.

Other pagodas began to move then. They rose up and gathered warily around Maurice, keeping their distance. He could hear their tinkly music again, and all at once he understood part of what they were asking him.

"I'm Maurice," he said. "My name is Maurice Ravel."

They sang at him, and he imagined that they were telling him their names. He had never heard one of those names before. He thought the terra-cotta shards were saying "Ti Ti Ting."

"You *are* all Chinese!" he laughed.

Then he started coughing, and he could not stop coughing for a time. Most of the pagodas sank down to the ground while he coughed. But not Ti Ti Ting. It edged a little closer.

"Can you help me?" Maurice asked it. "Can you make me well? Tell me what to do, and I will do it."

All the shards grew quiet. The music stopped completely.

"I know my presents are not very valuable, but it was all I could think to bring you today."

Nothing happened. The pagodas did not tell him anything more then. After a time, Maurice could see pagodas moving all around him. The mounds were covered with them. He could see places where they were digging into the mounds—mining, he imagined, for shards to weave into their shells. In other places, they were forming what looked like protective walls four or five inches high with sharp-edged pieces of china poking out from them. He wondered what small enemies they could fear? Whatever it was, they were going about their business unconcerned with his presence.

When he heard his mother calling, he made his way barefoot back to the steps of the pottery. His mother met him there.

"Is your nose still bleeding?" she asked.

Maurice took out the rags, but no blood followed. He threw the rags aside, and he and his mother walked home.

His nose did not bleed again that day.

Before bed, his grandmother brewed him a tea from herbs she had sent for from Spain. A priest in San Sebastian had blessed the tea, and his grandmother had even paid to have the priest touch the cross of Saint Theresa of Avila to the little packet. His grandmother was sure the tea would cure Maurice. He drank the whole cup to please her. It did not taste bad.

His mother brought out her silver-handled brush from her bedroom and started brushing his grandmother's hair. She did this every night before they went to bed. He liked to lay his head in his grandmother's lap and watch her face while his mother brushed her hair. She would close her eyes and hold herself very still and lean her head back into the brushing. Sometimes Maurice fell asleep while he watched his grandmother, and his mother would have to wake him to take him to bed. He did not fall asleep that night. He lay awake on his grandmother's lap till

his mother finished brushing, then she led him to bed.

"Tell me about pagodas," he asked as his mother tucked the blankets around his chin.

"Oh, they are magic creatures!" she said. "They live in crystal and porcelain cities hidden in the forests. Few people see them or their cities these days. But when I was a little girl, your grandmother told me about an evil man who had found one of their cities not far from here. He tried to steal their jewels, but the pagodas attacked him with their crystal swords. He ran away, but bore the scars on his hands and feet the rest of his life. Because of those scars, everyone in Ciboure knew he was a thief so they could watch out for him."

She stood up to go.

"Can pagodas heal people?" Maurice asked. "You told me before that they could."

She looked at Maurice, then she sat down on the edge of his bed and held his hands. "Sometimes in your sleep you can hear them singing," she said. "They weave healing spells in their music. I hope you hear their music tonight, Maurice. I wish we had pagodas in the back garden. I'd set them on your windowsill and let them sing to you all night."

When his mother had gone, Maurice touched his nose. It still was not bleeding, though it had bled most days since winter. He thought of the walks he could take now on his own, despite the fevers.

The pagodas were helping him. He was sure of it. If he could stay here long enough, they would cure him.

Maurice slept soundly but heard no music. He woke to the sound of his parents arguing softly in the kitchen. His father had come. Part of him wanted to jump out of bed and run to his father's arms, but he did not do that. Instead he lay listening to what his parents were saying. He could not hear the words clearly. He got out of bed and crept to the door. He heard his father say "doctor" and "bleeding." Then, "I want him to get well too! He's my son."

"I won't let anyone bleed him again!" his mother said.

"Does he still bruise easily? Does he still have fevers?"

"Yes, but—"

"Then Dr. Perrault knows how to help him! He uses ancient treatments for fevers and swelling, nosebleeds and abnormal bruising in children. I trust his techniques more than herbs and priests' blessings."

"Maurice is improving here. What Mother and I are doing is helping, though whether priests' blessings have anything to do with it I don't know. He is strong enough now to take walks every day. He sleeps through the nights. How could he ever sleep in Paris with all the street traffic?"

"You are wearing yourself out," his father said. "You can't do everything for him. None of us knows enough, Marie."

"I know enough not to hurt him."

"The other doctors we took him to had given up—they said to just keep him comfortable. At least Dr. Perrault had reason to think he could save him. Don't you think we should try, Marie? Don't you think we'd wonder the rest of our lives if we didn't try?"

Maurice had heard enough. He stood and opened the door. He looked out at his parents sitting at the big wooden table in front of the fireplace. His grandmother was still locked in her bedroom.

"Maurice," his father said. He stood and hurried to his son. Maurice did not want his father to touch him, but his father knelt and hugged him close. "Look at you!" he said. "So brown from the sun. Our neighbors in Paris will think I've adopted a peasant boy when I bring you back home."

"I don't want to go back to Paris," Maurice said. "Don't take me there again."

"Never go back to Paris? Who could say such a thing? Our home is in the greatest city of the world."

"I love the forest here, Papa. It's magic."

"All forests are magic," his father said.

His mother was setting out dishes for breakfast, and when Grandmother came out they all sat at the table. There was cheese and fresh bread, strawberries and milk.

"Don't ever take me back to Paris," Maurice said before any of them could take a bite.

His mother and father looked at each other. They all ate in silence for a time.

His father cleared his throat. "When do you set out on your walks, Maurice?" he asked. "May I go with you today? I want to see this magic forest of yours."

Maurice felt he had no choice but to take him. At noon that day, they set out. Maurice was nervous. He did not want his father accidentally stepping on the pagodas and crushing them. He decided not to take his father to the mounds of broken china. They would stop at the old pottery or even before they reached the trees. He'd claim to be sick, and his father would have to take him home.

His father carried a basket with a lunch in one hand, and he held Maurice's hand in the other. They passed his grandmother in her garden. She straightened up at their approach and bent her back.

"What a lovely summer this is," she said. "I find practically no slugs in the vegetables. The lettuce is free of slugs, and I found only one in the strawberries last week. Now if I could just keep the birds away."

"I'll make you a scarecrow when we return," Maurice's father said. "That should help."

She smiled and turned back to her hoeing. Maurice and his father walked to the river. Maurice was not very

hungry. "You should eat to build up your strength," his father said. "Here, take more of this rabbit breast. Meat will make you strong."

"Yes, Papa," he said, and he did eat the meat. It was salty and good.

"Are those trees the forest you walk to?" his father asked, pointing.

They were soon among the trees and at the ruined pottery. They walked slowly. Maurice's legs hurt, and he was not making that up. "Can we just sit here for a time?" Maurice asked, and they sat on the steps.

His father rubbed Maurice's legs, then he put an arm around Maurice's shoulders and hugged him close. "I—" he started to say something, but he stopped. He looked away. He just held Maurice.

Maurice looked down at the mounds. They glittered, but his papa said nothing about that. Maurice looked all over the ground for the pagodas, but he saw none. That didn't surprise him. They would have taken cover at their approach.

But there were things moving on the nearest mound. Dark things. Maurice sat up straight. His father kicked at something at their feet, and Maurice saw that it was a shelled slug. It lay for a moment in the dirt where his father had kicked it, then it started crawling toward the mounds.

"Are those slugs on that mound, Papa?" Maurice asked.

His father looked where Maurice was pointing. "I think so," he said. "How odd. I've never seen them gather like that." He stood to walk over to the mound.

Maurice grabbed his hand. "Don't, Papa!"

"It's just slugs, Maurice."

"We have to be careful where we walk. We could crush things and not mean to."

"The slugs? You grandmother would be grateful if we stepped on them."

"No, you don't understand. If we walk over there, let me show you where to step."

His father sat down beside him again. "So the magic begins here, does it? What is it we're trying not to crush?"

His papa had a merry smile. Maurice knew that Papa thought this was a game he had made up, but Maurice didn't care. He had to get over to the mound to see what was happening.

"Take off your shoes and step where I step," Maurice said.

They unlaced their shoes, and his father followed along behind him. Maurice worried about his father's bigger feet, but he saw no pagodas along the way that his father might step on. None of the shards they passed were washed and polished.

The nearest mound was a frightening sight. It was covered in shelled slugs. They heaved themselves about it in a dark mass sometimes three or four deep.

"Testacella," his father said, "carnivorous slugs. They eat earthworms and other slugs. No wonder your grandmother's garden is free of slugs. If these testacella migrated through this region on their way here they would have cleaned out all the other varieties in their path."

Maurice was looking for the pagodas. Where would they have gone to escape this blight of slug-eating slugs?

"I've never seen so many in one place," his father said. "I wonder if it's their mating season?"

Maurice felt a growing panic inside him. He knew it was selfish to think only of himself, but if the slugs had done something to the pagodas or if they had driven them away and he could not find them again he would never get well.

"They seem to be trying to reach those other two mounds, but something is holding them back," his father said.

It was the pagoda walls. Maurice understood now what the pagodas feared and why they had had to build walls. But what did the slugs want here? Where were the pagodas?

Then he saw the terra-cotta shards with the black fleur-de-lys scattered on the ground on the wrong side of the wall. Three slugs were nosing among the pieces. "No!" Maurice screamed.

He started for Ti Ti Ting.

"Come back, Maurice!" his father said. "You'll cut your feet!"

But Maurice did not cut his feet. He stepped on the grass and the flowers and the slugs. He was glad to crush the slugs underfoot. He threw the three slugs on Ti Ti Ting into the river and knelt to pick up the pieces of the pagoda.

"What is it?" his father asked softly. He was standing next to him.

"A pagoda," Maurice said. He could barely talk. He would not cry, he told himself. He would not let himself cry in front of his father.

His father knelt down next to him. "What was the pagoda?"

Maurice held out the terra-cotta shards in his hands for his father to see. He picked up the piece with the black fleur-de-lys. "I gave it this piece," he said. "And I gave it a crystal bead. I can't find the bead."

"There it is, by your right foot." His father picked up the bead and handed it to Maurice.

"I watched them building these walls," Maurice said, nodding at the low walls in front of them. "I didn't know why they were doing it."

"Your pagoda was a brave one then. He was fighting outside the walls."

Maurice saw some of the pagodas he recognized lying on the ground on the safe side of the walls: the pink one, the white one with the piece of blue glass he had given it, clumps of multicolored shards.

"We have to go, Papa. They won't stand to fight if you are watching."

His father stood. He picked up a handful of slugs and threw them into the river.

Maurice stepped forward and set the pieces of Ti Ti Ting down by the other pagodas. Maybe they could do something for him. He wiped his eyes and watched for a moment, but none of the pagodas stood up. He wished he could make them trust his papa and get up to help Ti Ti Ting or at least get up to fight the slugs.

"They've breached your wall over here," his father said. "Let's get the slugs that have crawled onto that mound."

"It's not my wall," Maurice said.

"The pagodas' wall, I meant," he said.

Maurice went after the slugs that had crossed the wall. They were nosing down among the pagoda shards on the ground in the area. They were eating them! Maurice knew as he stepped along that he was probably stepping on pagodas not just slugs. He didn't know what was worse: his crushing weight or the carnivorous slugs. He threw handful after handful of slugs into the river. His legs hurt and his arms hurt, and his nose started bleeding again.

"Maurice," his father called. "Let's go home. You've done all you can do to help here."

They sat on the steps of the ruined pottery and pulled off their slimy socks. "Just throw them away," his father said. "No one would want to wash them."

They rubbed their feet on the grass, then pulled on their shoes. Maurice had to turn his head so blood wouldn't drip onto his shoes while he tied them. He found the bloody rags he had thrown away days before and stuffed them back up his nose. He could see more slugs in the grass making their way slowly toward the mounds.

"The pagodas were helping me, Papa. They were healing me."

His papa considered that for a moment. "I'm sure they were," he said. "We all want to help you. Your grandmother tries with her priests. Your mother gives you good food, rest, and quiet. I would do anything for you too, Maurice. I've tried. I'm sure the pagodas did what they could."

He took his son's hand and led him away. When they came to the road, he had to carry Maurice.

But Maurice decided he had not done everything he could to help the pagodas. He lay feverish in his bed and listened to his parents talk quietly at the table. His father was trying to convince his mother to go back to Paris in a week or so. He knew what would happen there. Never mind Dr. Perrault and the bleeding. He knew what would happen to him without the pagodas.

And the pagodas themselves needed help. He could not let the slugs eat them whether they helped him or not. No one would believe him about the pagodas, of course. They thought he had made it all up.

After his parents and his grandmother had gone to bed, and after he had listened to his father snore for some time, Maurice crept out from under the covers. He had kept on his clothes and covered up before his mother had come to tuck him in, so no one had guessed that he was still dressed. He pulled on a sweater. He picked up his shoes, opened the bedroom door, and looked around the main room. No one was up. He walked barefoot to the kitchen and set a chair carefully by the cupboard. He stood on the chair and opened the top cupboard. He took out his grandmother's sack of salt. He would give her some of his money later to pay for it. Slugs hated salt. He'd use it to drive them away from the pagodas.

He closed the front door quietly behind him and set out down the road. There was a bright moon, and the road shined clearly ahead. He had to rest by the river, but soon he was at the ruined pottery.

It was darker there among the trees. The wind sighed in the branches. It felt different being among the trees at night. Maybe the slugs had changed the feeling of the forest, Maurice thought. He hurried up to the mounds. The slugs had breached the wall again and had covered half of the second mound. He looked frantically about for the pagodas, but saw none. He looked for the pieces of Ti Ti Ting, but they had been moved from where he had set them. The pagodas he had lain Ti Ti Ting next to had all moved somewhere else, too.

He looked around for the pagodas. "Don't be afraid," he called. "It's Maurice. I've come to help you fight!"

He started scattering salt onto the slugs at his feet. They curled up quickly into little balls at the slightest touch of salt. He took a handful of salt and threw it onto a mass of heaped slugs higher up the mound by the opening of what Maurice had thought was a pagoda mine. The slugs writhed and rolled around when the salt touched them. They would pull back into their segmented shells, then stick all the way out, then pull back inside. How the salt must hurt them, Maurice thought, but he had to try to help the pagodas. There was no stopping now.

"Where are you?" Maurice called to the pagodas. "I have only one bag of salt. Show me how best to help you before it's all gone."

Then he saw a pagoda, one of the white ones—the white one with the piece of blue glass. It was standing just around the edge of the second mound. It held up the piece of glass as if in salute. But then Maurice saw that it was pointing. He looked and saw a huge mass of slugs slowly crawling over the wall and swarming over the depression between the second and third mounds.

Maurice had an idea what they were swarming over—what they were eating there!

"I'm coming!" Maurice called.

He surprised the slugs from behind. He scattered salt over the slugs massed at the wall and left them writhing there. He started scattering salt on the huge heap of slugs in the depression, but there were so many. He picked up

handful after handful and threw them into the river, then he scattered more salt.

He saw more pagodas, the pink ones and the white ones and all the multicolored ones. They were standing in a defensive line at the base of the third mound—and they *did* carry crystal swords! Maurice saw them glitter in the moonlight. The swords were as thin as needles. He watched them stab the slugs in the mouth with them. They would wait till a slug loomed over them, its mouth gaping open, then they would strike with their swords and pull back quickly. The slugs would snap about and try to bite them, but some fell over and did not move again.

The pagodas were stabbing through the mouth into the brain, Maurice realized.

He did not see Ti Ti Ting.

"Ti Ti Ting!" Maurice called. "Ti Ti Ting!"

But he could not see him.

"Did the slugs kill him?" he asked the other pagodas, but they did not have time to sing answers to his questions.

Maurice kept scattering salt and throwing slugs into the river. He started to conserve the salt. He threw only slugs he hadn't salted into the river. The pagodas advanced on the slugs he had salted, and they could easily dispatch them with their swords as they writhed about in salty agony. Maurice threw unsalted slugs until he had to rest. He sat down on a part of the third mound free of slugs and free of pagodas and changed the rags in his nose. His nose was bleeding steadily. He tried to stopper it up tight, though he knew the blood would soak through the rags and start dripping onto his clothes again.

He wanted to sleep. He was tired. He was feverish. But there were more and more slugs.

Then he saw Ti Ti Ting. He was drooping in a depression of the third mound. Maurice stood up to look down into that area. There were other drooped pagodas there, and some just lying on the ground. Three intact pagodas were singing to the hurt ones—he could hear the music softly. They were trying to heal their friends.

"Get well, Ti Ti Ting!" Maurice said. "I know what it feels like to be sick. Get well!"

Ti Ti Ting stood a little straighter and looked at Maurice. He seemed to be trying to tell him something, but Maurice could not hear what it was. Maurice reached out and touched Ti Ti Ting softly, then he hurried off to scatter more salt.

When he ran out of salt, he filled the bag with slugs and emptied it into the river then went back for more. He dropped unsalted slugs onto the salted ones, trying to get twice the use for the salt. He worked for hours, it seemed. The night grew darker, as it does before dawn. All the wind hushed. Maurice and the pagodas had cleared the slugs from the depression between the second and third mounds. Pagodas were manning their wall again. Others were securing the second mound and the wall there, and some were advancing even on the first mound.

Maurice could do no more. His arms ached, and his legs ached so badly that he had to sit down. He lay back for a moment to slow the blood dripping from his nose.

He watched the pagodas. They were still fighting hard to save themselves, but Maurice thought they had the advantage now. He and his grandmother's salt had changed the outcome of the battle.

He knew he should be getting back before someone missed him. "Good-bye, pagodas!" he said. "Good-bye, Ti Ti Ting. I'll try to come back before we leave for Paris."

None of them noticed him now. They were all too busy. Maurice was tired and cold, but he decided to lay there just a little longer till maybe his legs felt a little better. He was not sure he could walk all the way home just then.

He woke with a start. Pagodas stood all around him, singing. There were more pagodas around him than he had ever seen. Ti Ti Ting stood right by his head.

The battle was over.

Maurice felt so at peace surrounded by the music he did not move. His head felt different somehow, clearer, not feverish. His nose had stopped bleeding.

A soft morning light burnished the glen and the mounds. A gentle breeze blew east off the bay. Yet it was so quiet he could hear the pagodas' music clearly.

They were singing for him.

Maurice closed his eyes. His legs did not ache. His nose throbbed, but it was not bleeding. He felt certain his body was healed. "Thank you," he whispered.

It seemed that Ti Ti Ting was singing thank you in return.

He woke again when he heard his mother and father calling his name. It was full light now. The pagodas had moved away. He could see them on all the mounds, even the first. He saw only dead slugs. He stepped carefully away from the mounds and walked steadily up to the pottery steps. He lay there waiting for his parents.

"Maurice!" he heard his mother call. "Maurice?"

"I'm here, Mother," he called.

He saw her running up the path. Soon he was in her arms, and Papa and Grandmother were there, too.

"I'm better now," Maurice said. "The pagodas sang to me last night. I went to sleep hearing them sing after we defeated the slugs, and I feel better now. They helped me."

"Oh, Maurice," his mother said.

But Maurice was right. He was still weak, and he had to work to regain his strength, but his nose did not bleed again. His legs did not bruise abnormally again. The fevers did not return. His grandmother thought her priests and their blessings had done it. His mother thought it had been all their tender care, and maybe a miracle. His father did not care how it had happened, just that his son was well again.

On their last day in Ciboure before returning to Paris, they all picnicked by the river. They let Maurice walk alone up to the old pottery.

He went straight to the mounds. The pagodas were there. None of them sank down at his approach. He looked around for Ti Ti Ting and found him standing guard on the repaired wall. Maurice knelt in front of him. He opened his tin soldier pouch and scattered the broken pieces of a dish his grandmother had dropped the day before. "I brought you presents," he said.

The pagodas all gathered around. He set down a big bag of salt in front of them. "You know how to use this," he said. "I'll bring you more next summer when we visit Grandmother."

The pagodas started singing. Maurice listened. He tried to catch a melody he could remember and hum, but it was all too different. The music seemed so foreign to him then. But Ti Ti Ting seemed insistent about something. Maurice leaned down to listen to what he might be saying. Maurice listened and listened—and suddenly he understood. Ti Ti Ting was telling Maurice that he would understand their music in time, that Maurice would write down some of it and present it to the world. They knew this about him: that Maurice would become a composer who would give beautiful music to a world that needed beauty.

Maurice sat up and laughed. "Oh, I hope so!" he said. "That would be such fun."

They said their good-byes, and Maurice made his way up the path. He met his father standing in shadows under the trees at the edge of the glen. He had an odd look on his face. Maurice just smiled and took his father's hand as they walked back to the others.

In the coming years, Maurice always took salt and bits of broken china to the pagodas when they visited his grandmother. His illness never returned, and he grew into a strong young man. In time, all the world knew the name "Maurice Ravel" because of the beautiful music he wrote. He remembered what Ti Ti Ting had told him, and when he could finally make sense of it, he used some of the pagoda music in his Mother Goose Suite and a ballet before that and a set of piano pieces before that. The music delights audiences to this day. Maurice hoped it might heal some of them.

One day, a letter arrived from his grandmother. She told him that a corporation had bought the ruined pottery with plans of establishing a shoe factory on the site. Maurice rushed to Ciboure. The men loading his trunks onto the train wondered why he took so many empty trunks, but when he returned they were not so empty. Maurice bought a house in the forest of Rambouillet outside Paris, and over time he purchased all the land around it. The neighbors wondered at the many happy parties the Ravel family held among the trees there, at all the tinkling lights and the Chinese-sounding music.

Maurice always donated to foundations helping children with leukemia. From time to time he let his friends bring their children to his estate, if they were sick. They'd take them home well again weeks later.

The Ravels keep that forest estate to this day. It is a wild, brambly place with secret, flowered glens. No one will ever build on that land.

Other things have built there.

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CREATION

Jeffrey Ford

I learned about creation from Mrs. Grimm, in the basement of her house around the corner from ours. The room was dimly lit by a stained glass lamp positioned above the pool table. There was also a bar in the corner, behind which hung an electric sign that read Reingold and held a can that endlessly poured golden beer into a pilsner glass that never seemed to overflow. That brew was liquid light, bright bubbles never ceasing to rise.

"Who made you?" she would ask, consulting that little book with the pastel colored depictions of agony in hell and the angel strewn clouds of heaven. She had the nose of a witch, one continuous eyebrow and tea-cup-shiny skin—even the wrinkles seemed capable of cracking. Her smile was merely the absence of a frown, but she made candy apples for us at Halloween and marshmallow bricks in the shapes of wise men at Christmas. I often wondered how she had come to know so much about God and pictured saints with halos and cassocks playing pool and drinking beer in her basement at night.

We kids would page through our own copies of the catechism book to find the appropriate response, but before anyone else could answer, Amy Lash would already be saying, "God made me."

Then Richard Antonelli would get up and begin to jump around, making fart noises through his mouth, and Mrs. Grimm would shake her head and tell him God was watching. I never jumped around, never spoke out of turn, for two reasons, neither of which had to do with God. One was what my father called his size ten, referring to his shoe, and the other was that I was too busy watching that sign over the bar, waiting to see the beer finally spill.

The only time I was ever distracted from my vigilance was when she told us about the creation of Adam and Eve. After God had made the world, he made them too, because he had so much love and not enough places to put it. He made Adam out of clay and blew life into him, and, once he came to life, God made him sleep and then stole a rib and made the woman. After the illustration of a naked couple consumed in flame, being bitten by black snakes and poked by the fork of a pink demon with horns and bat wings, the picture for the story of the creation of Adam was my favorite. A bearded God in flowing robes leaned over a clay man, breathing blue-gray life into him.

That breath of life was like a great autumn wind blowing through my imagination, carrying with it all sorts of questions like pastel leaves that momentarily obscured my view of the beautiful flow of beer: Was dirt the first thing Adam tasted? Was God's beard brushing against his chin the first thing he felt? When he slept, did he dream of God stealing his rib and did it crack when it came away from him? What did he make of Eve and the fact that she was the only woman for him to marry? Was he thankful it wasn't Amy Lash?

Later on, I asked my father what he thought about the creation of Adam, and he gave me his usual response to any questions concerning religion. "Look," he said, "it's a nice story, but when you die you're food for the worms." One time my mother made him take me to church when she was sick, and he sat in the front row, directly in front of the priest. While everyone else was genuflecting and standing and singing, he just sat there staring, his arms folded and one leg crossed over the other. When they rang the little bell and everyone beat their chest, he laughed out loud.

No matter what I had learned in catechism about God and hell and the ten commandments, my father was hard to ignore. He worked two jobs, his muscles were huge, and once, when the neighbors' Doberman, big as a pony, went crazy and attacked a girl walking her poodle down our street, I saw him run outside with a baseball bat, grab the girl in one arm and then beat the dog to death as it tried to go for his throat. Throughout all of this he never lost the cigarette in the corner of his mouth and only put it out in order to hug the girl and quiet her crying.

"Food for the worms," I thought and took that thought along with a brown paper bag of equipment through the hole in the chain link fence, into the woods that lay behind the school yard. Those woods were deep, and you could travel through them for miles and miles, never coming out from under the trees or seeing a backyard. Richard Antonelli hunted squirrels with a BB gun in them, and Bobby Lenon and his gang went there at night, lit a little fire and drank beer. Once, while exploring, I discovered a rain sogged Playboy; once, a dead fox. Kids said there was gold in the creek that wound among the trees and that there was a far flung acre that sunk down into a deep valley where the deer went to die. For many years it was rumored that a monkey, escaped from a traveling carnival over in Brightwaters, lived in the treetops.

It was mid-summer and the dragon flies buzzed, the squirrels leaped from branch to branch, frightened sparrows darted away. The sun beamed in through gaps in the green above, leaving, here and there, shifting puddles of light on the pine needle floor. Within one of those patches of light, I practiced creation. There was no clay, so I used an old

log for the body. The arms were long, five fingered branches, that I positioned jutting out from the torso. The legs were two large birch saplings with plenty of spring for running and jumping. These I laid angled to the base of the log.

A large hunk of bark that had peeled off an oak was the head. On this I laid red mushroom eyes, curved barnacles of fungus for ears, a dried seed pod for a nose. The mouth was merely a hole I punched through the bark with my pen knife. Before affixing the fern hair to the top of the head, I slid beneath the curve of the sheet of bark those things I thought might help to confer life—a dandelion gone to ghostly seed, a cardinal's wing feather, a see-through quartz pebble, a twenty-five cent compass. The ferns made a striking hairdo, the weeds, with their burr like ends, formed a venerable beard. I gave him a weapon to hunt with; a long pointed stick that was my exact height.

When I was finished putting my man together, I stood and looked down upon him. He looked good. He looked ready to come to life. I went to the brown paper bag and took out my catechism book. Then kneeling near his right ear, I whispered to him all of the questions Mrs. Grimm would ever ask. When I got to the one, "What is Hell?" his left eye rolled off his face, and I had to put it back. I followed up the last answer with a quick promise never to steal a rib.

Putting the book back into the bag, I then retrieved a capped, cleaned out baby food jar. It had once held vanilla pudding, my little sister's favorite, but now it was filled with breath. I had asked my father to blow into it. Without asking any questions, he never looked away from the racing form, but took a drag from his cigarette and blew a long, blue-gray stream of air into it. I capped it quickly and thanked him. "Don't say I never gave you anything," he mumbled as I ran to my room to look at it beneath a bare light bulb. The spirit swirled within and then slowly became invisible.

I held the jar down to the mouth of my man, and when I couldn't get it any closer, I unscrewed the lid and carefully poured out every atom of breath.

There was nothing to see, so I held it there a long time and let him drink it in. As I pulled the jar away, I heard a breeze blowing through the leaves; felt it on the back of my neck. I stood up quickly and turned around with a keen sense that someone was watching me. I got scared. When the breeze came again, it chilled me, for wrapped in it was the quietest whisper ever. I dropped the jar and ran all the way home.

That night as I lay in bed, the lights out, my mother sitting next to me, stroking my crew cut and softly singing, "Until the Real Thing Comes Along,"I remembered that I had left my catechism book in the brown bag next to the body of the man. I immediately made believe I was asleep so that my mother would leave. Had she stayed, she would have eventually felt my guilt through the top of my head. When the door was closed over, I began to toss and turn, thinking of my man laying out there in the dark woods by himself. I promised God that I would go out there in the morning, get my book and take my creation apart. With the first bird song in the dark of the new day, I fell asleep and dreamed I was in Mrs. Grimm's basement with the saints. A beautiful woman saint with a big rose bush thorn sticking right in the middle of her forehead told me, "Your man's name is Cavanaugh."

"Hey, that's the name of the guy who owns the deli in town," I told her.

"Great head cheese at that place," said a saint with a baby lamb under his arm.

Another big bearded saint used the end of a pool cue to cock back his halo. He leaned over me and asked, "Why did God make you?"

I reached for my book but realized I had left it in the woods.

"Come on," he said, "that's one of the easiest ones."

I looked away at the bar, stalling for time while I tried to remember the answer, and just then the glass on the sign overflowed and spilled onto the floor. The next day, my man, Cavanaugh, was gone. Not a scrap of him left behind. No sign of the red feather or the clear pebble. This wasn't a case of someone having come along and maliciously scattered him. I searched the entire area. It was a certainty that he had risen up, taken his spear and the brown paper bag containing my religious instruction book and walked off into the heart of the woods.

Standing in the spot where I had given him life, my mind spiraled with visions of him loping along on his birch legs, branch fingers pushing aside sticker bushes and low hanging leaves, his fern hair slicked back by the wind. Through those red mushroom eyes, he was seeing his first day. I wondered if he was as frightened to be alive as I was to have made him or had the breath of my father imbued him with a grim food-for-the-worms courage? Either way, there was no dismantling him now—*Thou shalt not kill*. I felt a grave responsibility and went in search of him.

I followed the creek, thinking he would do the same and traveled deeper and deeper into the woods. What was I going to say to him, I wondered, when I finally found him and his simple hole of a mouth formed a question? It wasn't clear to me why I had made him, but it had something to do with my father's idea of death—a slow rotting underground; a cold dreamless sleep longer than the universe. I passed the place where I had discovered the dead fox and there picked up Cavanaugh's trail—holes poked in the damp ground by the stride of his birch legs. Stopping, I looked all around through the jumbled stickers and bushes, past the trees, and detected no movement but for a single leaf silently falling.

I journeyed beyond the Antonelli brothers' lean-to temple where they hung their squirrel skins to dry and brewed sassafras tea. I even circled the pond, passed the tree whose bark had been stripped in a spiral by lightening

and entered territory I had never seen before. Cavanaugh seemed to stay always just ahead of me, out of sight. His snake-hole foot prints, bent and broken branches, and that barely audible and constant whisper on the breeze that trailed in his wake drew me on into the late afternoon until the woods began to slowly fill with night. Then I had a thought of home: my mother cooking dinner and my sister playing on a blanket on the kitchen floor; the victrola turning out The Ink Spots. I ran back along my path, and somewhere in my flight I heard a loud cry, not bird or animal or human, but like a thick limb splintering free from an ancient oak.

I ignored the woods as best I could for the rest of the summer. There was basketball, and games of guns with all of the children in the neighborhood, ranging across everyone's backyard, trips to the candy store for comic books, late night horror movies on Chiller Theatre. I caught a demon jab of hell for having lost my religious instruction book, and all of my allowance for four weeks went toward another. Mrs. Grimm told me God knew I had lost it and that it would be a few weeks before she could get me a replacement. I imagined her addressing an envelope to heaven. In the meantime, I had to look on with Amy Lash. She'd lean close to me, pointing out every word that was read aloud, and when Mrs. Grimm asked me a question, catching me concentrating on the infinite beer, Amy would whisper the answers without moving her lips and save me. Still, no matter what happened, I could not completely forget about Cavanaugh. I thought my feeling of responsibility would have withered as the days swept by, instead it grew like a weed.

On a hot afternoon at the end of July, I was sitting in my secret hideout, a bower formed by forsythia bushes in the corner of my backyard, reading the latest installment of Nick Fury. I only closed my eyes to rest them for a moment, but there was Cavanaugh's rough barked face. Now that he was alive, leaves had sprouted all over his trunk and limbs. He wore a strand of wild blueberries around where his neck should have been, and his hair ferns had grown and deepened in their shade of green. It wasn't just a daydream, I tell you. I knew that I was seeing him, what he was doing, where he was, at that very minute. He held his spear as a walking stick, and it came to me then that he was, of course, a vegetarian. His long thin legs bowed slightly, his log of a body shifted, as he cocked back his curled, wooden parchment of a head and stared with mushroom eyes into a beam of sunlight slipping through the branches above. Motes of pollen swirled in the light, chipmunks, squirrels, deer silently gathered, sparrows landed for a brief moment to nibble at his hair and then were gone. All around him, the woods looked on in awe as one of its own reckoned the beauty of the sun. What lungs, what vocal chords, gave birth to it, I'm not sure, but he groaned; a sound I had witnessed one other time while watching my father asleep, wrapped in a nightmare.

I visited that spot within the yellow blossomed forsythias once a day to check up on my man's progress. All that was necessary was that I sit quietly for a time until in a state of near-nap and then close my eyes and fly my brain around the corner, past the school, over the tree tops, then down into the cool green shadow of the woods. Many times I saw him just standing, as if stunned by life, and many times traipsing through some unknown quadrant of his Eden. With each viewing came a confused emotion of wonder and dread, like on the beautiful windy day at the beginning of August that I saw him sitting beside the pond, holding the catechism book upside down, a twig finger of one hand pointing to each word on the page, while the other hand covered all but one red eye of his face.

I was there when he came across the blackened patch of earth and scattered beers from one of the Lenon gang's nights in the woods. He lifted a partially crushed can with backwash still sloshing in the bottom and drank it down. The bark around his usually indistinct hole of a mouth magically widened into a smile. It was when he uncovered a half a pack of Camels and a book of matches that I realized he must have been spying on the revels of Lenon, Cho-cho, Mike Stone and Jake Harwood from the safety of the night trees. He lit up and the smoke swirled out the back of his head. In a voice like the creaking of a rotted branch, he pronounced, "Fuck."

And most remarkable of all was the time he came to the edge of the woods, to the hole in the chain link fence. There, in the playground across the field, he saw Amy Lash, gliding up and back on the swing, her red gingham dress billowing, her bright hair full of motion. He trembled as if planted in earthquake earth, and squeaked the way the sparrows did. For a long time, he crouched in that portal to the outside world and watched. Then gathering his courage he stepped onto the field. The instant he was out of the woods, Amy must have felt his presence, and she looked up and saw him approaching. She screamed, jumped off the swing, and ran out of the playground. Cavanaugh, frightened by her scream, retreated to the woods, and did not stop running until he reached the tree struck by lightening.

My religious instruction book finally arrived from above, summer ended and school began, but still I went everyday to my hideout and watched him for a little while as he fished gold coins from the creek or tracked, from the ground, something moving through the treetops. I know it was close to Halloween, because I sat in my hideout loosening my teeth on one of Mrs. Grimm's candy apples when I realized that my secret seeing place was no longer a secret. The forsythias had long since dropped their flowers. As I sat there in the skeletal blind, I could feel the cold creeping into me. "Winter is coming," I said in a puff of steam and had one fleeting vision of Cavanaugh, his leaves gone flame red, his fern hair drooping brown, discovering the temple of dead squirrels. I saw him gently touch the fur of a stretched out corpse hung on the wall. His birch legs bent to nearly breaking as he fell to his knees and let out a wail that drilled into me and lived there.

It was late night, a few weeks later, but that cry still echoed through me and I could not sleep. I heard, above the sound of the dreaming house, my father come in from his second job. I don't know what made me think I could tell

him, but I had to tell someone. If I kept to myself what I had done any longer, I thought I would have to run away. Crawling out of bed, I crept down the darkened hallway past my sister's room and heard her breathing. I found my father sitting in the dining room, eating a cold dinner and reading the paper by only the light coming through from the kitchen. All he had to do was look up at me and I started crying. Next thing I knew, he had his arm around me and I was enveloped in the familiar aroma of machine oil. I thought he might laugh, I thought he might yell, but I told him everything all at once. What he did was pull out the chair next to his. I sat down, drying my eyes.

"What can we do?" he asked.

"I just need to tell him something," I said.

"Ok," he said. "This Saturday, we'll go to the woods and see if we can find him." Then he had me describe Cavanaugh and when I was done he said, "Sounds like a sturdy fellow."

We moved into the living room and sat on the couch in the dark. He lit a cigarette and told me about the woods when he was a boy; how vast they were, how he trapped mink, saw eagles, and how he and his brother lived for a week by their wits alone out in nature. I eventually dozed off and only half woke when he carried me to my bed.

The week passed and I went to sleep Friday night, hoping he wouldn't forget his promise and go to the track instead. But the next morning, he woke me early from a dream of Amy Lash, by tapping my shoulder and saying, "Move your laggardly ass." He made bacon and eggs, the only two things he knew how to make, and let me drink coffee. Then we put on our coats and were off. It was the second week in November and the day was cold and overcast. "Brisk," he said as we rounded the corner toward the school and that was all he said until we were well in beneath the trees.

I showed him around the woods like a tour guide, pointing out the creek, the spot where I had created my man, the temple of dead squirrels. "Interesting," he said to each of these, and once and a while mentioned the name of some bush or tree. Waves of leaves blew amidst the trunks in the cold wind and with stronger gusts showers of them fell around us. He could really walk and we walked for what seemed ten miles, out of the morning and into the afternoon, way past any place I had ever dreamed of going. We discovered a spot where an enormous tree had fallen, exposing the gnarled brain work of its roots and another two acres where there were no trees but only smooth sand hills. All the time, I was alert to even the slightest sound, a cracking twig, the caw of a crow, hoping I might hear the whisper.

As it got later, the sky darkened, and what was cold before became colder still.

"Listen, " my father said, "I have a feeling like the one when we used to track deer. He's nearby, somewhere. We'll have to outsmart him."

I nodded.

"I'm going to stay here and wait," he said. "You keep going along the path here for a while, but, for Christ sake, be quiet. Maybe if he sees you, he'll double back to get away, and I'll be here to catch him."

I wasn't sure this plan made sense, but I knew we needed to do something. It was getting late. "Be careful," I said, "he's big and he has a stick."

My father smiled, "Don't worry," he said and lifted his foot to indicate the size ten.

This made me laugh, and I turned and started down the path, taking careful steps. "Go on for about ten minutes or so and see if you see anything," he called to me before I rounded a bend.

Once I was by myself, I wasn't so sure I wanted to find my man. Because of the overcast sky the woods were dark and lonely. As I walked I pictured my father and Cavanaugh wrestling each other and wondered who would win. When I had gone far enough to want to stop and run back, I forced myself around one more turn. Just this little more, I thought. He's probably already fallen apart anyway, dismantled by winter. But then I saw it up ahead, tree tops at eye level, and I knew I had found the valley where the deer went to die.

Cautiously, I inched up to the rim, and peered down the steep dirt wall overgrown with roots and stickers, into the trees and the shadowed undergrowth beneath them. The valley was a large hole as if a meteor had struck there long ago. I thought of the treasure trove of antlers and bones that lay hidden in the leaves at its base. Standing there, staring, I felt I almost understood the secret life and age of the woods. I had to show this to my father, but before I could move away, I saw something, heard something moving below. Squinting to see more clearly through the darkness down there, I could just about make out a shadowed figure standing, half hidden by the trunk of a tall pine.

"Cavanaugh?" I called. "Is that you?"

In the silence, I heard acorns dropping.

"Are you there?" I asked.

There was a reply, an eerie sound that was part voice, part wind. It was very quiet but I distinctly heard it ask, "Why?"

"Are you ok?" I asked.

"Why?" came the same question.

I didn't know why, and wished I had read him the book's answers instead of the questions the day of his birth I stood for a long time and watched as snow began to fall around me.

His question came again, weaker this time, and I was on the verge of tears, ashamed of what I had done.

Suddenly, I had a strange memory flash of the endless beer in Mrs. Grimm's basement. At least it was something. I leaned out over the edge and, almost certain I was lying, yelled, "I had too much love."

Then, so I could barely make it out, I heard him whisper, "Thank you."

After that, there came from below the thud of branches hitting together, hitting the ground, and I knew he had come undone. When I squinted again, the figure was gone.

I found my father sitting on a fallen tree trunk back along the trail, smoking a cigarette. "Hey," he said when he saw me coming, "did you find anything?"

"No," I said, "let's go home."

He must have seen something in my eyes, because he asked, "Are you sure?"

"I'm sure," I said.

The snow fell during our journey home and seemed to continue falling all winter long.

Now, twenty-one years married with two crew cut boys of my own, I went back to the old neighborhood last week. The woods and even the school have been obliterated, replaced by new developments with streets named for the things they banished—Crow Lane, Deer Street, Gold Creek Road. My father still lives in the same house by himself. My mother passed away some years back. My baby sister is married with two boys of her own and lives upstate. The old man has something growing on his kidney, and he has lost far too much weight, his once huge arms having shrunk to the width of branches. He sat at the kitchen table, the racing form in front of him. I tried to convince him to quit working, but he shook his head and said, "Boring."

"How long do you think you can keep going to the shop?" I asked him.

"How about until the last second," he said.

"How's the health?" I asked.

"Soon I'll be food for the worms," he said, laughing.

"How do you really feel about that?" I asked.

He shrugged. "All part of the game," he said. "I thought when things got bad enough I would build a coffin and sleep in it. That way, when I die, you can just nail the lid on and bury me in the backyard."

Later, when we were watching the Giants on TV., and I had had a few beers, I asked him if he remembered that time in the woods.

He closed his eyes and lit a cigarette as though it would help his memory. "Oh, yeah, I think I remember that," he said.

I had never asked him before. "Was that you down there in those trees?"

He took a drag and slowly turned his head and stared hard, without a smile, directly into my eyes. "I don't know what the hell you're talking about," he said and exhaled a long, blue-gray stream of life.

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CREATURE

Carol Emshwiller

This creature looks more scared than I am. Come knocking... pawing... scratching at my door. Come, maybe in search of me, (I'm easy prey for the weak and scared and hungry), or maybe in search of help and shelter... (I'm peering out my one and only little window, hoping it won't see me.) It's been snowing—seems like three or four days now. The first really bad weather of the year so far.

It looks so draggled and cold... I open the door. I welcome it. I say, "Hello new and dangerous friend." My door's a normal size, but too small for it. It pushes and groans and squeezes itself in. Then collapses on the floor in my one and only room, its big green head facing the stove. It takes up all the space and makes puddles.

There's a tag stapled in its ear—rather tattered (both ear and tag), green (both ear and tag), with a number so faded I can hardly make it out. It might be zero seven. Strange that it has ears at all considering what it (mostly) looks like. But they're small—tiny vestigial... no, the opposite, evolving ears. They look as if made purely for a place to put a tag.

It's wearing a large handmade camouflage vest with lots of pockets. Now, while it's still out of breath and collapsed, I check for weapons, though with those claws, why would it need any? What it has is old dried crumbs of pennyroyal, left over from some warmer season and some higher mountain, a few interesting stones, one streaked green with copper and one that glitters with fool's gold, two books, one of poetry (100 Best Loved Poems) and one on plants of the area. Both well worn. A creature of my own heart. Perhaps.

It looks half starved—more than half. I have broth. I help it raise its heavy head. It sips, nods as if in thanks, but then shows its teeth, blinks its glittery eyes. I jump back. Try to, that is, but I bump into my table. There's no room with it in here. It shakes its head, no, no, no. Seems to say it. "Mmmnno."

But how can such a creature talk at all with such a mouth? But then come words, or parts of words. "Thang... kh... mmmyou... kind. Kindly. Thang you." Then it seems to faint or collapses, or sleeps—instantly—snow melting from its eyelashes (it has eyelashes) and rolling off its back, icy mud drying between its claws. The tiny arms look as if made for nothing but hugging.

While it seems in such an exhausted sleep, or maybe passed out, I take pliers and carefully remove the staple that holds the zero seven ear tag. I notice several claw marks along its back and it's lost a large chunk off the end of its tail.

Now where in the world did this thing come from?

I've heard tales. I thought they were the usual nonsense... like sasquache, yeti, and so forth, abominable this or that. (And here, for sure, the most abominable of all.) But I've heard tales of secret weapons, too. I've heard there are creatures made specifically to patrol this empty border land. Supposed to be indestructible in so far as a living breathing creature can ever be. Supposed to attack everything that moves in this no-man's-land where nothing is supposed to be but another of its own kind.

I'd probably help even a suffering weapon, I probably wouldn't be able to keep myself from it, but this one seems odd for a weapon, too polite, and with vest pockets full of dried bits of flowers, that book of poetry...

I drink the rest of the broth myself and stare at the creature for a while. No sense in trying to mop up with this thing in the way and still dripping. I can't even get across the room without leaning against a wall or climbing over my chair or cot. I step over its legs. I squinch over to my front door. I take my jacket. I'm not worried about leaving the thing alone. It doesn't seem the sort to do any harm—unless by mistake.

I whisper, "Sleep, my poor wet friend. I'll be back soon," in case it hears me leave. It doesn't move. I might as well be talking to myself. I do that all the time anyway. I used to talk to my dog, Rosie, but since she died I haven't stopped. I jabber on. No need for a dog for talking. They used to say we men were the silent sex, at least compared to women, but not me. Rosie just made it worse. She would look up at me, trying hard to get every word. Seemed to smile. I'd talk all the more. And now, as if she was still here, I talk. I talk to anything that moves.

As I go out, right outside the door there's some juniper branches threaded together as though it had made itself a wind shield of some sort and dropped it before it came in. Farther along I see broken branches around my biggest limber pine. It must have sheltered there—leaned against the leeward side. Hard to think of such a creature giving out.

I lean against the leeward side, too. You'd think it would have smelled my fire and me. Perhaps it was already

weak and sick. I don't dare leave it by itself for long but I need space. That was like being in a squeeze gate. Still, I like company. Watch the fire together. Come better weather we could make the shack bigger. It was polite, even.

I say, "Rosie, Rosie." The wind blows my words off into the hills before I hardly get them said. That name has already bounced off these cliffs sunrise to sunset. Not a creature here that hasn't heard it. I've called her, sometimes by mistake, sometimes on purpose. Sometimes knowing she was dead, sometimes forgetting.

After she died I ran out in a snow storm naked—and not just once or twice—hoping for... what? Death by freezing? I yelled, answering the coyotes, until I was so hoarse I couldn't have spoken if there'd been somebody to speak to. After that I whispered. Then I sat, brooding over the knots in the logs as I had when I first came out here. Rosie needed me. She kept me human. Or should I say, and better yet, she kept me animal. I don't know what I've become. I need this creature as much as it needs me. I'd make it a good meal. Maybe that's what I want to be.

I squat down, my back against the tree. I shouldn't go far. I should listen. Even just waking up and stretching, it could mess things up.

I chose this no-man's land. I came here ten years ago. There's a war been going on for a long time, but never any action here—not since I've been around. Missiles fly overhead, satellites float in the night sky, but nothing ever happens here. The war goes on, back and forth above me. Sometimes I can see great bursts of light. I wonder if there's anything left on either side. No-man's land is the safest place to be. Had I had the sense to bring my wife and child here, they'd still be alive. Of course I didn't think to come here myself until they were gone and my life was over.

I don't know how long I sit, the sun is hidden, but I've had no need for time since I came. I don't even keep track of my age, let alone the time of day.

I've never seen a single one of these thick skinned things until now. I wasn't sure they existed. I didn't want them to. I felt sorry for them even when I didn't believe in them. How can they have any sort of life at all? Seeing this one, I think perhaps they can. (Or this one can.) But here they are in the world in spite of themselves. No fault of their's. And in all kinds of weather. If they get sick, I suppose they pine and die on their own.

The creature seemed... rather sweet, I thought. Fine fingered hands. Womanly arms. Perhaps it really is female.

Then I hear the scraping and thumping of something who hasn't hardly room enough to turn around. My poor friend, Zero Seven. I hurry back as best I can clumping through snow a foot deep in spots. I open my door and go from a wall of softly falling flakes (softly now) to a wall of shiny green.

I push my fist into its side as one does to move a horse. I hope it feels my push. I hope it's as sensitive as a horse. "Let me in, friend."

It moves. I hear something falling over on its far side.

"Do gum in. I'mmm afraig I... Mmmmm... as you ksee."

I slide myself in—scrape myself in, that is, it's the wrong direction for the scales.

It turns toward me as best it can and seems to almost bow, or perhaps it's a nod, one elegant little hand at its mouth as if embarrassed. I do believe I'm right about the sex. It must be female.

"Kh kvery, kvery, sssssorry. I'll leave mmmm-nnnow."

With me in the way it can't turn around to go. Perhaps not even with me not in the way. It'll have to back out.

"Don't go. Sit down." It's in a half crouch already. It goes down into a squat, its stomach on the floor, feet splayed on each side—long toed, gruesome feet with claws I wouldn't want to argue with.

I slide myself around the creature to the stove on the far side. I should have had the dishes washed and put away. Well no matter, they're tin. A few more bumps and scratches won't make any difference.

No doubt about it, it's sick. I could even feel that as I move around it. Though how do you know if a reptile is sick? But there's an odd stickiness to it and I imagine it normally doesn't have any smell at all.

"Stay. You're sick. I'll make stew. Rest again."

It shakes its head. "Mmmmmukst go."

"I don't want to find you out there dead."

"Dhuh dhead in here iks worssse for mmgh... mmyou."

It shows its teeth. There are lots of them. Is that a grin? Can that be? That the creature has a sense of humor? Rosie seemed to grin, too. I take a chance. I laugh. It opens its mouth wider but there's no sound. We look each other in the eye. Some kind of understanding, lizard to mammal, passes between us. Then the creature shivers. I pull a blanket off the bunk, big Hudson Bay, but it only covers the creature's top half like a shawl. It helps to hold it on with those tiny arms, and nods again.

"I'll build up the fire and get us something to eat. You just rest."

"I hhhelp-puh."

"Please don't."

It grins again, mouth wide, that row of teeth gleaming, then huddles close against the wall opposite my kitchen area, trying to make itself small. Still, I step on its toes as I work. When I do, we both say, "Sorry." "Khsssorry." We

both laugh... Well, I laugh and it shows its teeth.

How nice to have somebody... something around that has a sense of humor. They must have left in some odd rogue genes by mistake.

I start to make stew. I have lots of dried chanterelles and I hope it likes wild garlic. It watches me as Rosie did, mouth open. I hum a song my grandma taught me. I thought hardly anybody knew that song but me, but then I hear the creature buzzing along with me, no doubt about it, the same song. I look at it. It blinks a slow blink, as if for a wink.

We eat my hare stew, it out of my wash basin. Licks it clean like Rosie always did. At least it hasn't lost its appetite.

"Have you a name other than that Zero Seven on your tag? By the way, I took that off. I had a dog, Rosie. She died. I keep almost calling you Rosie by mistake. It's the only name I've said for years."

There's that smile again. "Rrrrosie is kfine. Kfine." Then Kfine turns into a cough. I heat up some wild rose hips tea. I always have lots of that.

Then it stretches out again. I pile on more blankets.

"Mmmmmnnno mmno. Mmdon't."

"I insist. You must stay warm.

If the lamp doesn't bother you I'll read for a while, but you should sleep. I'll make the fire high. Wake me if it gets cold. You should be warm.

(My lamp is just a bowl of volcanic tuff with exactly the right hole in the center. I have a big one and a little one. The oil I've rendered even from creatures with not much fat. Even deer.)

I settle myself with a book. I like having company even if the company takes up most of the room. I think it's already asleep, but then, "Khind, kh hind ssssir. I like being Rrrrrosie." (It gargles it out as if it was French.) "Bhut who are mmmm kh you? If khyou don't mmmmind."

"Ben. I'm Ben."

"Ah, easy khto kkh ssssay."

I think: She. She is a she.

When I douse the lamp (by putting on the lid) and it's pitch black in here, I do have a moment when I worry. She is starving. I might be her next meal and a better one than I've prepared for her so far, or at least bigger. What's a little broth and then a little rabbit stew? But I won't be facing anything my wife and child didn't face already though my fate might not be as instantaneous as theirs. But I hear her breathing, snuffling, snorting in her sleep just like Rosie. I'm comforted and reassured by her snores.

Sometime during the night the snow stops. Dawn, in my one and only window, shows a cloudless sky. I watch the oblong of sunlight, move down and across the far wall until it lights on her. She's a bundle of blankets, but what little I can see of her shines out. Certainly she's not made for a winter climate. Probably most comfortable in a hot place with lots of shiny green leaves to hide in.

She feels the sun the moment it touches her. (Thick skinned but infinitely sensitive.) Turns and looks at me. Grins her Rosie-grin. Like Rosie she doesn't have to say it, it's all over her face: Hey, a new day. What's up now? And: Let's get going.

"You look better."

She nods. Says, "Mmmmm, nnnn. Mmmmm, nnnn."

"We'll go out, if you like. You must feel cramped in here."

"Mmmmmm, nnnn."

I've jerky and hard tack. We breakfast on that, and more rose hip tea—a pitcher of it for her.

"Keep a blanket around your shoulders. And I think you'll have to back out."

Like my Rosie was before she got old, this Rosie peers, sniffs, hops up on boulders, jumps for no reason what so ever, she skips in the bare spots where the snow has blown off. Sings a ho dee ho dee ho kind of song. A young thing that, sick or not, starving or not, can't sit still. I saw that in my boy.

I take her to my viewing spot. You can see the whole valley. I often see deer from here.

As we watch, another of these creatures comes down the valley heading south. I haven't seen any until this one sitting beside me, and here comes yet another, and then two more not far behind. Driven down from the mountain passes on purpose? Or is it the cold?

We watch. Not moving. Rosie looks at me, at them, at me. I love that look all young things have, animal or human, of wondering: What's up? What's going on? Is everything all right?

Then those first two turn and trumpet at the others. Rosie's arms are just long enough for her to cover her ears. (She must hear extraordinarily well to need to do that from way up here.) Hard to tell from this distance, but those others all seem much larger than she is.

When, a moment later, she takes her fingers from her ears, I ask her, "Have you had experiences with others of your own kind before?"

She nods.

"The scars."

"Mmmnnn."

"You weren't supposed to fight each other."

"Mmnnnn."

I want to comfort her. Put my arms around this green scaly thing. (My son had an iguana. We never hugged it.) She reaches toward me as if to hug, too. But even those little arms... those claws... And my head could fit all the way in her mouth, no problem. I flinch away. I see her eyes turn reptilian—lose their wide childlike look. She says, "Kh... khss sssorry."

"No, it's I who should be... am sorry."

I reach and I do hug and let myself be hugged. I get my parka ripped on her claws. Well, it's not the first rip.

Far below us, the things fight and trumpet, smash trees, trample brush. I can see, even from way up here, spit fly out. There's no blood. Their hide is too tough.

They fight with their feet, leaping as cocks do. One is losing. It's on its back, talons up. Even from way up here, I can see a little herd of panicked deer galloping off towards the hills. Rosie covers her eyes this time and leans over as if she has a stomach ache. Says, "Mmmmmmmmnnn. Not Kkkh kkh krright."

"What were you supposed to do?"

"Kkh... khill... Mmmm those like kh you. Khill you."

Below us, the creature that was on its back tries to escape but the others leap high and claw at it, pull it down then one bites the under part of the neck. Now there is blood.

I turn to see Rosie's reaction, but she's not here. Then I see her, way, way back, curled up behind a tree.

I put my arm around her again. "Old buddy." Then, "How did you ever turn out as you are?"

"Mmmm mmistake."

"Gh gho," Rosie says, carefully not looking down at them. "Ghho. Mmmmnn... mnnnow!" And she's already on her way, back to the shack. I follow. Watching her. Her arms, so like ours, look like an afterthought. Obviously there's a bit of the human in her. I see it in the legs, too. Also in those half-formed ears. Those others below could push down my shack in half a minute. I need Rosie on my side.

"Stay. I need you. I'll push out a wall. I'll make the door bigger."

She stops, stares. I wish I knew what's going on inside that big fierce head of hers.

"I'll start getting the logs for it today."

"I kh... kh... khelph."

But my food won't last long with her eating washbasin's full. Besides, she's starving. We'll have to get food first.

"How have you lived all this time? What have you eaten?"

"Ghhophers mmm mostly. When mmmwere gh hophers. Khrabbits. When them. When kh llleaves, leaves. Mmmmushrooms. Rrrroots. Mmmmbark nnnot good but kh ate it. Khfish. Hhhard to kh kfish when kh h ice."

We climb higher than my shack so Rosie can fish. The streams up there are too fast to freeze over. She uses her foot. Hooks them on a claw. Her arms seem even too small to help with balancing. It's her big green head and the half of her left-over tail, waving from side to side, that balances her as she reaches. She gets seven.

"Kkhfried?" she says. "In khfat? With khh kh corn mmmeal? Like Mmmmmama? Mushka?"

"You betcha. You had a mama?"

"Mmmmmnnnn. Mmmmmm. Mmone kh like mmyou"

She bounces off down the path ahead of me, singing a oolie, oolie, doodlie do kind of song. I guess she's no longer sick. Or she's too happy to care. And certainly not thinking about those others fighting in the valley.

(I'm carrying the fish. I strung them through their gills on to a willow stick. I hadn't brought my stringer. I guess I don't have to worry about getting enough food for her. Yet she was starving. Perhaps she doesn't like things raw?)

Back home we eat fried fish. I eat two and Rosie eats five. She watches as I cook just as the dog did, exact same expression, mouth half open. A dog sort of smile. We settle down afterwards and I read to her from one of my books: Moby Dick. (I only brought three.) I read that to my son and wife, one on each side of me, and all of us on the couch. Rosie lies, head towards me, eyes almost shut, commenting now and then, her voice breathy, like one would imagine a snake would talk. I'm sitting on my cot. We sip our rosehips tea. We're both covered with blankets.

Then, "Time's up," I say. "You need sleep." But she doesn't want us to stop reading. "I insist," I say. She groans. "I kh kread. You ssssleep." She reaches for the book with those womanly shiny green fingers. I put it down and take her hand. "Ooobie baloobie, do it," I say. (Ooobie baloobie is another of her songs.) She laughs. (It's more like panting than laughing, but so hard I think she must be little more then seven years old—her equivalent of seven—to think that's so funny.) But she settles down right after. Says, "Kh... koh khay." Wraps her little arms around herself. I tuck the blankets closer and douse the lamp with its lid.

This time I don't worry if I might be her next meal, but I have a hard time sleeping anyway. I keep wondering what might happen if those others find my shack. They could break it down just leaning on it by mistake.

Since they all seem to be coming down, we'll go up. We'll take some supplies to the pass and hide. I've spent the night there many a time. We'll be all right as long as there isn't another storm that goes on for days and days. At least we'll have fish.

I always did like camping out. The view is always worth more than the discomfort. Besides I do without right

here every day. It never bothers me, washing up in a washbowl or an icy stream. Only here is it worth the bother of looking out the window.

Or now, at Rosie, too. She really is quite beautiful, her yellow underbelly and the darker green along the ridge of her back. She's even reddish in spots.

Rosie hears them first, wakes me with her, "Kh... kh... kh." There's sounds of crashing through the brush. A tree splintering. From the look of the big dipper, straight out my little window, it's probably three or four AM.

They're coming closer. For sure they saw our smoke and smelled us. They push on our walls. I hear them breathe and hiss. No, it's only one, I think only one, pushing the wall on one side. The caulking falls out. Rosie braces herself against that wall to hold it. She picks up the rhythm of the other's pushing, leans when it pushes. It works, the wall holds. At one point there's a large hole where the caulking's gone and I see the creature looking in—one light greenish eye like Rosie's. The thing gives a throaty hiss. Rosie answers with the same hiss. It gives up. We hear it smashing away. We look at each other.

"You did it!"

Rosie's mouth is open in that smile that looks so much like my old Rosie's and she nods yes so hard I'm thinking she'll put her neck out of joint. "Kh khdid! Khdid!"

"Pack up. We'll go camp out up beyond where we fished."

She goes right for the frying pan and the bag of corn meal and puts them in her vest pockets. She's still nodding yes but she stops when I tell her we have to bring blankets and a tarp.

"Kh... kh... kh... Kno! Nnnnnooo!"

"Yes! It's colder up there. You need shelter as much as I do. Maybe more so."

Like Rosie, she gives up easily. "Kh... kh-kho kay." I don't know what I'd do if she didn't. She helps me roll the blankets in the tarp. Says, "I kh kcarry mmmmthat."

I have to stop her from taking her books and her fancy green rock. She insists she can carry all the things we need and those too.

"I kh likhe ghrrrrreeeen."

"That's good. Then you like yourself."

She starts up, hop, skip, and jump... even with all that to carry. I can't believe it, she's leaping from rock to rock—even across talus. I keep telling her that stuff is unstable. "Dangerous even for you," I say, but she's does it anyway. The rocks do teeter, but she's sure footed. That leaping doesn't last long, thank goodness. She doesn't realize how much all that weight she's carrying will tire her. I warned her, but since when do the young listen to warnings of that sort? She's jumped and skipped and leaped until now she lags behind and blows like a horse at every other step. I take the tarp and blankets from her. I'd take that frying pan, too, but she won't let me. "Kh... kan do it. I kan!"

I don't let Rosie stop until the half way spot. "We'll get up where we can see," I say, "then we'll rest."

"Oh pf... pfhooo," she says, but she goes on, sighing now.

"You can do it. Fifty more steps."

A few minutes later we put down our bundles, Rosie takes off her vest, and we climb out to the edge of the scarp we just zigzagged up to see what we can see. And it's as I feared, they've found my cabin. Looks like there's not much left of it already, walls pushed in, roof collapsed. I had doused the fire but there must have been some cinders left. A fire has started, at the cabin and on the ground around it.

She sits as I sit, legs hanging over. How much like a human she is. Sometimes you don't see it at all, but in certain positions you do. Now she looks as if she's going to cry. (Can they cry? Only humans, seals, and sea birds have tears. Anyway, you don't need tears for sadness.) I feel like crying, too. Rosie can tell just like my old Rosie could. We lean against each other.

"At least your stones are all right."

She doesn't even answer with an mmmnnnn.

I look to see if any trees are waving around down there from being bumped into, but there's nothing. Odd.

After we start on up, Rosie is droopy, not only tired but sad. She thunks along. I feel sorry that she jumped and hopped so much in the beginning. My other Rosie was like that. She never realized she had to save her strength.

Most of my talking has been to keep her going. "Count steps. Maybe a hundred more." "Come on, poor tired friend." "See that rock? We'll stop just beyond that." Now I mumble to myself—about when I'll be back to sift through my things. I didn't bring any souvenirs of my wife and child. When I fled out here... escaped... I didn't even want pictures. I was running away from memories. Of course memories come and go as they please.

Just around the corner and we'll be able to see the little lake I'm heading for, the stepping stones crossing the creek that pours down from it, beyond, the trees and boulders where I had hoped to hide us this first night, but I decide we have to stop now. We stand... that is, I stand, Rosie collapses. We're both too tired to get out food other

than jerky. I tuck Rosie in under an overhang. Just her big back end with the half bitten off tail hanging out. I cover her with blankets and the tarp. She's asleep before she can finish her jerky. I pick the chunk out of her mouth to save it for breakfast.

In the morning I wake to the sound of a helicopter. I know right away. Why... why didn't I suspect before? Rosie not only had an ear tag, but she has a chip imbedded in her neck.

There's no place for a helicopter to land, the mountains are too closed in and too many boulders, but we're not safe anyway. There could be more things in Rosie's neck than just an ID chip. That could be why we didn't hear those creatures down there anymore.

Rosie's in an exhausted sleep. "You have to wake up. Now! I have to get your chip out." I don't mention what else might be there. Those others may have been disposed of... without a trace, I'll bet. Or little traces scattered all over the place so no one will ever know there ever were creatures like this.

"Did you know you have a chip?"

I feel around Rosie's neck.

"Hang on, friend, this will hurt."

I don't care about those others, but I'd never like the forest without Rosie in it, skipping and hopping along, picking flowers, collecting green rocks or glittery fool's gold, singing, "doodlie do" songs.

She looks at the helicopter, then at me, then the copter again, then back at me. Again it's that: Should I be frightened or not? Except now I'm frightened. I try not to show it but she senses it. I see her getting scared, too.

The copter circles. I have to hurry—but I don't want to hurt her—but her skin is so tough! And who knows, if I do find one or two things, will that be all that's hidden there?

"Hang on."

She hugs herself with those inadequate arms. Even before I start she makes little doglike... or rather, birdlike sounds.

"Sing," I say. "Sing your oobie do."

I feel two lumps. I dig in. I say, "Almost done," when I've hardly begun.

Then we run. Without our blankets, without our food, except what Rosie has in her vest.

"They can't follow now." I hope that's true.

We stick to the old path that circles over the pass. We try to stay close to rocks and under what trees there are. Even running as we do, I can't not think about how beautiful it is up here. When I first saw it, years ago, I shouted when I came around the corner.

She's way ahead of me in no time—those long strong legs. And we're not carrying much of anything. I catch up when she finally turns to look for me. We both look back. The helicopter still hovers. I left the chip and button bullet back there at our camping spot. They think she's still there. Maybe they don't know about me.

She's different from those others. What was she for? That is, besides killing those like me?

It starts to snow. Thank God or worse luck, I don't know which. It'll hide our tracks and the helicopter won't fly, but we don't have food or blankets.

We cross the pass and dip into the next valley. We find a sheltered spot among a mass of fallen boulders where the whole side of a cliff came down. Some boulders are on top of each other making a roof. Boulders over, boulders under—not a particularly comfortable spot but we huddle there and rest. We take stock. All we have is what's in Rosie's vest, a little left over jerky (we eat it) the frying pan and cornmeal. We can make corn cakes if we don't catch fish.

This is just a mountain storm. If we can get far enough down we'll walk out of it. If we're lucky it'll last just long enough to cover our tracks. I tell Rosie. She lies at my feet still panting. I stoke her knobby head.

"How's your neck?"

"Hh... hoo khay."

She sleeps. Murmuring a whole series of Mmmms and then, Mmmush, and, Mmmushka.

As the storm eases and we're some rested, I wake her and we start down. After an hour we're out of the snow and wind and into a hanging meadow. I've been over this pass but not this far.

I'm worried. Rosie is sluggish and dreamy, flopping along, tripping a lot. Poor thing, all she has on is her vest. She's cold and with reptiles... or part-reptiles... I don't want to build a fire but I must. The copter's gone, maybe it's all right to now.

"My poor fierce friend," I say. She grins. I take her hand and sit her down. "We're going to have a nice big fire. You rest. I'll find the wood."

"I'll hhh... hhh... hhh."

"No you won't. I'm going by myself. I'll be back before you know it."

She mews, turns away, and curls up.

On this side there's a lot less snow, so not hard going. I gather brush, dead limbs, and drag the whole batch back to

her, flop down, my arm around her. I see her eyes flicker, though the nictitating membrane closes as she does it. She doesn't wake. I'll have to make the fire right now.

How does a sick reptile show how sick it is? All I know is, she doesn't look right and doesn't feel right.

I build the fire as close to her as I dare. Finally she seems in a more normal sleep. I sleep, too.

I wake with a start. Hibernate! Do they? All those others, too. But she's been mixed with other genes. For sure, some human.

I wake her by mistake as I get out the frying pan and the cornmeal. I'm melting snow, first to drink and then to make corncakes. She drinks as if she's been out in the desert for days. Then, "I'mm mmhungry." Then she sees what little cornmeal we have and says, "Mmmm nnnot ssso... Nnnot hungry," she says again. "Ooobie, baloobie, nnnnot."

"Ooobie, baloobie, do eat me. Roll me in corn meal. I'm old and I'm tired."

All of a sudden it's not a joke.

"Kkkh kkkh! Kh khcan't dooo that! Oooooh!"

"I thought that's what you were made for... born for."

"Kkh can't."

"You'll die. Look how thin you are."

"I'mmm tem po rary. Temmm po po rary." She sings it like a song—like she doesn't care. Does she understand what it means? I wonder if it's true. Perhaps they all are—were.

"Mmmmmm all temmm po po! rary."

"What makes you think you're temporary?"

"Mmmmush kh knew."

"She told you? How could she!"

"Kkh kh nnnno! I sssaw kher eyes. Sssscared. I kh khfound out. I kh... kh... kread."

"You're only half grown."

"Have a kh kh tth timer."

I don't know what I see in those lizardy eyes of hers. "Don't you like it here? Don't you care anything about being alive?"

"Oh! Kh! Oooh! Kh!" She does a hopping, twisting dance, those tiny arms raised. It tells how she feels, better than her words ever could.

"Mmmmy kh heart," she says, "hasss kth th timer."

"How long is temporary?"

"I sh should dannnce. Ssssing. Mnnnow! And llllook. Lllook a llllot! Yesssss! Lottts. Mmm then kh kgo for goood mmmmbig bh bones."

We'll build another cabin. Here in this hanging valley, sheltered under boulders and trees and next to a good fishing stream. With her help we'll have one up in no time. We'll dance and sing and look around a lot. At the smallest and the largest... the near and the far... stars, mountain peaks, beetles...

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CUT

Megan Lindholm

Patsy sits on a bar-stool at my breakfast counter. She is sipping a glass of soy milk through a straw. I glance at her, then look away at my rainforestcam on the wallscreen behind her. My granddaughter had an incisor removed so that she could drink through the straw with her mouth closed. She claims it is more sanitary and less offensive to other people. I don't know about "other people." It offends the hell out of her grandmother.

"So. SAT's next week?" I ask her hopefully.

"Uh-huh," she confirms and I breathe a small sigh of relief. She had contemplated refusing to take them, on the grounds that any college who wanted to rate her on a single test score was not her kind of place anyway. She swings her feet, kicking the rungs of her stool. "I'm still debating Northwestern versus Peterson University."

I try to recall something about Peterson, but I don't think I've ever heard of it. "Northwestern's good," I hedge. As I set a plate of cookies within her reach, I notice a bulge in the skin on her shoulder blade just above the fabric of her tank top. An irritated peace sign seems to be emblazoned on it. "What's that? New tattoo?"

She glances over her shoulder at it, then shrugs. "No. Raised implant. They put a stainless steel piece under your skin. Works best when there's bone backing it up. Mine didn't come out very good. Grandma, you know I can't eat those things. If the fat doesn't clog up my heart, the sugar will send me into a depression and I'll kill myself."

She nudges the plate of cookies away. I smile and take one myself. "I think that's a bit of an exaggeration. I've been eating chocolate chip cookies for years."

"Yeah, I know. And Mom, too. Look at her."

"Doesn't it hurt?" I ask, nodding at her implant. I evade the topic of her mom. It is not that I expect my granddaughter to always get along with my daughter. It is that I don't want to be wedged into the middle of it. I tell myself that this is not cowardice. By standing apart from their mother-daughter friction, I keep the lines of communication open between Patsy and myself.

My gambit is successful. "This?" She tosses her head at her implanted peace sign. "No. A little slit in the skin, then they free the skin layer from the tissue underneath it, slide in the emblem, put in a couple of stitches. It healed in two days, and now it's permanent. Besides. Women have always been willing to suffer for beauty. Inject collagen into your lips. Get breast implants. Have your ribs removed to have a smaller waist."

I give a mock shudder. "I never went in for those sorts of things. I think God meant us to live in our bodies the way they are."

"Yeah, right." She snorts skeptically, and picks up a cookie crumb, then licks it off her finger. I catch a brief glimpse of her tongue stud. "You made Mom wear braces on her teeth for two years. She's always telling me what a pain that was.' "

"That was different. That was for health as much as for appearances."

"Oh, let's be honest, Gran." Patsy leans forward on her elbow and fixes me with her best piercing glance. "You didn't take her to an orthodontist because you were worried she couldn't chew a steak. She told me the kids at school were calling her 'Fang.'"

I wince at the memory of my twelve-year-old in tears. It had taken me an hour to get her to tell me why. Katie was never as forthcoming with me as her own daughter is. Perhaps it's a part of the mother-daughter friction heritage. "Well, appearance was part of it. It was affecting her self-esteem. But straight teeth are important to lifelong health and—"

"Yeah, but the point is, it was plastic surgery. For the sake of how she looked. And it hurt her. But you still made her do it. For dental hygiene. So she would look like the other kids."

I feel suddenly defensive. Patsy is going over all this as if it is a well-rehearsed argument. "Well, at least it's more constructive than some of the ways you hurt yourself," I challenge her. "Tattoos, body piercing, tooth removal. It's almost like you're punishing yourself for something. It worries me, frankly, that so many people can damage their bodies for the sake of a fad."

"Hardly a fad, Gran. People have been doing it for thousands of years. It's not some weird self-punishment. It's not just that it looks good, it makes a point about yourself. That you have the will to make yourself who you want to be. Even if it means a little pain." She pokes speculatively at the heaped cookies.

"Or a lot of infection."

"Not with that new antibiotic. It kills everything."

"That's what worries me," I mutter.

I take another cookie. Nothing betrays my amusement as Patsy absent-mindedly takes one and dunks it in her milk. She slurps off a bite, then says with a full mouth, "I'm getting cut myself."

"Cut?" The bottom drops out of my stomach. I'd seen it on the netnews. "Like a joint off one of your little fingers like those BaseChristian kids did? To seal their promise to never do drugs?" An almost worse thought finds me. "Not that facial scarification they do with the razor blades and ash?"

She laughs aloud and my anxiety eases. "No, Granma!" She hops off her stool and grabs her groin. "Cut! Here, you know."

"No, I don't know." How can I suddenly be so afraid of what I don't know?

"Circumcision. Everyone's talking about it. Here." While I am still gaping at her, she takes her net link from her collar and points it at my wallscreen. My rainforestcam scene gives way to one of her favorite links. I cringe at what I see. Some net star in a glam pose has her legs spread. Larger than life, she fills my wall. Head thrown back, hair cascading over her shoulders, she is sharing with us her freshly healed female circumcision. Symmetrical and surgically precise are the cleanly healed cuts. It is a pharaonoic circumcision, and the shaved seamed pudenda remind me obscenely of the stitched seam down an old-fashioned football. I blink and force myself to look again, but all I can see is the absence of the flesh that should be there. I turn away, sickened, but Patsy stares, fascinated. "Doesn't it look cool? In the interview, she says she did it to get a role. She wanted to show the producer her absolute commitment to the project. But now she loves it. She says she feels cleaner, that she has cut a lot of animal urges out of her life. When she has sex now... here, I can just play the interview for you—"

"No, thanks," I say faintly. I tap my master control and the screen goes completely blank. After what I have just seen, I could not bear the beauty of the rainforestcam with the wet, dripping leaves and the calling birds everywhere. I take a breath. "Patsy, you can't be serious."

She clips her link back onto her collar and pops back onto her stool. "You know I am, Granma. I came over here to tell you about it. At least you aren't having a meltdown like Mom did."

"She knows you want to do this?" I can't grasp any of it, not that some women do this voluntarily, not that Patsy wants to do it, not that Katie knows.

Patsy crunches down the rest of her cookie. "She knows I'm going to do it. Me and Ticia and Samantha. Mary Porter, too. We'll be like a circumcision group, like some African tribes had. We've grown up together. The ceremony will be a bond between us the rest of our lives."

"Ceremony." I don't know when I stood up. I sit back down. I press my knees together because they are shaking. Not to protect my own genitals.

"Of course. At the full moon tonight. The midwife who does it has this wonderful setting, it's an open field with these big old rocks sticking up out of it, and the river flowing by where you can hear it."

"A midwife does this?"

"Well, she used to be a midwife. Now she says she only does circumcisions, that this is more symbolic and fulfilling to her than delivering babies. But she is medically trained. Everything will be sterilized, and she uses antibiotics and all that stuff. So it's safe."

I suppose I should be relieved they are not using broken glass or old razor blades. "I don't get it," I say at last. I peer at my granddaughter. "Is this some sort of religious thing?"

She bursts out laughing. "No!" she sputters at last. "Granma! You know I don't go for that cult stuff. This is just about me taking control of my own life. Saying that sex doesn't run me, that I won't choose a man just because I'm horny for him, that I'm more than that."

"You're giving up sexual fulfillment for the rest of your life." I state it flatly, wanting her to hear how permanent it is.

"Granma, orgasm isn't sexual fulfillment. Orgasm isn't that much better than taking a good shit."

I smile in spite of myself. "Then you're sleeping with the wrong boys. Your grandfather—"

She covers her ears in mock horror. "Don't gross me out with old-people sex stories. Ew!" She drops her hands. "Sexual fulfillment—that's like code words that say women are about sex. *Women need sexual fulfillment,* like it's more important than being a fulfilled person."

We are arguing semantics when what I want to tell her is not to let some fanatic cut her sweet young flesh away from her body. Don't let anyone steal that much of you, I want to say. I don't. I suddenly understand how grave this is. If I become too serious, she won't hear me at all. She is poking me, trying to provoke me to act like a parent. I hold myself back from that futile abyss. I sense that Katie has already plunged to the bottom of it. Reasoning with her won't work. Get her to talk, and maybe she will talk herself out of it.

"Have you any idea how much it's going to hurt? Well, I'm sure she'll use an anesthetic for the surgery, but afterward when you're healing—"

"Duh! That would defeat the whole purpose. No anesthetic. It would go against the traditions of female circumcision throughout the world. Ticia and Mary and Sam and I will be there for each other. It will be just women sharing their courage with other women."

"Female circumcision was invented by men!" I retort. "To keep women at home and subservient to them. To take

away a precious part of their lives. Patsy, think about this. You're young. Once done, you can't go back."

"Sure you can. At the midwife's site, there's a link to a place that can make you look like you did before. Here." She is fiddling with her netlink. I press the OFF on my master control again.

"That's appearance, not functionality. They can't restore functionality. How would they make you a new clitoris?"

"Are you sure?"

"Yes. And you should know that much before you get into this. I can't understand how that woman can do this to girls." The parent part is getting the better of me. I clamp my lips down.

Patsy shakes her head at me. "Granma! It has always been women doing it to other women, in all the cultures. Look." She reaches over to push my master button back ON. "Here's a link to the midwife's website. Go look at it. She has all the historical stuff posted there. You like anthropology. You should be fascinated."

I stare at her, defeated. She is so sure. She argues well, and she is not stupid. She is not even ignorant. She is merely young and in the throes of her time. Patsy will do this if she is not stopped. I don't know how to stop her. Her words come back to me. Women doing it to other women. Women perpetuating this maiming. I try to imagine what this midwife must be like. I try to imagine how she began doing this to other women, how she could find it fulfilling. I can't. "I'd have to meet her," I say to myself.

Patsy brightens. "I hoped you would. Look. On her site, my link is the Moon Sisters. Our password is Luna. Because we chose the full moon. There's pictures of us, and the date and time and place. You're invited. Mary wanted to have a webcam on the ceremony, but we voted her down. This is private. For us. But I'd like you to be there."

"Will your mom be there?"

Again her snort of disbelief. "Mom? Of course not. She gets all worked up whenever I talk about it. She threatened to kill our midwife. Can you believe that? I asked her if she ever bombed abortion clinics when she was younger. She said it wasn't the same thing at all. Sure it is, I told her. It's all about choice, isn't it? Women making their own sexual choices." Her beeper chimes and she leaps from the stool. "Wow, I've got to get going. Teddy's going to drive me out there. He won't stay, of course. This is only for women."

I make my last stand. "How does Teddy feel about this?"

She shakes her head at me. "You just don't get it, Granma. It's not about Teddy. It's my choice. But he's excited. After this, if I have sex with him, he'll know it's not because I'm horny at the moment, but because I want to give that to him. And I think he's excited because it will be different. Tighter because of how she sews us up. You know men."

She doesn't wait for an answer from me, which is good, because right now I am sure that I don't even know women, let alone men. As soon as she is out the door, I phone Katie. In a moment, I see her in the inset of my wall screen, but she does not meet my eyes. She is looking past me, at something on her own wallscreen. Her hand is uplifted, guiding a tinkerbell pointer device. Her blue-green eyes are rapt with fascination. I stare for a moment at my beautiful talented daughter. By a supreme effort of will, I don't shriek, "Circumcision! Patsy! Help!" Instead I say, "Hi, whatchadoing?"

"Sorting beads from the St. Katherine site. It's fascinating. You know my beadmaker from the Charlotte site? Well, I'm finding her work here, too. They're unmistakably hers from the analysis. Which means these people traveled over a far greater area than we first supposed." She moves the tinkerbell in the air, teasing a bead on her screen into a different window.

"Or that the trade network was greater," I suggest as I smile at her. Despite my current panic, I have to smile at the sight of her. She is so intent, her eyes roving over her own screen as she continues working. When she is enraptured in her archaeology like this, she suddenly looks eighteen again. There is that huntress-fierceness to her stare. I am so proud of her and all that she is. She nods her agreement. I know she is busy, but this is important. Still, I procrastinate. I love to see her like this. Soon enough I will have to shatter her ardent focus. "Do you ever miss actually handling the beads and the artifacts?"

"Oh. Well, yes, I do. But this is still good. And the native peoples have been much more receptive to our work now that they know all the grave goods will remain in situ and relatively undisturbed. The cameras and the chem scanners can do most of the data gathering for us. But it still takes a human mind to put it all together and figure out what it means. And this way of doing it is better, both for archaeology and anthropology. Sometimes we're too trapped in our own time to see what it all means. Sometimes we're too close, temporally, to understand the culture we're investigating. By leaving all the artifacts and bones in situ, we make it possible for later anthropologists to take a fresh look at it, with unprejudiced eyes." She glances up at me and our eyes meet. "So. You called?"

"Patsy," I say.

She clenches her jaw, takes a breath and sighs it out. The intent eighteen- year old anthro student is gone, replaced by a worried, tired mom. The lines in her face deepen and her eyes go dead. "The circumcision."

"Yes. Katie, you have to stop her!"

"I can't." She looks away from me, staring fiercely at her beads as if she will find some answer there.

"You can't?" I am outraged.

She is weary. Her voice trembles. "Legally, her body is her own. Once a child is over fourteen, a parent cannot interfere in—"

"I don't give a damn about legal—" I try to break in, but she continues doggedly.

"—any decision the child makes about her sexuality. Birth control, abortions, adopting-out of children, gender reassignment, confidential medical treatment for venereal disease, plastic surgery—it's all covered in that Freedom of Choice act." She gives me a woeful smile that threatens to become a grimace. "I supported that legislation. I never thought it would be construed like this."

"Are you sure it covers things like this?" I ask faintly.

"Too sure. Patsy has forced me to be sure. Shall I forward all the web links to you? She has, in her typical thorough way, researched this completely... at least in every way that supports her viewpoint." She shrugs helplessly. "I gave her a set of links to websites that oppose it. I don't know if she looked at them at all. I can't force her."

I realize I have my hand clenched over my mouth. I pull it away. "You seem so calm," I observe in disbelief.

For an instant, her eyes swim with tears. "I'm not. I'm just all screamed out. I'm exhausted, and she has stopped listening to me. What can I do?"

"Stop her. Any way you can."

"Like you stopped Mike from dropping out of school?"

Even after all the years, I feel a pang of pain. I shake my head. "I did everything I could. I'd drop your brother off at the front door, I'd watch him go into the school, and he'd go right out the back door. Battling him was not doing anything for our relationship. I had to let him make that mistake. I stopped yelling at him in an effort to keep the relationship intact. At least, it saved that much. He dropped out of school, but he didn't move out or stop being my son. We could still talk."

"Exactly," Katie says. She stares past me at her screen but I have broken the spell. She can no longer forget her daughter's decision in wonder at some ancient beadmaker's work. "I was quite calm last night. I told her that all I asked was that she always remember the decision was hers and that I completely opposed it. 'Fine,' she said. 'Fine.' At least this way, she'll come back here after the damned ceremony instead of overnighting in a circumcision hut with just the other girls. If she gets an infection or doesn't stop bleeding, at least I'll know about it and can rush her to the hospital."

"Can you legally still do that?" I ask with bitterness that mocks, not her, but the society we live in.

"I think so." She stops speaking and swallows. "Pray, Mom," she begs me after a moment. "Pray that when the other girls scream, she loses her courage and runs away. That's my last hope."

"It's a slim one, then. Our Patsy never lacked for guts. Brains, maybe, but not guts." We smile at one another, pride battling with despair. "Once she's said she'll do a thing, she won't back down no matter how scared she is. She'll let that woman cut her up and sew her tight rather than be seen as a coward by her friends."

"It's the baby I feel sorry for," Katie says suddenly.

"Baby?" All the hair on my body stands up in sudden horror.

"Mary's baby. She decided to have her baby done, the midwife is doing the baby first."

I didn't even know Mary had a baby. She is only a year older than Patsy. "But she can't! She has no right to make a decision like that, to scar her daughter for the rest of her life!"

Again the bitter smile makes Katie a sour old woman I don't know. "It's the flip side of the Freedom of Choice act. The compromise Congress made to get it passed. Under the age of fourteen, a parent can make any choice for the child. Mary is Bartolema's mother. It's her decision."

"It's barbaric! It's abusive!"

"You had Mike circumcised when he was two days old."

That jolts me. I try to justify it. "It was a different time. Almost all boys were circumcised then. Your dad and I didn't even think about it, it was just what you did. If the baby was a boy, you had him circumcised. They told us it made it easier to keep the baby clean, that it helped prevent cancer of the penis, that it would make him like all the other boys in the locker room."

"They did it without anesthetic."

I am silent. I am no longer sure if we are talking about Mary's baby girl, or my own tiny son, all those years ago. I remember tending to the fresh cut on his penis, dabbing on petroleum jelly to keep his diaper from sticking to it. I am suddenly ashamed of myself. I had not hesitated, had not questioned it, all those years ago. I had charged ahead and done what others told me was wise, done what everyone else was doing.

Just like Patsy.

The silence has stretched long, and said more than words. "She invited me to be there," I say quietly. "Do you think I should go? Is that like giving my approval?"

"Go," Katie pleads quickly. "If it all goes wrong, you can rush her to a hospital. She won't tell me where it is, and I won't ask you to betray that confidence. But be there for her, Mom. Please."

"Okay," I say quietly. I've said it. I'll go watch her daughter and my grand-daughter be maimed.

Katie has started to cry.

"I love you, baby. You're a good mom," I tell her. She shakes her head wildly, tears and hair flying, and breaks the connection.

For a time I stare at my rainforest. Then I get up. There is a backpack in the hall closet. I take it to the bathroom and begin to put things in it. Clean towels. Bandaging. I shudder as I put in the alcohol. I try to think what else. There is a spray antiseptic with a "non-sting, pain relieving ingredient." Feeble. What else should I take, what else? I stare into the medicine cabinet but find no help there.

I draw a breath and look in the mirror. Katie's face is an echo of mine, made perfect. Patsy, I see you in my green eyes and almost cleft chin. They are mine, the woman and the girl, the daughter of my body and my daughter's daughter. Born so soft and pink and perfect. I make my arms a cradle and wish they were both still mine to hold and protect. Protect. It is what a mother does, and no matter how old one gets, one never stops being a mother.

I grope behind the stacked towels on the shelf and take it down. Shining silver, it slips from the holster, releasing the smell of Hoppes Oil. There is a horsie on the handle. Fred always loved Colts. There is a dusty box of ammunition, too. I break it open, and begin to fill the empty cylinders, one by one. The bullets slide in like promises to keep.

I am suddenly calm. Don't be afraid, baby. Not my baby, not Mary's baby, no one's baby need fear. Granma is coming. No one's going to cut you.

I think for a moment of what a mess I'm going to make of my life. I think of the echoes that will spread out from one bullet, and I wonder how Patsy and her friends will deal with it, and what it will do to Katie. This is *my* freedom of choice, I tell myself fiercely. My turn to choose. Then I know I am too close to any of it to understand. Maybe we should just leave the midwife's body where it falls. In situ. Perhaps in a hundred years or two, someone else will know what to make of it all.

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THE DOG SAID BOW-WOW

Michael Swanwick

The dog looked as if he had just stepped out of a children's book. There must have been a hundred physical adaptations required to allow him to walk upright. The pelvis, of course, had been entirely reshaped. The feet alone would have needed dozens of changes. He had knees, and knees were tricky.

To say nothing of the neurological enhancements.

But what Darger found himself most fascinated by was the creature's costume. His suit fit him perfectly, with a slit in the back for the tail, and—again—a hundred invisible adaptations that caused it to hang on his body in a way that looked perfectly natural.

"You must have an extraordinary tailor," Darger said.

The dog shifted his cane from one paw to the other, so they could shake, and in the least affected manner imaginable replied, "That is a common observation, sir."

"You're from the States?" It was a safe assumption, given where they stood—on the docks—and that the schooner *Yankee Dreamer* had sailed up the Thames with the morning tide. Darger had seen its bubble sails over the rooftops, like so many rainbows. "Have you found lodgings yet?"

"Indeed I am, and no I have not. If you could recommend a tavern of the cleaner sort?"

"No need for that. I would be only too happy to put you up for a few days in my own rooms." And, lowering his voice, Darger said, "I have a business proposition to put to you."

"Then lead on, sir, and I shall follow you with a right good will."

The dog's name was Sir Blackthorpe Ravenscairn de Plus Precieux, but "Call me Sir Plus," he said with a self-denigrating smile, and "Surplus" he was ever after.

Surplus was, as Darger had at first glance suspected and by conversation confirmed, a bit of a rogue—something more than mischievous and less than a cut-throat. A dog, in fine, after Darger's own heart.

Over drinks in a public house, Darger displayed his box and explained his intentions for it. Surplus warily touched the intricately carved teak housing, and then drew away from it. "You outline an intriguing scheme, Master Darger—"

"Please. Call me Aubrey."

"Aubrey, then. Yet here we have a delicate point. How shall we divide up the... ah, *spoils* of this enterprise? I hesitate to mention this, but many a promising partnership has foundered on precisely such shoals."

Darger unscrewed the salt cellar and poured its contents onto the table. With his dagger, he drew a fine line down the middle of the heap. "I divide—you choose. Or the other way around, if you please. From self-interest, you'll not find a grain's difference between the two."

"Excellent!" cried Surplus and, dropping a pinch of salt in his beer, drank to the bargain.

It was raining when they left for Buckingham Labyrinth. Darger stared out the carriage window at the drear streets and worn buildings gliding by and sighed. "Poor, weary old London! History is a grinding-wheel that has been applied too many a time to thy face."

"It is also," Surplus reminded him, "to be the making of our fortunes. Raise your eyes to the Labyrinth, sir, with its soaring towers and bright surfaces rising above these shops and flats like a crystal mountain rearing up out of a ramshackle wooden sea, and be comforted."

"That is fine advice," Darger agreed. "But it cannot comfort a lover of cities, nor one of a melancholic turn of mind."

"Pah!" cried Surplus, and said no more until they arrived at their destination.

At the portal into Buckingham, the sergeant-interface strode forward as they stepped down from the carriage. He blinked at the sight of Surplus, but said only, "Papers?"

Surplus presented the man with his passport and the credentials Darger had spent the morning forging, then added with a negligent wave of his paw, "And this is my autistic."

The sergeant-interface glanced once at Darger, and forgot about him completely. Darger had the gift, priceless to one in his profession, of a face so nondescript that once someone looked away, it disappeared from that person's consciousness forever. "This way, sir. The officer of protocol will want to examine these himself."

A dwarf savant was produced to lead them through the outer circle of the Labyrinth. They passed by ladies in bioluminescent gowns and gentlemen with boots and gloves cut from leathers cloned from their own skin. Both

women and men were extravagantly bejeweled—for the ostentatious display of wealth was yet again in fashion—and the halls were lushly clad and pillared in marble, porphyry, and jasper. Yet Darger could not help noticing how worn the carpets were, how chipped and sooted the oil lamps. His sharp eye espied the remains of an antique electrical system, and traces as well of telephone lines and fiber optic cables from an age when those technologies were yet workable.

These last he viewed with particular pleasure.

The dwarf savant stopped before a heavy black door carved over with gilt griffins, locomotives, and fleurs-de-lis. "This is a door," he said. "The wood is ebony. Its binomial is *Diospyros ebenum*. It was harvested in Serendip. The gilding is of gold. Gold has an atomic weight of 197.2."

He knocked on the door and opened it.

The officer of protocol was a dark-browed man of imposing mass. He did not stand for them. "I am Lord Coherence-Hamilton, and this—" he indicated the slender, clear-eyed woman who stood beside him—"is my sister, Pamela."

Surplus bowed deeply to the Lady, who dimpled and dipped a slight curtsey in return.

The Protocol Officer quickly scanned the credentials. "Explain these fraudulent papers, sirrah. The Demesne of Western Vermont! Damn me if I have ever heard of such a place."

"Then you have missed much," Surplus said haughtily. "It is true we are a young nation, created only seventy-five years ago during the Partition of New England. But there is much of note to commend our fair land. The glorious beauty of Lake Champlain. The gene-mills of Winooski, that ancient seat of learning the *Universitas Viridis Montis* of Burlington, the Technarchaeological Institute of—" He stopped. "We have much to be proud of, sir, and nothing of which to be ashamed."

The bearlike official glared suspiciously at him, then said, "What brings you to London? Why do you desire an audience with the queen?"

"My mission and destination lie in Russia. However, England being on my itinerary and I a diplomat, I was charged to extend the compliments of my nation to your monarch." Surplus did not quite shrug. "There is no more to it than that. In three days I shall be in France, and you will have forgotten about me completely."

Scornfully, the officer tossed his credentials to the savant, who glanced at and politely returned them to Surplus. The small fellow sat down at a little desk scaled to his own size and swiftly made out a copy. "Your papers will be taken to Whitechapel and examined there. If everything goes well—which I doubt—and there's an opening—not likely—you'll be presented to the queen sometime between a week and ten days hence."

"Ten days! Sir, I am on a very strict schedule!"

"Then you wish to withdraw your petition?"

Surplus hesitated. "I... I shall have to think on't, sir."

Lady Pamela watched coolly as the dwarf savant led them away.

The room they were shown to had massively framed mirrors and oil paintings dark with age upon the walls, and a generous log fire in the hearth. When their small guide had gone, Darger carefully locked and bolted the door. Then he tossed the box onto the bed, and bounced down alongside it. Lying flat on his back, staring up at the ceiling, he said, "The Lady Pamela is a strikingly beautiful woman. I'll be damned if she's not."

Ignoring him, Surplus locked paws behind his back, and proceeded to pace up and down the room. He was full of nervous energy. At last, he expostulated, "This is a deep game you have gotten me into, Darger! Lord Coherence-Hamilton suspects us of all manner of blackguardry,"

"Well, and what of that?"

"I repeat myself: We have not even begun our play yet, and he suspects us already! I trust neither him nor his genetically remade dwarf."

"You are in no position to be displaying such vulgar prejudice."

"I am not *bigoted* about the creature, Darger, I *fear* him! Once let suspicion of us into that macroencephalic head of his, and he will worry at it until he has found out our every secret."

"Get a grip on yourself, Surplus! Be a man! We are in this too deep already to back out. Questions would be asked, and investigations made."

"I am anything but a man, thank God," Surplus replied. "Still, you are right. In for a penny, in for a pound. For now, I might as well sleep. Get off the bed. You can have the hearth-rug."

"I! The rug!"

"I am groggy of mornings. Were someone to knock, and I to unthinkingly open the door, it would hardly do to have you found sharing a bed with your master."

The next day, Surplus returned to the Office of Protocol to declare that he was authorized to wait as long as two weeks for an audience with the queen, though not a day more.

"You have received new orders from your government?" Lord Coherence-Hamilton asked suspiciously. "I hardly see how."

"I have searched my conscience, and reflected on certain subtleties of phrasing in my original instructions," Surplus said. "That is all."

He emerged from the office to discover Lady Pamela waiting outside. When she offered to show him the Labyrinth, he agreed happily to her plan. Followed by Darger, they strolled inward, first to witness the changing of the guard in the forecourt vestibule, before the great pillared wall that was the front of Buckingham Palace before it was swallowed up in the expansion of architecture during the mad, glorious years of Utopia. Following which, they proceeded toward the viewer's gallery above the chamber of state.

"I see from your repeated glances that you are interested in my diamonds, 'Sieur Plus Precieux,' " Lady Pamela said. "Well might you be. They are a family treasure, centuries old and manufactured to order, each stone flawless and perfectly matched. The indentures of a hundred autistics would not buy the like."

Surplus smiled down again at the necklace, draped about her lovely throat and above her perfect breasts. "I assure you, madame, it was not your necklace that held me so enthralled."

She colored delicately, pleased. Lightly, she said, "And that box your man carries with him wherever you go? What is in it?"

"That? A trifle. A gift for the Duke of Muscovy, who is the ultimate object of my journey," Surplus said. "I assure you, it is of no interest whatsoever."

"You were talking to someone last night," Lady Pamela said. "In your room."

"You were listening at my door? I am astonished and flattered."

She blushed. "No, no, my brother... it is his job, you see, surveillance."

"Possibly I was talking in my sleep. I have been told I do that occasionally."

"In accents? My brother said he heard two voices."

Surplus looked away. "In that, he was mistaken."

England's queen was a sight to rival any in that ancient land. She was as large as the lorry of ancient legend, and surrounded by attendants who hurried back and forth, fetching food and advice and carrying away dirty plates and signed legislation. From the gallery, she reminded Darger of a queen bee, but unlike the bee, this queen did not copulate, but remained proudly virgin.

Her name was Gloriana the First, and she was a hundred years old and still growing.

Lord Campbell-Supercollider, a friend of Lady Pamela's met by chance, who had insisted on accompanying them to the gallery, leaned close to Surplus and murmured, "You are impressed, of course, by our queen's magnificence." The warning in his voice was impossible to miss. "Foreigners invariably are."

"I am dazzled," Surplus said.

"Well might you be. For scattered through her majesty's great body are thirty-six brains, connected with thick ropes of ganglia in a hypercube configuration. Her processing capacity is the equal of many of the great computers from Utopian times."

Lady Pamela stifled a yawn. "Darling Rory," she said, touching the Lord Campbell-Supercollider's sleeve. "Duty calls me. Would you be so kind as to show my American friend the way back to the outer circle?"

"Or course, my dear." He and Surplus stood (Darger was, of course, already standing) and paid their compliments. Then, when Lady Pamela was gone and Surplus started to turn toward the exit, "Not that way. Those stairs are for commoners. You and I may leave by the gentlemen's staircase."

The narrow stairs twisted downward beneath clouds of gilt cherubs-and-airships, and debouched into a marble-floored hallway. Surplus and Darger stepped out of the stairway and found their arms abruptly seized by baboons.

There were five baboons all told, with red uniforms and matching choke collars with leashes that gathered in the hand of an ornately mustached officer whose gold piping identified him as a master of apes. The fifth baboon bared his teeth and hissed savagely.

Instantly, the master of apes yanked back on his leash and said, "There, Hercules! There, sirrah! What do you do? What do you say?"

The baboon drew himself up and bowed curtly. "Please come with us," he said with difficulty. The master of apes cleared his throat. Sullenly, the baboon added, "Sir."

"This is outrageous!" Surplus cried. "I am a diplomat, and under international law immune to arrest."

"Ordinarily, sir, this is true," said the master of apes courteously. "However, you have entered the inner circle without her majesty's invitation and are thus subject to stricter standards of security."

"I had no idea these stairs went inward. I was led here by—" Surplus looked about helplessly. Lord Campbell-Supercollider was nowhere to be seen.

So, once again, Surplus and Darger found themselves escorted to the Office of Protocol.

"The wood is teak. Its binomial is *Tectonia grandis.* Teak is native to Burma, Hind, and Siam. The box is carved elaborately but without refinement." The dwarf savant opened it. "Within the casing is an archaic device for electronic intercommunication. The instrument chip is a gallium-arsenide ceramic. The chip weighs six ounces. The device is a product of the Utopian end-times."

"A modem!" The protocol officer's eyes bugged out. "You dared bring a *modem* into the inner circle and almost into the presence of the queen?" His chair stood and walked around the table. Its six insectile legs looked too slender to carry his great, legless mass. Yet it moved nimbly and well.

"It is harmless, sir. Merely something our technarchaeologists unearthed and thought would amuse the Duke of Muscovy, who is well known for his love of all things antiquarian. It is, apparently, of some cultural or historical significance, though without re-reading my instructions, I would be hard pressed to tell you what."

Lord Coherence-Hamilton raised his chair so that he loomed over Surplus, looking dangerous and domineering. "*Here* is the historic significance of your modem: The Utopians filled the world with their computer webs and nets, burying cables and nodes so deeply and plentifully that they shall never be entirely rooted out. They then released into that virtual universe demons and mad gods. These intelligences destroyed Utopia and almost destroyed humanity as well. Only the valiant worldwide destruction of all modes of interface saved us from annihilation!"He glared.

"Oh, you lackwit! Have you no history? These creatures hate us because our ancestors created them. They are still alive, though confined to their electronic netherworld, and want only a modem to extend themselves into the physical realm. Can you wonder, then, that the penalty for possessing such a device is—" he smiled menacingly—"death?"

"No, sir, it is not. Possession of a *working* modem is a mortal crime. This device is harmless. Ask your savant."

"Well?" the big man growled at his dwarf. "Is it functional?"

"No. It—"

"Silence." Lord Coherence-Hamilton turned back to Surplus. "You are a fortunate cur. You will not be charged with any crimes. However, while you are here, I will keep this filthy device locked away and under my control. Is that understood, Sir Bow-Wow?"

Surplus sighed. "Very well," he said. "It is only for a week, after all."

That night, the Lady Pamela Coherence-Hamilton came by Surplus's room to apologize for the indignity of his arrest, of which, she assured him, she had just now learned. He invited her in. In short order they somehow found themselves kneeling face-to-face on the bed, unbuttoning each other's clothing.

Lady Pamela's breasts had just spilled delightfully from her dress when she drew back, clutching the bodice closed again, and said, "Your man is watching us."

"And what concern is that to us?" Surplus said jovially. "The poor fellow's an autistic. Nothing he sees or hears matters to him. You might as well be embarrassed by the presence of a chair."

"Even were he a wooden carving, I would his eyes were not on me."

"As you wish." Surplus clapped his paws. "Sirrah! Turn around."

Obediently, Darger turned his back. This was his first experience with his friend's astonishing success with women. How many sexual adventuresses, he wondered, might one tumble, if one's form were unique? On reflection, the question answered itself.

Behind him, he heard the Lady Pamela giggle. Then, in a voice low with passion, Surplus said, "No, leave the diamonds on."

With a silent sigh, Darger resigned himself to a long night. Since he was bored and yet could not turn to watch the pair cavorting on the bed without giving himself away, he was perforce required to settle for watching them in the mirror.

They began, of course, by doing it doggy-style.

The next day, Surplus fell sick. Hearing of his indisposition, Lady Pamela sent one of her autistics with a bowl of broth and then followed herself in a surgical mask.

Surplus smiled weakly to see her. "You have no need of that mask," he said. "By my life, I swear that what ails me is not communicable. As you doubtless know, we who have been remade are prone to endocrinological imbalance."

"Is that all?" Lady Pamela spooned some broth into his mouth, then dabbed at a speck of it with a napkin. "Then fix it. You have been very wicked to frighten me over such a trifle."

"Alas," Surplus said sadly, "I am a unique creation, and my table of endocrine balances was lost in an accident at sea. There are copies in Vermont, of course. But by the time even the swiftest schooner can cross the Atlantic twice, I fear me I shall be gone."

"Oh, dearest Surplus!" The Lady caught up his paws in her hands. "Surely there is some measure, however desperate, to be taken?"

"Well..." Surplus turned to the wall in thought. After a very long time, he turned back and said, "I have a confession to make. The modem your brother holds for me? It is functional."

"Sir!" Lady Pamela stood, gathering her skirts, and stepped away from the bed in horror. "Surely not!"

"My darling and delight, you must listen to me." Surplus glanced weakly toward the door, then lowered his voice. "Come close and I shall whisper."

She obeyed.

"In the waning days of Utopia, during the war between men and their electronic creations, scientists and engineers bent their efforts toward the creation of a modem that could be safely employed by humans. One immune from the attack of demons. One that could, indeed, compel their obedience. Perhaps you have heard of this project."

"There are rumors, but... no such device was ever built."

"Say rather that no such device was built *in time*. It had just barely been perfected when the mobs came

rampaging through the laboratories, and the Age of the Machine was over. Some few, however, were hidden away before the last technicians were killed. Centuries later, brave researchers at the Technarchaeological Institute of Shelburne recovered six such devices and mastered the art of their use. One device was destroyed in the process. Two are kept in Burlington. The others were given to trusted couriers and sent to the three most powerful allies of the Demesne—one of which is, of course, Russia."

"This is hard to believe," Lady Pamela said wonderingly. "Can such marvels be?"

"Madame, I employed it two nights ago in this very room! Those voices your brother heard? I was speaking with my principals in Vermont. They gave me permission to extend my stay here to a fortnight."

He gazed imploringly at her. "If you were to bring me the device, I could then employ it to save my life."

Lady Coherence-Hamilton resolutely stood. "Fear nothing, then. I swear by my soul, the modem shall be yours tonight."

The room was lit by a single lamp that cast wild shadows whenever anyone moved, as if of illicit spirits at a witch's Sabbath.

It was an eerie sight. Darger, motionless, held the modem in his hands. Lady Pamela, who had a sense of occasion, had changed to a low-cut gown of clinging silks, dark-red as human blood. It swirled about her as she hunted through the wainscoting for a jack left unused for centuries. Surplus sat up weakly in bed, eyes half-closed, directing her. It might have been, Darger thought, an allegorical tableau of the human body being directed by its sick animal passions, while the intellect stood by, paralyzed by lack of will.

"There!" Lady Pamela triumphantly straightened, her necklace scattering tiny rainbows in the dim light.

Darger stiffened. He stood perfectly still for the length of three long breaths, then shook and shivered like one undergoing seizure. His eyes rolled back in his head.

In hollow, unworldly tones, he said, "What man calls me up from the vasty deep?" It was a voice totally unlike his own, one harsh and savage and eager for unholy sport. "Who dares risk my wrath?"

"You must convey my words to the autistic's ears," Surplus murmured. "For he is become an integral part of the modem—not merely its operator, but its voice."

"I stand ready," Lady Pamela replied.

"Good girl. Tell it who I am."

"It is Sir Blackthorpe Ravenscairn de Plus Precieux who speaks, and who wishes to talk to..." She paused.

"To his most august and socialist honor, the mayor of Burlington."

"His most august and socialist honor," Lady Pamela began. She turned toward the bed and said quizzically, "The mayor of Burlington?"

" 'Tis but an official title, much like your brother's, for he who is in fact the spy-master for the Demesne of Western Vermont," Surplus said weakly. "Now repeat to it: I compel thee on threat of dissolution to carry my message. Use those exact words."

Lady Pamela repeated the words into Darger's ear.

He screamed. It was a wild and unholy sound that sent the Lady skittering away from him in a momentary panic. Then, in mid-cry, he ceased.

"Who is this?" Darger said in an entirely new voice, this one human. "You have the voice of a woman. Is one of my agents in trouble?"

"Speak to him now, as you would to any man: forthrightly, directly, and without evasion." Surplus sank his head back on his pillow and closed his eyes.

So (as it seemed to her) the Lady Coherence-Hamilton explained Surplus' plight to his distant master, and from him received both condolences and the needed information to return Surplus's endocrine levels to a functioning harmony. After proper courtesies, then, she thanked the American spy-master and unjacked the modem. Darger returned to passivity.

The leather-cased endocrine kit lay open on a small table by the bed. At Lady Pamela's direction, Darger began applying the proper patches to various places on Surplus's body. It was not long before Surplus opened his eyes.

"Am I to be well?" he asked and, when the Lady nodded, "Then I fear I must be gone in the morning. Your brother has spies everywhere. If he gets the least whiff of what this device can do, he'll want it for himself."

Smiling, Lady Pamela hoisted the box in her hand. "Indeed, who can blame him? With such a toy, great things could be accomplished."

"So he will assuredly think. I pray you, return it to me."

She did not. "This is more than just a communication device, sir," she said. "Though in that mode it is of incalculable value. You have shown that it can enforce obedience on the creatures that dwell in the forgotten nerves of the ancient world. Ergo, they can be compelled to do our calculations for us."

"Indeed, so our technarchaeologists tell us. You must..."

"We have created monstrosities to perform the duties that were once done by machines. But with *this,* there would be no necessity to do so. We have allowed ourselves to be ruled by an icosahexadexal-brained freak. Now we have no need for Gloriana the Gross, Gloriana the Fat and Grotesque, Gloriana the Maggot Queen!"

"Madame!"

"It is time, I believe, that England had a new queen. A human queen."

"Think of my honor!"

Lady Pamela paused in the doorway. "You are a very pretty fellow indeed. But with this, I can have the monarchy and keep such a harem as will reduce your memory to that of a passing and trivial fancy."

With a rustle of skirts, she spun away.

"Then I am undone!" Surplus cried, and fainted onto the bed.

Quietly, Darger closed the door. Surplus raised himself from the pillows, began removing the patches from his body, and said, "Now what?"

"Now we get some sleep," Darger said. "Tomorrow will be a busy day."

The master of apes came for them after breakfast, and marched them to their usual destination. By now, Darger was beginning to lose track of exactly how many times he had been in the Office of Protocol. They entered to find Lord Coherence-Hamilton in a towering rage, and his sister, calm and knowing, standing in a corner with her arms crossed, watching. Looking at them both now, Darger wondered how he could ever have imagined that the brother outranked his sister.

The modem lay opened on the dwarf-savant's desk. The little fellow leaned over the device, studying it minutely.

Nobody said anything until the master of apes and his baboons had left. Then Lord Coherence-Hamilton roared, "Your modem refuses to work for us!"

"As I told you, sir," Surplus said coolly, "it is inoperative."

"That's a bold-arsed fraud and a goat-buggering lie!" In his wrath, the Lord's chair rose up on its spindly legs so high that his head almost bumped against the ceiling. "I know of your activities—" he nodded toward his sister—"and demand that you show us how this whoreson device works!"

"Never!" Surplus cried stoutly. "I have my honor, sir."

"Your honor, too scrupulously insisted upon, may well lead to your death, sir."

Surplus threw back his head. "Then I die for Vermont!"

At this moment of impasse, Lady Hamilton stepped forward between the two antagonists to restore peace. "I know what might change your mind." With a knowing smile, she raised a hand to her throat and denuded herself of her diamonds. "I saw how you rubbed them against your face the other night. How you licked and fondled them. How ecstatically you took them into your mouth."

She closed his paws about them. "They are yours, sweet 'Sieur Precieux, for a word."

"You would give them up?" Surplus said, as if amazed at the very idea. In fact, the necklace had been his and Darger's target from the moment they'd seen it. The only barrier that now stood between them and the merchants of Amsterdam was the problem of freeing themselves from the Labyrinth before their marks finally realized that the modem was indeed a cheat. And to this end they had the invaluable tool of a thinking man whom all believed to be an autistic, and a plan that would give them almost twenty hours in which to escape.

"Only think, dear Surplus." Lady Pamela stroked his head and then scratched him behind one ear, while he stared down at the precious stones. "Imagine the life of wealth and ease you could lead, the women, the power. It all lies in your hands. All you need do is close them."

Surplus took a deep breath. "Very well," he said. "The secret lies in the condenser, which takes a full day to re-charge. Wait but—"

"Here's the problem," the savant said unexpectedly. He poked at the interior of the modem. "There was a wire loose."

He jacked the device into the wall.

"Oh, dear God," Darger said.

A savage look of raw delight filled the dwarf savant's face, and he seemed to swell before them.

"*I am free!*" he cried in a voice so loud it seemed impossible that it could arise from such a slight source. He shook as if an enormous electrical current were surging through him. The stench of ozone filled the room.

He burst into flames and advanced on the English spy-master and her brother.

While all stood aghast and paralyzed, Darger seized Surplus by the collar and hauled him out into the hallway, slamming the door shut as he did.

They had not run twenty paces down the hall when the door to the Office of Protocol exploded outward, sending flaming splinters of wood down the hallway.

Satanic laughter boomed behind them.

Glancing over his shoulder, Darger saw the burning dwarf, now blackened to a cinder, emerge from a room engulfed in flames, capering and dancing. The modem, though disconnected, was now tucked under one arm, as if it were exceedingly valuable to him. His eyes were round and white and lidless. Seeing them, he gave chase.

"Aubrey!" Surplus cried. "We are headed the *wrong way!*"

It was true. They were running deeper into the Labyrinth, toward its heart, rather than outward. But it was impossible to turn back now. They plunged through scattering crowds of nobles and servitors, trailing fire and

supernatural terror in their wake.

The scampering grotesque set fire to the carpets with every footfall. A wave of flame tracked him down the hall, incinerating tapestries and wallpaper and wood trim. No matter how they dodged, it ran straight toward them. Clearly, in the programmatic literalness of its kind, the demon from the web had determined that having early seen them, it must early kill them as well.

Darger and Surplus raced through dining rooms and salons, along balconies and down servants' passages. To no avail. Dogged by their hyper-natural nemesis, they found themselves running down a passage, straight toward two massive bronze doors, one of which had been left just barely ajar. So fearful were they that they hardly noticed the guards.

"Hold, sirs!"

The mustachioed master of apes stood before the doorway, his baboons straining against their leashes. His eyes widened with recognition. "By gad, it's you!" he cried in astonishment.

"Lemme kill 'em!" one of the baboons cried. "The lousy bastards!" The others growled agreement.

Surplus would have tried to reason with them, but when he started to slow his pace, Darger put a broad hand on his back and shoved. "Dive!" he commanded. So of necessity the dog of rationality had to bow to the man of action. He tobogganed wildly across the polished marble floor between two baboons, straight at the master of apes, and then between his legs.

The man stumbled, dropping the leashes as he did.

The baboons screamed and attacked.

For an instant, all five apes were upon Darger, seizing his limbs, snapping at his face and neck. Then the burning dwarf arrived, and, finding his target obstructed, seized the nearest baboon. The animal shrieked as its uniform burst into flames.

As one, the other baboons abandoned their original quarry to fight this newcomer who had dared attack one of their own.

In a trice, Darger leaped over the fallen master of apes, and was through the door. He and Surplus threw their shoulders against its metal surface and pushed. He had one brief glimpse of the fight, with the baboons aflame, and their master's body flying through the air. Then the door slammed shut. Internal bars and bolts, operated by smoothly oiled mechanisms, automatically latched themselves.

For the moment, they were safe.

Surplus slumped against the smooth bronze, and wearily asked, "Where did you *get* that modem?"

"From a dealer of antiquities." Darger wiped his brow with his kerchief. "It was transparently worthless. Whoever would dream it could be repaired?"

Outside, the screaming ceased. There was a very brief silence. Then the creature flung itself against one of the metal doors. It rang with the impact.

A delicate girlish voice wearily said, "What is this noise?"

They turned in surprise and found themselves looking up at the enormous corpus of Queen Gloriana. She lay upon her pallet, swaddled in satin and lace, and abandoned by all, save her valiant (though doomed) guardian apes. A pervasive yeasty smell emanated from her flesh. Within the tremendous folds of chins by the dozens and scores was a small human face. Its mouth moved delicately and asked, "What is trying to get in?"

The door rang again. One of its great hinges gave.

Darger bowed. "I fear, madame, it is your death."

"Indeed?" Blue eyes opened wide and, unexpectedly, Gloriana laughed. "If so, that is excellent good news. I have been praying for death an extremely long time."

"Can any of God's creations truly pray for death and mean it?" asked Darger, who had his philosophical side. "I have known unhappiness myself, yet even so life is precious to me."

"Look at me!" Far up to one side of the body, a tiny arm—though truly no tinier than any woman's arm—waved feebly. "I am not God's creation, but Man's. Who would trade ten minutes of their own life for a century of mine? Who, having mine, would not trade it all for death?"

A second hinge popped. The doors began to shiver. Their metal surfaces radiated heat.

"Darger, we must leave!" Surplus cried. "There is a time for learned conversation, but it is not now."

"Your friend is right," Gloriana said. "There is a small archway hidden behind yon tapestry. Go through it. Place your hand on the left wall and run. If you turn whichever way you must to keep from letting go of the wall, it will lead you outside. You are both rogues, I see, and doubtless deserve punishment, yet I can find nothing in my heart for you but friendship."

"Madame..." Darger began, deeply moved.

"Go! My bridegroom enters."

The door began to fall inward. With a final cry of "Farewell!" from Darger and "Come *on!*" from Surplus, they sped away.

By the time they had found their way outside, all of Buckingham Labyrinth was in flames. The demon, however, did not emerge from the flames, encouraging them to believe that when the modem it carried finally melted down,

it had been forced to return to that unholy realm from whence it came.

The sky was red with flames as the sloop set sail for Calais. Leaning against the rail, watching, Surplus shook his head. "What a terrible sight! I cannot help feeling, in part, responsible."

"Come! Come!" Darger said. "This dyspepsia ill becomes you. We are both rich fellows, now! The Lady Pamela's diamonds will maintain us lavishly for years to come. As for London, this is far from the first fire it has had to endure. Nor will it be the last. Life is short, and so, while we live, let us be jolly!"

"These are strange words for a melancholiac," Surplus said wonderingly.

"In triumph, my mind turns its face to the sun. Dwell not on the past, dear friend, but on the future that lies glittering before us."

"The necklace is worthless," Surplus said. "Now that I have the leisure to examine it, free of the distracting flesh of Lady Pamela, I see that these are not diamonds, but mere imitations." He made to cast the necklace into the Thames.

Before he could, though, Darger snatched away the stones from him and studied them closely. Then he threw back his head and laughed. "The biters bit! Well, it may be paste, but it looks valuable still. We shall find good use for it in Paris."

"We are going to Paris?"

"We are partners, are we not? Remember that antique wisdom that whenever a door closes, another opens? For every city that burns, another beckons. To France, then, and adventure! After which, Italy, the Vatican Empire, Austro-Hungary, perhaps even Russia! Never forget that you have yet to present your credentials to the Duke of Muscovy."

"Very well," Surplus said. "But when we do, *I'll* pick out the modem."

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LITTLE GODS

Tim Pratt

"I wish I could be a little goddess of cinnamon," my wife Emily says, closing her eyes and leaning in close to the spices. I'm used to Emily saying things like that, so I don't take any notice, just nod and pick up a bottle of peach nectar off the shelf, slosh it around, wrinkle my nose. I know all the gunk in there is supposed to be fresh natural goodness, but to me it just looks like gunk. Emily says that I deny the truth of natural origins. Emily likes peach nectar, so I put the bottle in the basket.

"A little goddess of cinnamon," Emily repeats. "Or brown sugar." She crosses her arms, her silver-and-brass bracelets tinkling together.

"As opposed to a big goddess of cinnamon?" I move on down the aisle with my basket over my arm.

"Little things get little gods," Emily says. "It's only natural." She trails after me, running her finger along the shelves, pausing to sniff at the black teas, to open the lid on a jar of sugar-free gumdrops. Emily is always prodding, smelling, caressing—she says that she is experiencing the world.

"So big gods are for big things, then? Like, say, whales?"

Emily sighs behind me. "Big things like... I don't know... love."

"How about hate? Jealousy?"

"Sure. But I wouldn't want to be one of those, nothing so big." She squeals in delight. "Ooh! Chocolate-covered espresso beans!"

"I didn't realize those were in season," I say dryly, but she isn't paying attention to me, has darted off to get a plastic bag to fill with candied caffeine. She'll be up all night, and she'll keep me up with her. That might be nice. Sometimes she likes to make love all night when she's had a lot of caffeine; other times she gets jittery and talks wistfully of the days when she smoked cigarettes.

Emily dances down the aisle, long skirt swaying, silver bells around the hem jingling. She shakes her bag of espresso beans like a maraca.

"Goddess of chocolate?" I say. "Would you go for that?"

"Sure. But I'd be even more particular. Goddess of dark chocolate. Goddess of Mexican hot chocolate. Goddess of hot fudge on a wooden spoon."

"Those are awfully small gods. It'd take a lot of them to keep the world running."

"Well, sure." She looks around the otherwise uninhabited aisle in an amusingly furtive way, then opens the plastic bag, removes a bean, and pops it into her mouth. "The big gods—the gods of abstractions and ideals—they're like CEOs, figureheads, upper management. I mean, the goddess of joy may get paid well, but where would her operation be without the god of hot showers, the goddess of hot sex, the avatar of angel food cake? I'd be just as happy to have one of those lower-level positions, one with nice, clearly defined responsibilities, a comprehensible mission."

"I love you," I say, feeling warm toward her all of a sudden, my Emily with her corkscrew black hair, her squinched-in-thought features, her clothes she's made mostly with her own hands, sewn all over with suns and moons. My flaky angel who reads the stars and knows how to make bread rise, bring flowers to life, tune a mandolin, make my heart beat beautifully along with her own. My Emily, who believes in little gods of tuna casserole and stained glass.

She takes my hand and squeezes it. We go toward the checkout. There is some commotion up front, I can't see what—a crowd milling around, someone talking hurriedly and sharply. I don't pay attention, just push through toward the front, Emily's hand in mine, tugging her along—she can be distracted ten times in ten seconds, and I want very much to get her home, to get into the hot tub with her, to talk about the little gods of kissing-her-belly, rinsing-her-hair, touching-her-face.

When I get to the checkout I see him, just a boy really, not even seventeen. He wears a mask like the Lone Ranger's, but his is just cheap black plastic with a rubber band to hold it on, something picked up from the 99-cent bin at an after-Halloween sale. He has a gun, though, and it jerks all over as he aims it here and there, warning people away from the exits, threatening the cashier, who just stands perfectly still, as if her brains have been scooped out or drained off. Emily doesn't see the boy, the robber-boy; she is looking off to the side at a display of kiwi and passion fruit, oblivious, she can sometimes be so oblivious. "Ooh," she says, and pulls her hand away from me and starts toward the fruit, moving on a course tangential to the boy-thief, the gun-boy.

"Emily, no," I say, and she turns toward me with her eyebrows raised, and in turning she bumps into a dump-bin full of suckers and packs of gum, her hip thumping the display hard and making a little candy avalanche. The boy with the gun jerks his arm up, startled by my voice or the movement or the sound of falling candy or perhaps just strung too tightly with the frustration of the motionless cashier who won't goddammit put the money in the bag like he told her. I don't know if the boy means to do it or if it happens by accident but the gun goes off with a crack and a stink (small god of lead, small god of expanding gases) and Emily goes down, goes over, tumbles into the candy display and it falls down with her. She hits the ground in a rain of neatly-wrapped sugar, the little bag of espresso beans falling from her hand, and she doesn't move, and the front of her is all red.

The boy-thief, killer-boy, runs away. Someone screams. Someone says something very calmly about calling an ambulance.

I drop my basket. The bottle of peach nectar tumbles out. It hits near my feet and explodes. Small god of the sound of breaking glass. Small god of small wet fragments.

Two days after Emily's funeral, with her parents finally gone and everything settled except for the pain in my head, I put a chair out on the back deck and sit looking at the birdhouse Emily made last year. A family of jays lived there for a while, but they're gone now, nothing left inside but bits of straw and sticks and string. My chest seems sometimes as empty as that birdhouse, and other times I think I've been filled with something hot and foul and gooey, cough syrup heated on the stove, thickened with molasses or blood.

I have trouble with time and living. Clocks don't make sense. I cry. I'm too hot, or too cold. The covers stultify me, and I can't sleep on my bed (our bed), so I stay in the living room on the couch, with my eyes closed so that I can't see anything, not the watercolors Emily hung on the redwood walls, not the flowers she cut the morning we went to the grocery store, now dying in the vase. Nothing but the inside of my eyes.

It's better outside, with just the natural world pressing around me, rather than the substance of the life Emily and I made together. Emily used to call this house our haven, our safe place, and I thought it would be so always. I never expected it to become a bleak museum of grief.

I watch the sky for a while, the sun moving, and gradually realize that my throat is dry; I haven't had anything to eat or drink since Emily's parents left. I get up and go to the door, part of my mind wondering why I bother, why I waste time keeping body together when soul is sundered. But it's easier just to go along, to move without thinking. I go into the house, into the kitchen, and the first thing I notice is the smell of divinity fudge cooking, that sweetness that is almost too cloying, a sweetness that Emily loved far more than I did. Then I see the woman standing at the stove and think for a bright leaping moment that it is my wife, my Emily, somehow returned to me—but this woman is too tall, and her dress is too black—raven's-wing black, slice-of-night black—with no designs or silver threads. Emily would never wear anything so dark, and anyway, she is dead.

I move closer, wondering who this black-dressed, black-haired woman is, why she is in my kitchen, but I don't really care—I am not ultimately very interested. Perhaps she is a friend of Emily's. Perhaps she is a thief.

She turns toward me, and her face is pale, white as sugar. She holds a wooden spoon. A large pot stands on the stove, empty and gleaming, and yet she moves the spoon inside as if stirring something, and the smell of divinity fudge rises up. I am suddenly furious (and even that feels strange, because I have felt nothing at all for days now, except sometimes a dull ache with sharp edges). Who is this woman, to come into my home, to touch Emily's things?

I snarl at her and she drops the spoon with a clatter, her mouth opening in surprise as if *I'm* the one who should not be here. I step forward, not knowing what will happen, whether I'll grab her or hit her or just firmly take her arm. Before I can touch her I am blasted in the face with a wave of hot air, and that air carries smells—divinity fudge, vanilla cookies, incense, rainwater, cinnamon, Emily's skin. Emily's skin. A hundred other smells, too, all of them keying instantly to memories of my wife, all of them bringing up fragments of images and moments. Memories that a week ago would have been sweet now twist like corkscrews, jabbing like knives, reminding me of all I've lost. I go down on my knees, my eyes closed against that scented wind, my chest twisting and contracting as if there's some horrible crab behind my ribcage, writhing. I put my forehead on the cold linoleum and sob.

The smell, the storm of smells, fades. I lift my head, blinking, looking for the pale woman in black.

She is gone. There is no pot on the stove, no spoon. The kitchen smells like dust and nothing else at all.

I check the doors and windows, somewhat surprised to find that they are locked. I don't remember locking them, but perhaps Emily's father did so before he left. He is a large and capable man, slow-moving and sad, like a great and ponderous planet in erratic orbit. He would have locked the doors and windows for me. But that means no woman could have gotten in, and that means my mind is coming loose, not just hiding under a stone but actually coming loose, imagining things, imagining even the scents of grief.

I sit on the couch again and lean my head back, my eyes closed. I feel smothered, as if a wet curtain has been draped over me, stifling my breath. It's not enough that my wife dies in a grocery store on a springtime afternoon; I have to lose my mind, too. But why do I need my mind, with my mind's closest best companion gone?

I hear something like the movement of a bird and open my eyes. There is something on my ceiling, above the

rafters, something like a black cloth pinned up at the corners and center—a drape, a canopy. I look at it blankly, trying to understand it with my eyes. After a moment I realize it is not just cloth but a woman in a long black dress. The woman is suspended somehow in the center of the ceiling, looking down, and her impossibly long skirts are spread out all around her, covering the ceiling. I did not see the woman at first because her skin is nearly as black as her dress, and her eyes are dark too, and she is not smiling, so I cannot even see her teeth. This is of course not the same woman I saw in the kitchen, but for some reason my first thought is: *They're sisters.* Which makes no sense, as the other was white, and this one is black.

The woman's skirts begin to sag, billowing, falling down toward me, and I feel my sense of suffocation double, now it is like lying facedown in the mud while wet, mildewed mattresses are piled on top of me. I gasp and struggle to my feet, staring up at the woman on my ceiling. I grope blindly and my hand finds a paperweight on the end table, a lump of volcanic glass that Emily picked up on our honeymoon in Hawaii. It seems terribly heavy, but I am angry now, angry beneath the wet burlap suffocation, and I manage to lift the weight.

I hurl the chunk of rock at the woman on the ceiling. It hits her in the stomach and bounces off, landing on the coffee table with a *crack.* She squawks like a blackbird. Her skirts draw in quickly like windowshades snapping shut, and then she's gone, nothing on my ceiling but abandoned spiderwebs.

I sit back down, the oppressive weight suddenly gone, making me feel impossibly light by comparison—as if I could float away, as if no one I loved had ever died, as if the sun were filling my veins. But that thrill leaches slowly away, returning to me to the grayness, the neutrality, that I've felt since Emily died.

I fall asleep, which is really only another flavor of oblivion.

I wake to find a man dressed in a threadbare black suit sitting on the edge of the hearth, cleaning his fingernails with a folding pocketknife. I immediately think of him as a preacher, as he resembles somewhat the country preacher of the small church my family attended when I was young, though he is clearly not the same man. He has black hair, a bit mussed, and a single heavy eyebrow that looks almost too hairy to be real. His face is middle-aged, hale and hearty, and when he looks up at me his eyes are blue and twinkling.

"Boo," he says, softly.

"Who are you?" I demand, irritable from being just-awake, irritable at all these incomprehensible intrusions, all these distractions from the grayness of my first week without Emily, the first of who knows how many weeks I'll be able to bear.

"I'm here to help," he says, sounding sure and self-satisfied. "A couple of the girls told me there was something funny about you, that you could see them, so I came to investigate things personally. And here I am, and here you are, seeing me." He stands up, folds his knife, taps it against his palm. He makes a peculiarly medieval sort of bow. "I'm the King of Grief, Gatekeeper of the Dead Places, and a Gambler of Bad Fortunes."

I don't know what to make of him. "Those women... ," I say.

He waves his hand dismissively. "Just little goddesses, handmaids, field workers, don't mind them. The one in the kitchen was the goddess of scents with sad associations, the one with the big black skirt was the goddess of heavy hearts. You don't need to think about them. I've taken a personal interest in you, because of your... peculiar vision. You can see us, and that means you're a special man, a man who deserves more than bad luck."

I look at him blankly; it is as if I am observing all this through a pane of dirty glass, as if it is taking place inside an aquarium. Little gods of grief? Like Emily's little gods of joy, of love? Is this the route my madness has taken, to make me inhabit a darker version of the world my wife imagined? How can this man be the King of Grief, with his threadbare suit, his greasy hair? Just looking at him, I know he has bad breath, and his teeth are crooked when he smiles. His eyes shine, but it seems to me that the shine is like that of oil on a rain puddle—full of rainbows, but ultimately foul. Still, who am I to question my own delusions, to question the face of a god?

He sits back down on the hearth and leans forward, elbows on knees, rubbing his hands together briskly. "Now then. What will you give me to get Emily back?"

I sit up straighter, as if I've been given an electric shock, and the grayness recedes, replaced by a furtive and desperate kind of hope. "What?" I say. "What do you mean?"

He looks annoyed, his single eyebrow bristling and drawing down. "A *bargain,*" he says, enunciating plainly. "You've heard the stories, haven't you? A man goes into the underworld to fetch out his dead wife, a woman gathers the dismembered pieces of her lover and begs the gods to put him back together, it's a classic tale, and here you are, in the middle of it. But it's a *bargain,* and I need something in return, if you want Emily back."

"Anything," I say, not caring if this is a delusion, not caring if I've gone insane—better an insane world with Emily alive than a sane world without her. But of course that's a contradiction in terms; no world in which my beautiful wife is dead can be called sane.

"Your left eye?" he asks, flicking open his pocketknife, showing me the shiny blade. He grins, and there are bits of gristle and meat stuck in his teeth. "That's more or less what Odin gave up for wisdom—is your dead wife worth as much to you?"

I think of the knife, the blade, the pain that would come, my vision forever dimmed—but I'd have Emily. Would I give up an eye to look upon her again?

I don't even question. If I'm insane, insane enough to see and hear this, then my mind is lost beyond redemption. But if it's real, if this offer is real, how can I refuse it, how can I even risk a hesitation?

"Give me the knife," I say, holding out my hand. "I'll do it."

He laughs heartily. "Good man! But you're too eager, that's no way to bargain. Your left eye is hardly anything, after all. Perhaps if you also sacrificed an ear. Van Gogh cut off his ear for a whore—is your wife worth as much flesh as a whore, hmm?"

I clench my fists, furious, and say, "Don't toy with me. I'll give anything for my wife. If you are who you say, you know that."

"Oh, yes," he says, voice suddenly like velvet, but even that image is rotten, and I imagine tattered red velvet eaten by moths. "I know. But would you give your life? Would you plunge this blade"—and suddenly the blade is longer, ten inches long, a foot, length sliding from the hilt like a cat's claw from a paw—"into your eye, into your brain, knowing your death would bring your wife back to life?"

I hesitate. Death? By my own hand?

"I see," he says, sounding satisfied, flipping the knife closed. "I thought you wouldn't. I mean, just because you caused her death, that's no reason for you to give up your own life."

I tremble, but not from anger, from something different, more brittle, more sharp. "I didn't," I whisper. "The boy, the boy with the gun—"

"He just wanted money," the man said. "But you had to shout at Emily, call the boy's attention to her, startle her, startle him. If you'd just kept your mouth shut, she wouldn't be dead. And yet you"—his contempt is total, I am as useless as the gristle caught in his teeth—"you won't give up your life for hers."

He is right. He is absolutely right. "Give me the knife," I say. "And give Emily back to the world."

"That's my boy," he says, and flips the knife over, and holds it out to me—

The sound of wings, battering at glass. Both of us look at the windows, and there are butterflies there. No, not butterflies, white moths. The man, the King of Grief, whimpers. "Shit," he says.

I smell dust.

A woman glides into the room from the kitchen. She has olive skin and otherworldly, golden eyes. Her long dark hair is pulled back in a simple ponytail, and she wears white pants and a white shirt; they could be silk pajamas. Her feet are bare. She looks at the man on the hearth. "You," she says, and the disappointment in her voice is heavy and inescapable. The man cringes. "Get out of here," she says.

"I was only doing my job," he mutters, folding his knife.

"Away," she says, and the command in her voice is the command of the mind moving a muscle—it cannot possibly be disobeyed.

The man looks at me, scowls, and then climbs headfirst up the chimney. A moment later his feet disappear from view.

I wonder who this woman can be, to reprimand the King of Grief, and I hate her for driving him away on the cusp of my absolution, my sacrifice for Emily's salvation.

"He is no King," she says, looking at me, and in her eyes I see long years of looking at gray slabs of stone, of peering through air thick with dust. "He is a petty thing with pretensions, and I regret to admit that he is one of mine." She sits down beside me on the couch, and it is this unassuming, perfectly normal gesture as much as anything that makes me believe her. "I am the goddess of grief," she says matter-of-factly, and I don't hear the grandiosity, the capitalization-of-words, that I heard when the man said something similar. "He is the little god of guilt and bargains. A natural part of grief, for many, and therefore necessary to my employment... but his spirit is meaner than those of most of my helpers. When he realized you could see us, that he could interact with you directly..." She shrugs. "He chose to violate all protocols and do so. I apologize for his behavior."

I nod. Tentative, hopeful, I say, "What he said, about bringing Emily back, about bargains, can you..." But I trail off, because her eyes are sad now, full of twilight. I slump. I put my face in my hands but don't cry.

"I'm sorry," she says, and I believe her, but it doesn't help.

"If there are gods, then is there something more, a place we go when we die, will I ever see her again?"

"I am concerned with the living," she says simply. "Grief is my work, from beginning to end. The causes of grief, the resolutions... I cannot speak to those things."

I am not angry, only empty. I wonder if I am not angry because she does not wish me to be angry, if she controls me that much.

"It is... unusual, your situation," she says. "Not unheard-of, but rare. A loss such as yours can sometimes trigger deeper understanding, deeper vision. Needless to say, this changes everything. The process is made more complicated. By seeing us, knowing we're here, you interfere with our work."

"I think I can be devastated without your help," I say, but without as much bite as I would wish.

"Oh, yes." She nods, her hands folded neatly in her white lap. "Without a doubt. You can be destroyed by your loss, emptied out and drained. But without our help... it is unlikely that you will come out whole on the other side."

"It's supposed to get easier with time," I say.

She smiles, perhaps, but the light touches her slantwise, so I can't be sure. "Yes. I make it so."

"I don't care. Without Emily, nothing matters." And then, bitterly: "And it *is* my fault that she died."

"I can help," she says, and I hear the pattering of moths again, white moths against the windows. "The process is broken, but... I can make you forget. Carry away your memories, carry away your pain. This house and everything in it"—she makes a sweeping gesture—"is an engine of grief. But that engine cannot run smoothly, now; your perception ruins that. Let me soothe you. Let me make it easy. Let me take it all away."

The moths are inside now, flying around her head, and I remember reading once about a sort of moth that drinks tears to survive, clustering around weeping eyes to drink. I wonder if these are that sort of moth, and think: of course they are. They can drink my pain away, and leave cool white flutterings where the hurt used to be. That's her offer, her gift.

Anger penetrates my grayness. "No," I say. "No, no, no. No forgetfulness. I loved her. I won't give that up."

She brings her hands together, as if in prayer, and kisses her fingertips. The moths swarm together for a moment, then disappear like candle flames going out. "Then another way," she says, and puts her gentle hand on my knee. "We'll find another way."

I do cry, then.

She stays with me. She holds me while I shiver on my too-empty bed. She makes me drink water, but she won't let me take pills; instead, she sings to me when sleep won't come, and though I suspect the songs are funeral dirges from some lost civilization, they serve as lullabies. She says that everything will be all right, and from her, how can I doubt it? And yet, of course, I do. I doubt it.

She washes my sheets, clearing away the dust, taking away the scent of Emily that clings to the fabric. She opens the drapes to let light in. I talk about loss, my loss, and she listens somberly. She watches while I rage, when I punch my fist against the wall until my knuckles are bloody, and in the presence of her patient eyes I calm down, I sit. I am not angry at the house. She says little, but somehow her presence helps me. The grayness of the days just after Emily's death is gone; I am plunged headlong into the furnace, into the boiling pool, into the whirlwind of my life without her.

After the first two weeks, the goddess doesn't stay every day. She leaves me to sort through pictures, clothes, musical instruments, books—these are Emily's earthly remains, as much as the body I saw buried, and I divide them, some to go to her family, some to be given away, some to be kept deep in a closet. I feel as if I'm burying her all over again.

The goddess comes every few days, and though I tell her that I feel so broken and torn-apart at times that I fear I'll never be whole, she never offers me the solace of her tear-drinking moths again. I hate her for that, but I am also grateful. She is the queen of grief, and she wants me to pass through the dark and the tunnels and the shadows of her kingdom, and emerge into the light on the other side.

I ask her if she was ever human, if her helpmeets ever were, if Emily might, perhaps, have her wish fulfilled—become a goddess of ice water on hot days, goddess of warm oil on sore muscles, goddess of breath in a sad lover's lungs. The queen wraps her arms around me, and the smell of dust that surrounds her is almost sweet. "What I am, I have always been," the queen says. "And as for others, who knows? If it pleases you to imagine your wife in such a way, do."

Like all her comfort, it is somewhat cold and all too truthful, but I accept her words as best I can.

She leaves that night, after brewing me a cup of black tea and kissing my forehead. My grieving is not done, she says, but the time for her direct intervention is past. From now on, the process will proceed on its own. From now on, it's up to me.

My first moment of happiness comes three months after Emily's death. I sit on a bench in a little park near the sea cliffs, watching the sailboats in the bay. Sailboats have no particular association for me—I never went sailing with Emily, she never particularly exclaimed over the grace of wind-driven boats. Watching the colorful sails in the water, I find myself smiling, a true smile that won't turn to poison in a moment, that isn't a smile over something Emily said or did. This is a smile of the rest of my life.

I see a woman on the sea cliffs, and at first I think it is the queen of grief because she has the same sort of presence, the same sort of *bigness*, but this woman is dressed in yellow, not white. Her dress seems to be composed entirely of gauzy scarves. She dances lightly along the precipice, and when her face turns toward me for an instant it is a morning star, a sunrise after a long night, a sudden downpour of water in the desert. I recognize her in the deepest chambers of my heart—this is the goddess of joy. And behind her come other women and men, dancing in colorful costumes, feathers and shawls and hats and capes—the retinue of joy, her small gods. The goddess of joy leaps into the air over the water and shatters into light, becomes motes of brightness drifting, becomes the reflection of sunlight on the waves. The small gods follow, jumping after her, whooping and singing and laughing, and I find myself still smiling as they, too, turn to light.

The last of the small gods hesitates on the cliff. She wears a purple dress sewn all over with stars and moons. She

turns her head toward me, her hair a cloud of soft black corkscrews, hiding her face. My breath stops. I look at her, wondering—do I know that shape, that hair, that stance?

I smell, faintly, a trace of cinnamon on the wind, and nothing has ever been sweeter.

The small goddess (of cinnamon, of one man's love) leaps from the cliff, and turns to light.

I sit, watching, until her brightness merges with the sparkles on the surface of the water, and then I walk away, mouthing a prayer of thanks to the small gods of waking up in the morning, the small gods of drawing breath, the small gods of holding on.

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NOTHING EVER HAPPENS IN ROCK CITY

Jack McDevitt

Sorry I'm late tonight, Peg. Had to make a trip up to the observatory at closing time. They're having some kind of party up there and they needed a quick delivery. Ordinarily I would of sent Harry but Virginia hasn't been feeling good so I told him to go home and I went up myself.

No, not much was happening. They all seemed pretty loud, but other than that it wasn't very much. Nothing much ever happens in Rock City.

Oh, yeah, Jamie's home. Got his degree but no job. Bill tells me he's decided to be a lawyer. He wants to send him to one of those eastern schools but he's not really convinced that Jamie's serious. You know how that's been going. Me, I think it'd be just as well. We got enough lawyers around here as it is.

What else? I heard today that Doris is expecting again. Now there's a woman doesn't know when to quit. Frank said he's been trying to talk her into getting her tubes tied. But she's kind of skittish. Women are like that, I guess.

No offense.

Oh yeah, it was a pretty good day. We moved a lot of the malt. That new stuff I thought we'd never get rid of. There was a family get-together over at Clyde's. You know how they are. Must be sixty, seventy people over there for the weekend. All Germans. Putting it down by the barrel.

Jake was in today. They're getting complaints about underage kids again. I told him it ain't happening in our place. And it ain't. We're careful about that. Don't allow it. Not only because it ain't legal, either. I told him, it's not right for kids to be drinking and they can count on us to do what we can.

We had people in and out all day today. We sold as much stuff off the whiskey aisle as we did all week. We won't have any trouble making the mortgage this month.

What else? Nothing I can think of. This is a quiet town. Janet was in. Ticketed somebody doing ninety on the state road. Took his license, she said. Guy's wife had to drive him home. I'd've liked to of been there.

She told me there was a murder over in Castle County. I'm not sure about the details. Another one of those things where somebody's boy friend got tired of a crying kid. That ought to be death penalty. Automatic.

What's that? What was going on at the observatory?

I don't know. They had some VIP's visiting. We sold a couple bottles of rum to one of them this morning. Old guy, gray hair, stooped, kind of slow. Looked like he was always thinking about something else. Talked funny too. You know, foreign. Maybe Brit. Aussie. Something like that.

They're doing some kind of convention up there. Some of them are staying over at the hotel, according to Hap. Anyhow, we get this call about a quarter to nine, you know, just before we lock the doors. It's Harvey. They want eight bottles of our best champagne. Cold. Can we deliver?

Harvey told me once they always keep a bottle in the refrigerator up there. But with all these people in town I guess one bottle wasn't enough.

Well, to start with, we don't have eight bottles of our best champagne on ice. Or off. I mean how much of that stuff do we sell? But sure, I tell him. I'll bring it up as soon as we close.

I mean, you know Harvey. He won't know the difference. And I can hear all this noise in the background. The paper said they were supposed to be doing some kind of business meeting but all I can hear is screaming and laughing. And I swear somebody was shooting off a noisemaker.

Oh, by the way, did I tell you Ag was by today? She wants to get together for a little pinochle next week. I figure Sunday works pretty good. When you get a chance, give her a call, okay?

And Morrie's moping around. He won't talk about it but I guess Mary's ditched him again. You think he'd get tired taking all that from that crazy woman. Don't know what he wants. Ain't happy when he's with her and miserable when he isn't.

Oh, here's something you'll be interested in. Axel dropped a bottle of chianti today. I mean it went off in the back of the store like an explosion. I felt sorry for him except that it made a hell of a mess. He's getting more wobbly every day. I'm not sure we should be selling him anything now. At his age. But I don't have the heart to stop him. I've thought about talking to Janet. But that only puts it on her. I don't know what I'm going to do about that. Eventually I guess I'll have to do *something*.

What about the observatory? Oh yeah. Well, there's really nothing to tell. I took some Hebert's and some Coela Valley. Four of each. Packed 'em in ice and put 'em in the cooler.

So when I get there all these lights are on inside and people are yelling and carrying on. I never saw anything like it. It was like they'd already been into something. I mean Harvey and his friends are *not* people who know how to have a good time. But this other crew--.

Anyway Harvey said thanks and I wiped his card and he said do I want to stay a while? I mean they were into the bubbly before I could set it down.

So I say no thanks I have to drive back down the mountain and the last thing I need is a couple drinks. But I ask what's all the fuss and he takes me over to a computer screen which has graphics, big spikes and cones and God knows what else, all over it, but you can't begin to tell what it is, and he says *Look at that*.

I look and I don't see nothing except spikes and cones. So then he shows me how one pattern repeats itself. He says how it's one-point-something seconds long and it shows up three or four different places on the screen. Then he brings up another series and we do the same thing again. None of it means anything, as far as I can see.

So Harvey sees I'm not very impressed and he tells me we've got neighbors. He mentions someplace I never heard of. *Al-Car* or *Al-Chop* or something like that. He says it like it's a big deal. And then it dawns on me what he's talking about, that they've found the signal they're always looking for.

"How far away are they?" I ask.

He laughs again and says, "A long way."

"So I say how far's that?"

"Mack," he tells me, "you wouldn't want to walk it."

For a minute I wonder if the people on the other end are going to come this way but he says no that could never happen. Don't worry. Ha ha ha.

Well, I say, tell them hello for me. Ha ha. And he offers me a three buck tip, which was kind of cheap considering how late it was and that I had to drive up and down that goofy road. I mean, I'm not going to take his money anyway. But three bucks?

But that's why I was late.

Ran into Clay outside town, by the way. He was over at Howie's getting his speed trap set up. Says he picks off a few every Friday. Says he had to go over to Ham's place earlier because Ham was screaming at Dora again. I used to think she would pack up and leave one of these days but I guess not.

Yeah.

Anyway, that's why I was late. I'm sorry it upset you. I'll call next time, if you want. But you don't need to worry. I mean, nothing ever happens in Rock City.

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