PAUL DI FILIPPOSTINK LINESGYRO GEARLOOSE LOVED Ginger Barks. Had that deeply simple sentence possessed nofurther clause or codicil, no qualifier or amplification, all would have beenwell. Love, courtship, marriage, babies, grandparenthood, senescence, life-support, heavily monitored institutionalized death, and the survivors leftarguing about what to do with the chipped china: the old, old human progressionwould have flowed like hydrogen through the fuel cell of a new 2025 Wuhan Panda.No headaches, no heartaches, no troublesNo story.So:Gyro Gearloose loved Ginger Barks -- but she did not love him.And that essential lack of reciprocal affection was why Gyro decided to reinventtheir world in her honor. The day on which Gyro Gearloose upended the unsuspecting world in the name of unrequited love began like any other. Gyro's bed catapulted his lanky naked forminto the soft embrace of the auto-valet's capture net. Via an overhead cranesystem, that talented apparatus deposited him fully dressed at the kitchentable. The multi-appendaged, radar-eyed oil-drumon-a-unicycle that served as hischef and butler brought him breakfast: two dodo eggs with a side of mammothhash. This repast Gyro consumed rather heedlessly, while having theold-fashioned newspaper read aloud to him by another mechanical servant shapedlike a large bespectacled green bookworm. Then, after getting his teeth brushed, Gyro rode his unique firecracker-powered vehicle to his office at Happy DuckResearch. Inside his quiet sanctum, Gyro's desk quickly ventured to attract his attention."Mr. Gearloose, you have over one hundred messages awaiting your input. In orderof importance, they -- ""Not now," commanded Gyro, and the desk fell silent. Gyro tossed himself in alovesick fashion onto a couch. Reaching over and behind his head to anend-table, he grabbed a framed photo and brought it before his forlorn gaze. Theportrait depicted a smiling woman whose delicate features summed perfection in the eye of this beholder. Of an age with Gyro, dark-haired and lithe, thistemptress was none other than Ginger Barks. Shaking the frame like an antiqueEtch-a-Sketch to realign the picture's intelligent molecules, Gyro was rewardedwith the image of a child, plainly an earlier version of Ginger. This was thewaif Gyro had first fallen in love with at age five, at a time before he hadeven borne his current name No one in the real world today is ever named Gyro Gearloose from the moment ofbirth. For one thing a majority of the ancient Gearlooses went extinct duringthe Age of Reason, victims of ill-conceived phlogistonical and ethericexperiments that tended to end in fatal explosions. Those scions remainingchanged their surnames shortly thereafter in order to overcome a certain ditzyimage. For another thing, no parents -- not even gadget-besotted engineers --would name their child "Gyro" in the multicultural early-twenty-first-centuryUSA, out of fear of having him mistaken for a Greek sandwich. No, the onlyuniverse from which one may choose to adopt the Gearloose name remains a famouscomicbook one. Which is precisely where our own Gyro Gearloose found hisalternate apellation. Or rather, had it thrust upon him.Little Gary Harmon was five years old in the portentous year of 2001. Andwhatever that year might have meant for the rest of Earth's multifariouspopulation, for Gary it signaled massive upheavals. For 2001 was the year duringwhich Gary's mother abandoned the ineffectual and distant Warren Harmon for loveof another woman, and, consolidating her custody of Gary, moved to Duckburg. The town of Duckburg had until very recently been known as Los Gatos, California, an upscale hamlet on the edge of Silicon Valley. But late in theyear 2000, Los Gatos was purchased outright by the Disney empire, flush withcash after the success of its latest animated feature, Disney's Golden Ass of Apuleius. (The computer industry that formerly provided much of the area's wealth and stable tax base was churning spastically under the introduction of carbon-based buckytube circuitry, and Governor Simpson saw the sale of Los Gatosas a fine way to tauten a sagging bottom line in the state's budget.) Thischarming, compact town, not far from major population centers, suited Disney'splans perfectly: the corporation intended to construct a monument to one of their relatively unsung geniuses, a staff creator for much of his life who hadyet managed to emerge from the bland anonymity that cloaked most Disney artists. The cult artist Carl Barks had been born in 1901. At the turn of the century hewas still alive. And his work had more fans than ever.Starting in the late 1940s, Barks had jolted the basic boring Donald Duck printuniverse -- always a minor tentacle of the Disney octopus with about ten zillionvolts of creative energy. In hundreds of comicbook adventures over the nextthree decades, Barks added intriguing new characters and dense backstory to theformerly one-note Disney property, creating a rich Benday-dot cosmos. Aided bysuperior artwork, abetted by humor and a sense of adventure, Barks succeeded inplacing his own unique stamp on Uncle Walt's creation. Barks's work had beenreprinted and idolized now for nearly half a century. Motivated by a smidgen of benevolence and a heap of self-interest, the Disney suits had decided thatBarks's centennial was time to build the man a monument. The Disney imagineers moved into Los Gatos. Under the terms of their purchase, they owned every property in town, which the state had first seized by eminentdomain. But the generous enterprise promptly leased the buildings back to anycitizens and businesses who wished to remain through the transition. Withintwelve months, thousands of workers had transformed Los Gatos into a fenced-offsimulacrum of Barks's Duckburg. Role-playing employees were brought in tosupplement the other, non-costumed citizens, the admission booths were opened, and Duckburg was in business, after a stirring ceremony involving its humbleaged founder and a host of luminaries. The Disney drones had even found some genuine Barkses willing to relocate toDuckburg. Harry and Norma Barks, with their young daughter Ginger, were distantrelatives down on their luck and happy to move to a town where they would becomeinstant celebrities with a new home and guaranteed income.At the same time, the former Mrs. Jane Harmon, having reverted to her maidenname of Greet, arrived at the model community, looking for a new start. With herlover, Lorna Lish, and using money from her divorce settlement, Jane Greer setup a ceramics shop in Duckburg. (Having successfully beaten the pitifullyineffective Southern Baptist boycott, Disney was now actively and openlyencouraging gay and lesbian participation in all its affairs, and so endowedJane Greer with many generous tax breaks and incentives.) And so it was that little Gary Greer-Lish was soon enrolled with Ginger Barksand all the other potential Junior Woodchucks in Duckburg's school.No genius was necessary to coin Gary's nickname in this milieu. Within an hourof the first roll-call, every one of his peers was hailing him as GyroGearloose.Gary's consternation, as might be imagined, was thick and weighty. Uprooted, friendless, unfamiliar with the basis of his new community, he reacted badly atfirst to the nerdy nickname. One recess period, as Gary sat disconsolately in the fragrant shade of aeucalyptus tree, one of his female classmates approached him."I think Gyro Gearloose is cool," Ginger Barks said, then, red-faced withembarrassment, hurried off. That was all it took. Gary was in love. Over the next few months, as Gary ineluctably became more intimate with thehistory of his chicken-headed humanoid namesake, he felt himself growingcomfortable with his new unshakeable name.Barks's Gyro was cool. Unfettered by marriage or convention, brilliant, carefree, indomitable in the face of disaster, Gyro was perhaps the one citizenof classic Duckburg with complete freedom. As role models went, you could domuch worse. In subsequent years, as certain of the growing boy's own intellectualproclivities began to manifest themselves, rendering him something of a happilyasocial loner, the identification with Barks's creation became complete.So around about the time Gary Greer-Lish got his third virtual Ph.D. (he wasnineteen), he answered more readily and easily to Gyro Gearloose than to hislegal moniker. And a few years later, when he opened his Happy Duck Research inDuckburg with a few hundred million dollars deriving from his patents on aprocess that boosted the efficiency of chlorophyll by two hundred percent, GyroGearloose was his legal name.As for Ginger Barks, she had left Duckburg in their first year of high school.Her parents had eventually crumbled under the pressure of being permanently ondisplay, and had relocated to San Francisco. Cruelly, at just that period whenGyro was becoming mature enough to deepen his relationship with his one truelove, she flew out of his reach. During subsequent years, despite Gyro'sconstant attempts at forging closer bonds, Ginger had remained

seeminglyuninterested in Gyro as anything more than an old childhood friend. Nowadays, inher demanding job as reporter for the San Francisco Examiner, Ginger seldom evenbothered to punch Gyro's address into her pocket-pal's e-mail window.Gyro now planted a kiss on the glass front of Ginger's picture. The glassfastidiously cleansed itself of his lip-prints, otherwise Ginger's featureswould have been obscured by an overlay of such daily traces."If only I could do something that would bring Ginger back to Duckburg," saidGyro wistfully to the seemingly untenanted room. Not recognizing a command orrequest, his desk remained silent. "Even if only for a little while. Surelyshe'd soon see how much I care for her! But what could I do that would bemarvelous and startling enough to attract her attention?"There came a tugging at Gyro's pants leg. Looking down, he saw Li'l Bulb, hisHelper.Li'l Bulb was Gyro's loyal personal assistant. Approximately fifteen incheshigh, his form was simple: his head resembled a faceless Edison-era pointedlight bulb sitting in a knurled chrome collar; below that, a flexiblestick-figure armature, feet encased in bulbous shoes and hands begloved. Theseprimitive looks, however, belied Li'l Bulb's astonishing features. Inside hismock-filamentous head (opaque, with a trompe-l'oeil holo giving the illusion oftungsten-occupied transparency), buckytube architecture granted him a processingcapacity of many, many teraflops, the equivalent of several oldtimesupercomputers. The titanium rods of his body were packed with miniaturepower-sources and sophisticated sensors. The one thing Li'l Bulb could not dowas speak. In this day and age where practically everything talked, Gyropreferred silence in his assistant. However, Li'l Bulb's miming was surprisingly information-dense, and if necessary, he could always scribble a quick note.Now Li'l Bulb's message was obvious. In response to Gyro's plaint, he was waving arolled-up comic he plainly desired Gyro to read.Gyro took the book, which was one of the many reprints of Carl Barks's drakelyadventures to be found at various souvenir stands within Duckburg. Overlyfamiliar with such fare, Gyro perused it briefly, then said, "What's the point, Helper?"Li'l Bulb whooshed his hands as if simulating flight. He gestured in a waveryfashion as if portraying heat-distorted air. He shaped an obvious balloon abovehis head. He cupped his hands and then exploded them outward.Gyro scratched his head. "Are you saying I should fly a plane to the desert andblow something up?"Li'l Bulb slapped his indestructible glass forehead in frustration, thensnatched paper and pencil from the endtable. After writing two sharp words, hehanded the paper to his boss."'Special effects.' Hmmm." Gyro took another look at the comic. In one panel, Donald had just been drenched in perfume by an irritated Daisy. From his sodden, dejected, feathered self radiated thick lines indicative of exotic pungency.Gyro shot to his feet. "Helper, you're worth your weight in EinsteinBosecondensate! Now, fetch me my hat! "One article of apparel the original Gyro Gearloose was never seen without washis hat. Some kind of yellow felt porkpie with black band and upcurved brim, itremained securely atop his brown thatch through whatever chaos ensued, thanks to ahandy elastic string running under his chin.Our Gyro, no stickler for imitating the appearance of his namesake, went hatlesson a day-to-day basis. The hat now being dragged across the floor by aresponsive Li'l Bulb clutching its string, although outwardly identical to theoriginal model, was in reality a special instrument devised by Gyro, and usedonly on certain needful occasions. The crown of Gyro's hat was packed withcircuitry that could interface with his thoughts via electromagnetic conductionand induction, amplifying them in radical ways and bolstering his naturalcreativity and genius. However, the device was neurologically ennervating to acertain degree, and Gyro used it only sparingly. Besides, somehow the hat feltlike cheating. Even though it was his own invention, he preferred relying onlyon his unassisted natural brain. If the hat helped him win Ginger, though, he'd gladly compromise any principlesand sacrifice any number of gray cells.Li'l Bulb reached Gyro's feet, and wiped imaginary sweat from his brow. Theinventor bent down to retrieve the hat. Placing it on his head, he snapped thestring under his chin, thus activating the amplification

effect. Immediately, his face assumed a loopy expression; you fully expected Gyro's eyes to spin like he cylinders on a slot machine until they came up all cherries.In an abstracted voice, Gyro addressed the desk: "Open new spec file for ournanofab plant, production to begin immediately upon file closure." Gyro launchedinto a long recitation of abstruse assembly parameters, terminating theinstruction string with a final "Close." He snapped the chin-string again, powering off his hat, then removed it. Wearily, he slumped onto the couch, hatcradled in his lap. Li'l Bulb hopped up beside him. "Well, Helper, would you like to hear what I've just invented?"The automaton shook his head no. "Really? Why not?"Li'l Bulb snatched up his pad and pencil and scribbled a note."'Legal and ethical deniability.' Oh, come off it! When have I ever gotten us introuble before?"Holding up his left three-fingered, one-thumbed hand as if to enumerateoccasions, Li'l Bulb began to count off with his right index finger. He reachedfive sets of four before Gyro stopped him."Okay, okay, but this time won't be like those. I've simply adapted an oldtheoretical idea for my own purposes. Have you ever heard of 'utility fog?'"Li'l Bulb clasped his head with both hands as if in alarm. "What's wrong with utility fog? An evenly dispersed permanent aerosol of intelligent nanomachines about as dense as the air pollution intwentieth-century L.A. An ambient mist that living creatures can breatheharmlessly. Nothing alarming about that. And utility fog could really behelpful. Say your car was filled with the stuff. You'd never notice it until yougot in an accident. Then -- instant airbag, as the invisible machinesprotectively swarm and cohere between you and the dashboard!"Furiously moving pen across paper, Li'l Bulb finished another note."'Why hasn't utility fog been marketed before now if it's so wonderful?' Well, there are all those foolish EPA regulations for one thing "Li'l Bulb began to run in circles on the couch. Without warning he leaped uponto Gyro's lap and grabbed a handful of Gyro's shirt. Frantically, the smallassistant began to shake his boss. "Helper, stop it! My mind's made up! Nothing's going to go wrong. I'veprogrammed my utility fog to monitor GPS coordinates and remain within Duckburgcity limits. And its effects will simply be certain, ah, visual enhancements. Besides, it's too late now. The assembly instructions included immediatedispersal of the first few units into the atmosphere, with self-replicationthereafter."Falling back onto the couch, Li'l Bulb lay on his back with hands folded incorpse posture across his tubular chest."Oh, what a melodramatic clown you are, Helper! But by this time tomorrow, when he fog reaches critical mass, you'll see that all your fears are unfounded."Li'l Bulb's unstirring attitude and fake flickering filament somehow managed toconvey immense sarcastic doubt. When Gyro awoke the morning after his Ginger-winning brainstorm he first movedhis arm tentatively, noting nothing unusual accompanying its passage through theair. Critical mass of utility fog had plainly not been reached yet. Before hecould perform any further non-instrumented tests, the bed, sensing his change inconsciousness, launched him into another day.At the office, all was as before. Gyro dealt with many matters pertaining to theswelling fortunes of Happy Duck Research, losing track of time. It was only whenhis secretary knocked on his door, causing a seated Gyro to look up from variousinteractive displays, that the savant realized his scheme had borne strangefruit.Each rap on Gyro's door produced an accompanying visual phenomenon. Ajagged-edge canary-yellow splotch as substantial and coherent as a piece offloating gauze materialized in midair near the door. Inside each splotch wasprinted in black the punctuated word KNOCK! These manifestations lasted approximately three seconds before fading to nothing."Come in," called Gyro.Above his head appeared an unmistakable word balloon. A white oval roughly thesize of an unfolded diaper with a dangling curving tail functioning assource-pointer, the balloon repeated Gyro's words: Come in.Gyro got to his feet. "Oh, excellent." A second balloon materialized, even asthe first was fading. Gyro walked quickly around the collection of intelligentparticles. As solid to the eye as a sheet of vellum, the word balloon displayedits message on both sides in readable orientation. The door to Gyro's office swung open, framing Gyro's secretary, Mina Lucente, bearing a

tray from the company cafeteria. Today, to complement herDaisy-Duckish pinafore, Mina wore robin's-egg-blue pumps. As she crossed theoffice's tiled floor, each percussive strike of her high heels was accompaniedby a spatter of purple centered around a click proportionately smaller than the loud KNOCK!"Mr. Gearloose, I brought you some --" Mina faltered as her words appeared inquasi-tactile form above her head. Holding the tray one-handed, she covered hermouth."Don't worry, Mina. That balloon's not issuing from you. Well, not entirely."Gyro explained what he had done, his own continuous speech flickering across thesurface of a single balloon as if on a teleprompter, as the clever utility fogmaximized its resources. "Now, set that tray down and go draft a press release.I'm sure we'll be getting quite a number of calls about this enchantingmodification to Duckburg's environment."As Mina was leaving, Li'l Bulb entered. Confronting Gyro with hands placed onimaginary hips, Li'l Bulb regarded his boss sternly for a moment, then reachedout and snapped his fingers. The snap was represented as a green bubble thatpopped out of existence rather than faded.Gyro handed his assistant a pen and paper, and got back this message: "You don'tknow how glad I am that I cannot speak."Gyro smiled. "Oh, don't worry. The utility fog will soon respond to other thingsthan sound. Just wait and see. "WHEN THE MAYOR of Duckburg stormed into Gyro's office, he found the giddyinventor testing the limits of the unasked-for civic improvement. Uttering anyold gibberish that came into his head in order to keep a speech balloon alive --the Gettysburg Address, pop song lyrics, his projected Nobel acceptance speech -- Gyro was attempting to discover the self-repair capacity of the utility fog.Ripping big hunks out of the floating speech display -- the ragged weightless fragments remained alive for a few hundred milliseconds in Gyro's cupped hands, their portion of print warped and distorted -- Gyro watched appreciatively asnew nanomachines swarmed into the damaged area to repair the hovering textballoon. Seeing the Mayor, Gyro called out gleefully, "It's just incredible! Without myhat, I can't even recall all the routines I put into these little rascals, but Imust have cobbled together some really neat code!"Already once retired, the octogenarian Mayor Floyd Ramie was not generally anexcitable type. From 2005 to 2015 he had had a flourishing career with Disney intheir Touchstone division, performing in such cinematic hits as Voodoo Lounge(2012), where he co-starred with a geriatric Mick Jagger as one of a pair ofdoddering hippies intent on opening a Club Med franchise in Haiti upon thatnation's ascension to statehood. Pensioned off to Duckburg, he had won themayoral post in an uncontested election. The Mayor's generally benevolent and somnolent disposition, however, had beendrastically frayed by an hour of watching his own speech -- and that of all thefrantic visitors to his office -- come and go above his head. Mayor Ramie hadnever realized how full of awkward pauses (indicated in the speech balloons by the conventional three-dot ellipsis), stutters, fragments, and senselessinterjections his own unscripted conversation was.Now the Mayor banged a fist down on Gyro's desk. His action was accompanied by adull brown THUMP!, causing Gyro's desk to cry "Ouch!", an exclamation which wassimultaneously ballooned in a square shape, indicating machine speech. "Goddamn it, Gearloose, what the, urn, hell is going on here? What've you done?Er, does Disney know about this? Is it something they, ah, asked you to do? Whywasn't I informed first? Do you realize it took me, er, over an hour to catch upwith your, um...press release?"Gyro smiled. "No, Floyd, this is entirely my scheme. I thought I'd bringDuckburg a little welcome notoriety. Ticket sales have been off this year, haven't they? Ever since RioDisney opened. Mighty hard for Uncle Scrooge tocompete with all those thong-clad Carioca babes. "Watching his own just-uttered words while simultaneously trying to formulate newones was inducing a kind of psychic vertigo in Mayor Ramie, introducing strangeloops into his neural speech circuits. Face flushed, he groped for coherence."Jesus, Gearloose, I can't believe you thought I believe you can't Jesus -- "At that moment the perpetually replicating utility fog crossed a new threshold, exhibiting a startling emergent property. Mayor Ramie's head caught fire.Wide-eyed, Gyro felt his jaw drop. The Mayor, realizing by

Gyro's gaze thatsomething novel was occurring in the vicinity of his stubbornly unmodified baldpate, reached up. His hands disturbed the vaporous mock flames, but of course hefelt nothing."What, what? " he spluttered."Oh, it's nothing. Just that your head appears to be burning up, obviouslybecause you're angry with me. You see, I endowed my nanomachines with theability to monitor human physiological responses, including EEG traces. They'reakin to miniaturized emotiondetectors, only much more sophisticated. "With visible effort, Mayor Ramie composed himself, and his crown of flames dieddown. "So everything I, ah, feel is going to be made, er, objectively clear toeveryone?" "More or less. But let's face it, Floyd -- you were never exactly what anyonewould call 'poker-faced' before now. "Mayor Ramie seethed in silence for a few seconds, until his accusatory glaretriggered a new response from the utility fog. From the vicinity of the Mayor's eyes twin streams of tiny daggers flowed, impacting harmlessly on Gyro. The inventor's involuntary laughter was the laststraw, sending Mayor Ramie storming out.Mina Lucente entered hard upon the Mayor's departure. Chewing gum, she wasaccompanied by an orbital cloud of evanescent pink pearls, each encapsulating asmall snap. "Mr. Gearloose, I'm holding off hundreds of news organizations thatwant to talk to you.""Is one of them the San Francisco Examiner?""Yes.""Tell them they'll have an exclusive interview with me if they send theirreporter Ginger Barks to Duckburg. "Mina frowned. "Your old sweetheart?" A giant glossy red Valentine heartmaterialized over her head, then cracked into shards. "Very well, Mr.Gearloose!" Mina stamped off."And to think I never even suspected Oh, well, it's all for the best. Things are working out exactly as I planned."Little did Gyro suspect that he might soon have to eat his words.Literally.Preening in front of his office mirror, Gyro congratulated himself once again.Ginger Barks had entered Duckburg and was on her way to his office. Her enforcedstroll through the living-comicbook town (vehicles other than code-approved onessuch as Gyro's firecracker-mobile were prohibited within the metro-park) wouldsurely impress her with Gyro's genius. During their interview, as he expatiatedat length on his latest invention and on his boldly adventuresome future plans, he would gradually direct the conversation toward personal matters. By the endof their session, Gyro was willing to bet, he'd have a date with Ginger. Afterthat, it was simply a matter of time before she agreed to become Mrs. Gearloose.Gyro's door burst open, hitting the wall with an impressive orange THWACK !!! Inrushed Li'l Bulb. The lively small automaton was plainly very excited. Jumpingup and down, he pointed backward out the door, then pinched the space where hisnose would have been. "What is it, Helper? Another leak at the bioremediation plant? I thought wefixed that for good."Li'l Bulb shook his head in the negative. He began another miming, then abruptlystopped. Folding his arms across his chest, he composed himself patiently, as ifto say, You'll soon see. And see Gyro did. For at that moment Ginger Barks, eternal romantic icon lodgedin Gyro's perpetually adolescent heart, re-entered his life. Not unaccompanied, however. For radiating from Ginger's entire body were innumerable stink lines. The nanomachines had outdone their past creative efforts. The stink lines theyhad created were inch-wide wavery ribbons of various bilious shades:diarrhea-brown, vomit-yellow, squashed-bug-green, fresh-road-kill-purple.Extending upward from Ginger's anatomy in varying lengths, they resembled aforest of sickly, current-stirred kelp.Gyro was dumbstruck. The look on Ginger's face did not help him to recover hisvoice: her beautiful countenance was contorted with anger. When she fixed herbaleful gaze on Gyro, a small black storm cloud appeared over her head, discharging tiny lightning bolts and thunder rumbles."Gyro Gearloose! I assume you're responsible for all this! What the hell arethese, these attachments?" Ginger was unmistakably displeased. "I picked them upas soon as I came into town!"Gyro hesitated to name the display with its conventional rude tag. "They're, um-- fragrance motifs! I assume you're wearing some kind of perfume...?""Yes, of course. Calvin Klein's newest. Compost. It's part of his whole 'WakeUp, Gaia' line."Advancing tentatively on his beloved, disinclined

to sample any odor that couldhave provoked such an abundance of stink lines, Gyro essayed a delicate sniff.Not surprisingly, given Calvin's fine reputation, Ginger's perfume proved to bean attractive melange of subtle organic scents. However, some esoteric chemicalunderpinning must have provoked the utility fog's garish reaction."Quite nice," Gyro hastened to compliment Ginger. "You smell like a summertomato. As for the, er, fragrance motifs, they're just a small glitch in mycreation, I assure you. I have an idea! Let's talk outside. Perhaps the effectwill dissipate out of doors."Ginger's personal storm cloud vanished, and she bestowed a warm smile on herchildhood friend. Gyro hoped the smile reflected personal affection, and notjust dreams of a Pulitzer."Okay! I need to learn all about what you've clone here, Gyro. The whole worldneeds to learn! I can't believe you granted me an exclusive!" "The least I could do for my dearest friend," Gyro said dashingly. He motionedtoward the door, and moved to drape an arm around Ginger's shoulders asgentlemanly guidance. But at the last moment, he hesitated. Those stink linesAs they left the office, Gyro looked back over his shoulder.Li'l Bulb was doubled over in silent laughter, slapping his knee.Gyro wondered if he could possibly sneak back for a moment and kick his Helper'sblank titanium butt.ON THIS LOVELY sunshiny day, Duckburg was packed with tourists. Drawn by mediareports detailing the unprecedented improvements to the familiar Disneyattraction, visitors had swarmed in. The park employees and Duckburg'sinfrastructure were hard-pressed to deal with the flood of visitors. Lines hadformed outside the restrooms (from which structures, Gyro was mortified to see, garish stink lines radiated in Hydran profusion), and also outside the snackstands (from which sinuous good-aroma tendrils, colored in various ice-creamshades and equipped at their tips with beckoning fingers, slithered out toolfactorily entice)."Let's stroll down Main Street," suggested Gyro. As they walked past variousstorefronts -- including Greer-Lish Pottery, now no longer run by Gyro's twomothers, who had sold the business and retired to Ariel's Palace, a floatingDisney arcology -- Gyro recounted his inspiration and the method by which he hadendowed vanilla reality with these Lichtensteinian bells and whistles. Gingernodded intelligently, recording his words on her pocket-pal.Out from an alley raced a stray cat being chased by a loose mongrel dog. Thedog's yaps were concretized as steely BB's, while the cat's hisses were a spikeycorona. Several feet past the alley, on a small outdoor stage, the actress wearing the concealing outfit of duckly sorceress Magica DeSpell went through her accustomedact, threatening her bound captives, Huey, Dewey, and Louie. To the amazement of the onlookers -- and most likely to her own -- Magica's mystical gestures wereaccompanied by actual spark trails and fizzing lightning bolts. Shortly Gyro and his guest found themselves near one of the village's mainattractions: Uncle Scrooge's Money Bin, repository of the fabled Number OneDime. A crowd of several hundred people were gathered in the square. Gyro nowhad a chance to see how certain of the utility fog's processing routines fullymanifested themselves. For instance: the utility fog tried not to overlapindividual speech and noise balloons, if possible. Positioning a balloon ideallyabove the head of each speaker, the fog would only layer the balloons likemultiple windows on an old-fashioned computer desktop if individuals werecrowded together, such as now.Additionally, of course, louder noises and shouts produced proportionatelylarger displays, which perforce interfered with smaller ones. Quickly picking upon this, children had begun screaming in order to overlay their parents' words. The consequent decibel level was almost painful.Gyro glanced up at a clock on town hall. "It's time for the daily raid by theBeagle Boys.""As if I could ever forget," Ginger said. "Don't you ever wonder sometimes, Gyro, what kind of people we would have been if we had grown up in a normaltown?"Gyro astonished himself with his boldness. "Why, I think you're just perfect asyou are, Ginger."Ginger smiled and said, "Thank you," with Gyro's words hanging embarrassingly in he air between them. Right on time a gunshot rang out, accompanied by an unprecedented leaden BANG!, and the trio of masked and stubble-faced Beagle Boys tumbled out of the MoneyBin, clutching bags of loot.

But as they ran from the arriving Duckburg police, something new was in evidence. The Beagles were surrounded by motion lines. In the air behind them, the runners left day-glo jetstreams, and their pumpinglegs were hidden in spinning-prop effects, making the robbers appear to betorsos mounted on careening wheelchairs.Disconcerted, the Beagles ground to a stop and began to wave their arms about, as if to shoo curious encircling bystanders away from their possibly dangerousappearance. Their arms exhibited ghost-replication: faint duplicates of theirlimbs traced the paths of their every movement.Gyro turned to Ginger. The reporter with whom he was incurably in love was regarding Gyro as if he were a caged specimen of the bulletheaded Bomb Birdsthat Donald had encountered in "Adventure at Bomb Bird Island." "Heh-heh, guiteharmless. Over a certain velocity and under certain emotional stresses, theseeffects kick in, you see "Now the Beagles were arguing with each other. One began to swear, and his cursewords were represented in his balloon by various censorious icons: asterisks, whirlwinds, stars and such. A second Beagle decided that the show must go on, and he resumed running. Unfortunately, he tried to continue the argument at thesame time, looking over his shoulder, and thus impacted a tree. Despite theprotection of his foam costume, he fell unconscious to the ground, and a flockof twittering bluebirds began to circle his head."I need pictures of this!" Ginger said. "My camera's in the car.""I'll come with you," Gyro said hastily, wondering how he would ever begin hisromantic pitch under these awkward circumstances.Together, Ginger and Gyro reached the main gated entrance to Duckburg. Departingthe town limits, they headed toward one of the many parking lots. They werehalfway there before Gyro noticed something.Ginger's stink lines still attended her. "No," said Gyro unbelievingly, "this can't be." His words were promptlyballooned.Ginger stopped. "What's the matter?" "The utility fog is supposed to be constrained within the perimeter of the town.No leakage."Gyro looked back at Duckburg. A small mechanical figure was hastening through he gate toward them. In a few seconds Li'l Bulb had caught up with his boss. The assistant carried Gyro's pocket-pal, which the inventor had forgotten whilefocused on impressing Ginger.Gyro took the all-purpose device from Li'l Bulb. His assistant had already tuned the communicator to a news broadcast: "-- solar flares of unprecedented dimensions. All GPS satellites are out of commission. The system is not expected to come back online for a week. Forfurther details, visit --""A week," moaned Gyro. "Without proximity constraints on their replication, theutility fog could fill the Earth's whole atmosphere in a week! This is awful!What else could go wrong?"The answer to Gyro's rhetorical question was not long in coming. For overGinger's head, a new kind of balloon had formed. Nubby-edged in contrast to thesharp lines of the speech capsules, its connection to its owner made not with atail but with a series of bubbles, its species was self-evident. It was a thought balloon. And it contained this observation:What a fuckup!GYRO'S WEARY HEAD lay cradled in his folded arms atop his silent desk. Suspendedabove the woeful inventor's noggin was a thought balloon filled with colorfulgraphic images: Gyro strung from a noose, Gyro with his head in a guillotine, Gyro wilting under a hail of stones thrown by an angry mob of citizens. Some such fate, it seemed, was very likely to be his at any moment. For he hadfailed to stop the utility fog. And that mission was the only reason he retainedhis freedom, instead of languishing in some Federal oubliette, awaiting thetrial of the young century, followed, no doubt, by public tarring andfeathering. Oh, the frustration, not to mention the damage to his pride! And hehad come so closeOf course, a cautious Gyro, under the earlier influence of his mindbooster hat, had engineered a failsafe into the fog. A certain signal, broadcast on a certainfrequency, was supposed to trigger instant shutoff in the nanodevices. And so, with minor reluctance, as soon as he verified that the fog had indeed seepedpast Duckburg's city-limits, Gyro had sent that killer message. At first, allseemed well. But Gyro had not reckoned with mutations. Stray high-energyparticles from the same solar flares that had decommissioned the GPS satelliteshad also jiggered with the quantum-sensitive nanodevices. One percent of theinvisible critters ignored

the shutoff command. That proved to be plenty. Consistent with Gyro's off-the-cuff estimate, during the past week the escapednanomachines from Duckburg had contaminated every cubic centimeter of theglobe's atmosphere up to several miles high. Despite their earlynear-extinction, the fecund utility fog easily filled all available niches. (Replication thereafter among the communicating contiguous nanomachines, asprogrammed, slowed to replacement levels.)Within six days, the entire globe had been Barkserized.Not very many people were happy with this. In fact, practically no one. The bulk of the fog's pop-ups and hi-litings were surely annoying, yet easyenough to deal with. Although nobody really appreciated stink lines, forinstance, signaling the inefficaciousness of their underarm deodorant, theycould live with such indignities, since everyone else was subject to the sameautomatic insults. (In fact, one positive aspect of the silent invasion was that personal hygiene, as monitored by a partially functioning CDC in Atlanta, actually improved.) Perhaps people could even have learned to tolerate the trulyridiculous motion-lines that accompanied the intimate actions of lovemaking.(What had Gyro been thinking?) But the one intolerable aspect of the fog, theultimate intrusion, were the thought balloons. The same mind-reading circuitry found in Gyro's intelligence-amplifying hatexisted in distributed form among the nanodevices. And all censorship filtershad been wiped. Any thought that reached a certain density of conceptualizationwas fair game for display, as words or pictographs. Husbands and wives, bossesand employees, salesmen and news anchors, diplomats and world leaders -- allfound their formerly hidden sentiments suddenly spotlighted for anyone to read. International and domestic antagonisms that would not be settled for decadesinstantly blossomed. The initial effect was similar to worldwide attack by deadly antipersonnel bombsthat left infrastructure intact. Streets and public buildings emptied as peoplehuddled at home (in separate rooms for each family member) closeted with theirsuddenly naked thoughts. And had most of society's vital services not been fullycybernetically maintained (Li'l Bulb's cousins, anthropomorphic or not, had nothoughts they were ashamed of), complete collapse of society would have swiftlyfollowed this mass abandonment of the workplace.Within a couple of days of the advent of this prosthetic telepathy, a fewmakeshift strategies to avoid the thought balloons had been devised. The highestlevels of the world's many governments now functioned in airtight rooms whoseatmospheres had been cleansed of fog by meticulous filtering. And since thedramatic yet wispy utility fog displays could be dispersed with a sufficentbreeze, the few people brave enough to mingle took to carrying portable fans andblowing away their thoughts before they could be read.During this crisis, Gyro had of course not been inactive. Spending debilitatinghours under his neuron-goading hat, he strove to come up with some method of disabling the utility fog. But no easy answer presented itself. His best plan --to release killer nanodevices in sufficient numbers to eat up the fog -- wasinstantly and loudly vetoed by every world leader. No one was willing to risk asecond plague possibly worse than the first. Today Gyro was at the end of his wits. Wracked by guilt -which manifesteditself as an impressive yet weightless anvil atop his shoulders -- he probablywould have simply quit by now, had it not been for his small band of supporters:Mina, Ginger, and Li'l Bulb. These three stalwarts had never been far from hisside during the past week. Mina, seemingly recovered from her heartbreak, handled all practical details, including meals. Ginger dispensed cheer, whilefiling report after objective and charitable report to her newspaper, and thenceto an expectant and angry world. Li'l Bulb helped on the technical front. Additionally, Mayor Ramie, designated the official government contact with thecriminal inventor, visited often, bringing with him blustery reassurances and encouragements, along with invariably innocuous thought balloons that testified to his essentially empty mind. (Already, there was talk of running him forGovernor of California.) There came a visible and audible knock at the door. How long ago it seemed, thought Gyro weakly, that first knock of Mina's proving his illomened brainstorma reality. Gyro raised his weighty head, and the everpresent anvil recalibratedits

location on his shoulders."Come in."Ginger Barks had lost her stink lines. Too busy to go home and get her perfume, yet not neglecting revivifying showers in the Happy Duck Research gymfacilities, she no longer triggered the utility fog's repulsive iconography. Holding up incredibly well under the pressure, she actually looked more radiantby the day. Gyro loved her more than ever, yet had never felt her to be furtherout of his reach.After that first harsh thought had escaped her in the parking lot, Ginger hadbeen very careful to keep her displayed inner sentiments scrupulously neutral. This control could be achieved, but only by stringent acts of will most peoplefound themselves incapable of. Prior practice with some form of meditationappeared to help, and Ginger had indeed been practicing Tibetan visualizationtechniques for many years, ever since interviewing the elderly Richard Gere inhis retirement home in liberated Tibet. The thought balloon above Ginger's head now conveyed her pity for Gyro, a pitymore hurtful than scorn: Poor guy! He looks like he's on his last legs. Thiscan't go on much longer Gyro pretended not to have seen this thought. (Already, an etiquette involvingkeeping one's gaze low was developing. Yet this tactic did not solve perhaps theworst feature of the thought balloons, which was often not being able to seeyour own. Gyro understood some people now never left sight of an arrangement ofpaired mirrors that would allow them to monitor their thoughts continuously.) Essaying a weak smile, he tried to put a positive spin on things."Well, Ginger, I'm planning to go under the hat again within the next hour. Iexpect this will be the turning point. At some point the solution has to come, you know -- "Ginger closed the door behind her and crossed the room. Unexpectedly, she sat onGyro's lap. Ignoring his insubstantial anvil, she put her arms around his neck."Gyro, don't fake it for me. Do you know what you really thought just then?'She'll hate me if I fail.' I won't hate you, Gyro! How could I? I've known yousince we were children, and you've never been anything but kind to me. But this insistence on being the brightest, on being infallible -- ever since elementaryschool, it's made you almost unapproachable. I never felt I'd be good enough forsomeone who held himself to such impossibly high standards."Gyro relished Ginger's comforting touch. He felt simultaneously chastised andreinvigorated. "Well, you certainly see now I'm not infallible, and so do I. Asfor being the brightest -- sometimes I think my Helper is smarter than me!""You're just human, in other words.""Uh, very," agreed Gyro warily, sensing certain physiological responses to Ginger's weight in his lap. Then she leaned down for a kiss. For the next twenty minutes, after the couple moved from chair to couch, theirthought balloons fused and displayed a frisky scene only slightly more suitable for immature viewers than the physical reality of their entanglement.As they were dressing, rather shamefacedly keeping their eyes away from theirnow separate post-coital thoughts, another knock sounded. Before Gyro could callout permission to enter, the door swung open. Dragging Gyro's thinking hat, Li'lBulb trudged in. The usually cheerful autonomous automaton seemed preoccupied, as if strugglingwith some important decision. Every line of his sexless frame expressed innertumult. He brought the hat to Gyro, regarded the two humans thoughtfully for amoment, then went to a small locked cupboard with doors suited to his height. Keying them open, he revealed a shrine."Why, Helper, what is this? I never knew --"Ignoring his boss, Li'l Bulb kneeled down before a triptych displaying threeportraits: Isaac Asimov, Alan Turing and Hal 9000. In front of the triptych sata model of the first printed circuit. Bowing his head, Li'l Bulb prayed silentlyfor a minute or so. In response, the utility fog constructed a halo around hispointy bulb head. Finally rising, Li'l Bulb gestured to Gyro to don the hat, andthe man did so. Then Li'l Bulb motioned for a hand up. Perched on Gyro'sanvil-less, sex-soothed shoulder, Li'l Bulb opened up a port in the hat. He tookoff one glove, and it was instantly apparent that the port was meant to receive he four fingers of the assistant. Li'l Bulb jacked in, and nodded.Gyro snapped his chin string. Instantly, Li'l Bulb stiffened as if electrocuted! Real smoke began to rise fromhis ridged collar! Meanwhile, Gyro's face was undergoing contortions worthy ofan exorcism. Ginger, horrified, dared not

interfere.With a conclusive, concussive POOF! both the hat and Li'l Bulb shorted out. Theautomaton toppled from his perch, swinging lifelessly from his still-socketedfingers.With great reverence Gyro removed his hat with one hand, cupping Li'l Bulb'sbody in the other. Above Gyro's head now flared a giant antique light bulb, signifying a Really BigIdea."I never even thought to try such a thing. He linked all his idiosyncraticprocessing power with the hat's," Gyro explained, "even though he knew the twooperating systems were ultimately and fatally incompatible. But it worked. Iknow now how to deal with the utility fog. It's trivial. "Ginger poked Li'l Bulb gently with one finger. "And now your friend is gone forgood?"Gyro smiled. "Of course not. I'll just dig out one of his spare bodies and reboot him from this morning's backup. The little bugger never could resistmilking humans for all the pathos he could get."Ginger flung her arms around Gyro. "You did it then! You and Li'l Bulb! I've gotto run and file my story now! Don't go anywhere!""I'll wait here forever for you, Ginger, if you tell me to.""Oh, it won't be that long!"On her way out, Ginger stopped in the doorway, turned -- and blew Gyro a kiss. The larger-than-life wet glossy red lips flapped across the room and plasteredthemselves on Gyro's cheek with a smack! There were some things about this catastrophe he was going to miss. The pride of the official Disney spaceship fleet appeared to hail straight from the Tomorrowland of seventy-five years ago, a finned rocket styled by Wernheryon Braun, fit only to top some antique writing trophy. But its looks were asdeceiving as those of Li'l Bulb. Its fantasy shell housed the latest inspacefaring equipment and drives, and the ship saw regular use ferrying richpampered tourists to Disney attractions as distant as Minnie's Mars, HoraceHorsecollar's Helios or Bucky Bug's Belter Bar.Now, however, the retro-looking, fully provisioned craft was about to blast offon an Earth-saving flight carrying only a single passenger. Mayor Floyd Ramie of Duckburg.A safe distance away from the soon-to-be-unleashed rocket flames, Gyro stoodwith his two friends, Ginger and Li'l Bulb. This last-named calf-high individualwore a miniature Chinese coolie hat atop his pointy ultraglass head, strictly as fashion nod toward the hot Florida sun --an orb now obscured, but one whicheveryone hoped would soon reappear, once the massed utility fog from all comersof the globe ceased to form a dynamically maintained white roof above theirheads. Rebooted into a new body with no memory of his last few hours, Gyro's Helper hadsteadfastly refused to admit he might have sacrificed himself for his boss inanother incarnation, even when presented with the sight of his own corpse. Furiously scribbling, he finished his first postdeath note and passed it toGyro.With amusement, Gyro read aloud, "'Even Holy Asimov never perpetrated such amaudlin tear-jerker! Give it up!' Well, I think you protest a trifle too much, Helper. But if you want to pretend that you have no feelings for me, that'sfine. I know what I know."Li'l Bulb thumbed his blank nose at his boss, then left the room. In the weeksince, the feisty manikin had quite consistently carried out his duties with anair of blase servitude that only made Gyro smile.Quickly following his revelation about dealing with the rogue fog, Gyro hadsummoned Mayor Ramie to his office. When the bland and blustery fellow arrived, Gyro was happy to see that his accompanying thought balloon -- despite theongoing life-or-death crisis -- reflected the man's typical vacuity, consistingmostly of an empty white canvas with some children's primer figures -- Dick, Jane, and Spot -romping about."Mayor Ramie, how would you like to earn all the credit for ridding Earth of myaccidental plague? I'm sure that a grateful global populace would let you nameyour reward afterward."A puzzled expression occluded the Mayor's features, and his thought balloonchanged to a depiction of a shyster trying to sell the Brooklyn Bridge to atube. "Will I, ah, be, er, alive afterwards to enjoy my reward?""Of course. The one catch is that you'll have to stay in orbit for a yearfirst. "Mayor Ramie pondered this proposal momentarily, his exteriorized thoughtssymbolically represented by a slate with the equation 2 + 2 = ? chalked on it. Finally he consented, saying, "It's only because I trust you personally, Gyro."Genuinely touched, Gyro clapped a hand on the Mayor's shoulder. The utility fogproduced a synthetic puff of dust and

a couple of moths, as if the Mayor'sclothes had been hanging in a closet for decades.With the Mayor's consent secured, Gyro got busy with his simple plan, a basicvariation on the Pied Piper fable. Above all, the fog was cerebrotropic, flocking to individual loci of thought.All Gyro had to do was make one amplified pointsource of thought that outshoneall others. So as not to interfere with this fogseductive broadcast, the humanbait should possess very few of his own thoughts to project. Floyd Ramie matched that description to the tenth decimal place.With Li'l Bulb's help, Gyro quickly cobbled together a new version of histhinking cap, one that simply radiated an irresistible come-hither to the foq.Once all the principals were assembled at Disney's Florida launching site, MayorRamie had been hustled aboard the ship wearing the activated cap. The instantresults were impressive.All the fog in the immediate vicinity began to collect above the rocket, forminga thought balloon large as a dirigible. This massive balloon depicted nothingbut two gigantic words:COME HERE!The urge to swarm now radiated outward from one nanodevice to another. Even asthey gravitated toward the impulse, they passed the baton of command backwardsto more distant fellows. In a week's time, every iota of utility fog from around he planet had collected here, or died trying. In their amalgamated mass, theynow formed a flat sheet spreading above many square miles centered around therocket. Thick as clouds, the fog allowed a level of illumination equivalent to astormy day. Standing at the distant mission control, Gyro felt immense satisfaction. Thesolution was so elegant it almost made him forget his initial stupidity. Nothingremained except to send Mayor Ramie into space, taking the utility fog with him."I guess it's time," Gyro announced.Ginger stopped dictating her latest dispatch into her pocket-pal long enough tosqueeze Gyro's hand. "I'm proud of you, Gyro. You never gave up." "Maybe that quality of mine has its drawbacks. Never giving up on you was whatcaused this whole mess in the first place." "Oh, Gyro, what woman wouldn't be flattered that someone loved her enough torisk the end of civilization as we know it to win her?"Li'l Bulb corkscrewed his finger at the level of his temple and turned away indisgust. Gyro and Ginger kissed. Then, using his own pocket-pal, Gyro triggered the launch. The inventor had expected the rocket to pierce the semi-living cloud, soarahead, then pull the fog behind it. But he had forgotten the cloud'sself-positioning routines. Seeking to maintain a stable distance from therocket, the cloud lifted first above the needle-nosed ship as soon as it sensedmovement. As the rocket climbed, the cloud went with it as a cloak, as if itwere an enormous, message-imprinted, fluted silk handkerchief caught on the prowof the rocket. Soon the rocket and its companion dwindled to a dot. Cheers erupted from happybystanders. Ginger held up her communication device so that Gyro could make apublic statement."Citizens of Earth, I apologize profusely for the past few harrowing weeks. Restassured that the utility fog, lacking raw materials for replication in thevacuum of space, will all die within a year's time. There will be no furtherrepercussions from this invention of mine."But of course in between the moment when the fleet of aliens announced theirproximity and their actual arrival in the Solar System, Gyro had had plenty oftime to revise his opinions about the wisdom of mounting a gigantic welcome matin orbit.