

# The Offer of King Krool

Stanislaw Lem

## An Impressive Advertisement

The tremendous success of their application of the Gargantius Effect gave both constructors such an appetite for adventure, that they resolved to sally forth once again to parts unknown.

Unfortunately, they were quite unable to decide on a destination.

Trurl, given to tropical climes, had his heart set on Scaldonia, the land of the Flaming Flamingos, while Klapaucius, of a somewhat cooler disposition, was equally determined to visit the Intergalactic Cold Pole, a bleak continent adrift among frozen stars. The friends were about to part company for good when Trurl suddenly had an idea. "Wait," he said, "we can advertise our services, then take the best offer!"

"Ridiculous!" snorted Klapaucius. "How are you going to advertise? In a newspaper? Do you have any idea how long it takes a newspaper to reach the nearest planet? You'll be dead and buried before the first offer comes in!"

But Trurl gave a knowing smile and revealed his plan, which Klapaucius—begrudgingly—had to admit was ingenious, and so they set to work. All the necessary equipment quickly thrown together, they gathered up the local stars and arranged them in a great sign, a sign that would be visible at truly incalculable distances. Only blue giants were used for the first word—to get the cosmic reader's attention—and lesser stellar material made up the others. The advertisement read: Two Distinguished Constructors Seek Employment Commensurate with Their Skill and Above All Lucrative, Hence Preferably at the Court of a Well-heeled King (Should Have His Own Kingdom), Terms to Be Arranged.

## The Emissary

It was not long before, one bright morning, a most marvelous craft alighted on their front lawn. It gleamed in the sun, all inlaid with mother-of-pearl, had three legs intricately carved and six additional supports of solid gold (quite useless, since they didn't even reach the ground—but then, the builders obviously had more wealth than they knew what to do with). Down a magnificent staircase with billowing fountains on either side there came a figure of stately bearing with a retinue of six-legged machines: some of these massaged him, some supported him and fanned him, and the smallest flew above his august brow and sprayed it with eau de cologne from an atomizer. This impressive emissary greeted the constructors on behalf of his lord and sovereign, King Krool, who wished to engage them.

"What sort of work is it?" asked Trurl, interested.

"The details, gentle sirs, you shall learn at the proper time," was his reply. He was dressed in galligaskins of gold, mink-tufted buskins, sequined earmuffs, and a robe of most unusual cut—instead of pockets it had little shelves full of mints and marzipan. Tiny mechanical flies also buzzed about his person, and these he brushed away whenever they grew too bold.

"For now," he went on, "I can only say that His Boundless Kroolty is a great enthusiast of the hunt, a fearless and peerless conqueror of every sort of galactic fauna, and verily, his prowess has reached such heights that now the fiercest predators known are <sup>1</sup>longer worthy game for him. And herein lies our misfortune, for he craves excitement, danger, thrills... which is why—"

"Of course!" said Trurl. "He wants us to construct a new model of beast, something wild and rapacious enough to present a challenge."

"You are, worthy constructor, indeed quick!" said the King's emissary. "Then it is agreed?"

Klapaucius began to question the emissary more closely on certain practical matters. But after the King's generosity was glowingly described and sufficiently elaborated upon, they hurriedly packed their things and a few books, ran up the magnificent staircase, hopped on board and were immediately lifted, with a great roar and burst of flame that blackened the ship's gold legs, into the interstellar night.

As they traveled, the emissary briefed the constructors on the laws and customs prevailing in the Kingdom of Krool, told them of the monarch's nature, as broad and open as a leveled city, and of his manly pursuits, and much more, so that by the time the ship landed, they could speak the language like natives.

First they were taken to a splendid villa situated on a mountainside above the village—this was where they were to stay.

Then, after a brief rest, the King sent a carriage for them, a carriage drawn by six fire-breathing monsters. These were muzzled with fire screens and smoke filters, had their wings clipped to keep them on the ground, and long spiked tails and six paws apiece with iron claws that cut deep pits in the road wherever they went. As soon as the monsters saw the constructors, the entire team set up a howl, belching fire and brimstone, and strained to get at them. The coach men in asbestos armor and the King's huntsmen with hoses and pumps had to fall upon the crazed creatures and beat them into submission with laser and maser clubs before Trurl and Klapaucius could safely step into the plush carriage, which they did without a word. The carriage tore off at breakneck speed or—to use an appropriate metaphor—like a bat out of hell.

"You know," Trurl whispered in Klapaucius' ear as they rushed along, knocking down everything in their path and leaving a long trail of sulfurous smoke behind them, "I have a feeling that this king won't settle for just anything. I mean, if he has coursers like these..."

But level-headed Klapaucius said nothing. Houses now flashed by, walls of diamonds and sapphires and silver, while the dragons thundered and hissed and the drivers cursed and shouted. At last a colossal portcullis loomed up ahead, opened, and their carriage whirled into the courtyard, careening so sharply that the flower beds all shriveled up, then ground to a stop before a castle black as blackest night. Welcomed by an unusually dismal fanfare and quite overwhelmed by the massive stairs, balustrades and especially the stone giants that guarded the main gate, Trurl and Klapaucius, ranked by a formidable escort, entered the mighty castle.

King Krool awaited them in an enormous hall the shape of a skull, a vast and vaulted cave of beaten silver. There was a gaping pit in the floor, the skull's foramen magnum, and beyond it stood the throne, over which two streams of light crossed like swords—they came from high windows fixed in the skull's eye sockets and with panes specially tinted to give everything a harsh and infernal aspect. The constructors now saw Krool himself: too impatient to sit still on his throne, this monarch paced from wall to wall across the silver floor, his steps booming in that cadaverous cavern, and as he spoke he emphasized his words with such sudden stabs of the hand, that the air whistled.

## The Hunting Trophies

"Welcome, constructors!" he said, skewering them both with his eyes. "As you've <sup>1</sup>doubt learned from Lord Protozor, Master of the Royal Hunt, I want you to build me new and better kinds of game. Now I'm not interested, you understand, in any mountain of steel on a hundred-odd treads—that's a job for heavy artillery, not for me. My quarry must be strong and ferocious, but swift and nimble too, and above all cunning and full of wiles, so that I will have to call upon all my hunter's art to drive it to the ground. It must be a highly intelligent beast, and know all there is to know of covering tracks, doubling back, hiding in shadows and lying in wait, for such is my will!"

"Forgive me, Your Highness," said Klapaucius with a careful bow, "but if we do Your Highness' bidding too well, might not this put the royal life and limb in some peril?"

The King roared with such laughter that a couple of crystal pendants fell off a chandelier and shattered at the feet of the trembling constructors.

"Have <sup>1</sup>fear of that, noble constructors!" he said with a grim smile. "You are not the first, and you will not be the last, I expect. Know that I am a just but most exacting ruler. Too often have assorted knaves, flatterers and fakes attempted to deceive me, too often, I say, have they posed as distinguished hunting engineers, solely to empty my coffers and fill their sacks with gems and precious stones, leaving me, in return, with a few paltry scarecrows that fall apart at the first touch. Too often has this happened for me not to take appropriate measures. For twelve years now any constructor who fails to meet my demands, who promises more than he is able to deliver, indeed receives his reward, but is hurled, reward and

all, into yon deep well—unless he be game enough (excuse the pun) to serve as the quarry himself. In which case, gentlemen, I use <sup>1</sup>weapon but these two bare hands...”

“And... and have there been, ah, many such impostors?” asked Trurl in a weak voice.

“Many? That's difficult to say. I only know that <sup>1</sup>one yet has satisfied me, and the scream of terror they invariably give as they plummet to the bottom doesn't last quite so long as it used to—the remains, <sup>1</sup>doubt, have begun to mount. But rest assured, gentlemen, there is room enough still for you!”

A deathly silence followed these dire words, and the two friends couldn't help but look in the direction of that dark and ominous hole. The King resumed his relentless pacing, his boots striking the floor like sledge hammers in an echo chamber.

“But, with Your Highness' permission... that is, we—we haven't yet drawn up the contract,” stammered Trurl. “Couldn't we have an hour or two to think it over, weigh carefully what Your Highness has been so gracious as to tell us, and then of course we can decide whether to accept your generous offer or, on the other hand—”

“Ha!!” laughed the King like a thunderclap. “Or, on the other hand, to go home? I'm afraid not, gentlemen! The moment you set foot on board the *Infernanda*, you accepted my offer! If every constructor who came here could leave whenever he pleased, why, I'd have to wait forever for my fondest hopes to be realized! No, you must stay and build me a beast to hunt. I give you twelve days, and now you may go. Whatever pleasure you desire, in the meantime, is yours. You have but to ask the servants I have given you; nothing will be denied you. In twelve days, then!”

“With Your Highness' permission, you can keep the pleasures, but—well, would it be at all possible for us to have a look at the, uh, hunting trophies Your Highness must have collected as a result, so to speak, of the efforts of our predecessors?”

“But of course!” said the King indulgently and clapped his hands with such force that sparks flew and danced across the silver walls. The gust of air from those powerful palms cooled even more our constructors' ardor for adventure. Six guards in white and gold appeared and conducted them down a corridor that twisted and wound like the gullet of a giant serpent. Finally, to their great relief, it led out into a large, open garden. There, on remarkably well-trimmed lawns, stood the hunting trophies of King Krool.

Nearest at hand was a saber-toothed colossus, practically cut in two in spite of the heavy mail and plate armor that was to have protected its trunk; the hind legs, disproportionately large (evidently designed for great leaps), lay upon the grass alongside the tail, which ended in a firearm with its magazine half-empty—a clear sign that the creature had not fallen to the King without a fight. A yellow strip of cloth hanging from its open jaws also testified to this, for Trurl recognized in it the breeches worn by the King's huntsmen.

Next was another prone monstrosity, a dragon with a multitude of tiny wings all singed and blackened by enemy fire; its circuits had spilled out molten and had then congealed in a copper-porcelain puddle. Farther on stood another creature, the pillarlike legs spread wide. A gentle breeze soughed softly through its fangs. And there were wrecks on wheels and wrecks on treads, some with claws and some with cannon, all sundered to the magnetic core, and tank-turtles with squashed turrets, and mutilated military millipedes, and other oddities, broken and battle-scarred, some equipped with auxiliary brains (burnt out), some perched on telescoping stilts (dislocated), and there were little vicious biting things strewn about. These had been made to attack in great swarms, then regroup in a sphere bristling with gun muzzles and bayonets—a clever idea, but it saved neither them nor their creators.

Down this aisle of devastation walked Trurl and Klapaucius, pale, silent, looking as if they were on their way to a funeral instead of to another brilliant session of vigorous invention. They came at last to the end of that dreadful gallery of Krool's triumphs and stepped into the carriage that was waiting for them at the gate. That dragon team which sped them back to their lodgings seemed less terrible now. Just as soon as they were alone in their sumptuously appointed green and crimson drawing room, before a table heaped high with effervescent drinks and rare delicacies, Trurl broke into a volley of imprecations; he reviled Klapaucius for heedlessly accepting the offer made by the Master of the Royal Hunt, thereby bringing down misfortune on their heads, when they easily could have stayed at home and rested on their laurels. Klapaucius said nothing, waiting patiently for Trurl's desperate rage to expend itself, and when it finally did and Trurl had collapsed into a lavish mother-of-pearl chaise lounge and buried his face in his hands, he said:

“Well, we'd better get to work.”

These words did much to revive Trurl, and the two constructors immediately began to

consider the various possibilities, drawing on their knowledge of the deepest and darkest secrets of the arcane art of cybernetic generation.

### Brainstorming a Beast

First of all, they agreed that victory lay neither in the armor nor in the strength of the monster to be built, but entirely in its program; in other words, in an algorithm of demoniacal derivation. "It must be a truly diabolical creature, a thing of absolute evil," they said, and though they had as yet <sup>1</sup>clear idea of what or how, this observation lifted their spirits considerably. Such was their enthusiasm by the time they sat down to draft the beast, that they worked all night, all day, and through a second night and day before taking a break for dinner.

And as the Leyden jars were passed about, so sure were they of success, that they winked and smirked—but only when the servants weren't looking, since they suspected them (and rightly, too) of being the King's spies. So the constructors said nothing of their work, but praised the mulled electrolyte which the waiters brought in, tail coats flapping, in beakers of the finest cut crystal. Only after the repast, when they had wandered out on the veranda overlooking the village with its white steeples and domes catching the last golden rays of the setting sun, only then did Trurl turn to Klapaucius and say:

"We're not out of the woods yet, you know."

"How do you mean?" asked Klapaucius in a cautious whisper.

"There's one difficulty. You see, if the King defeats our mechanical beast, he'll undoubtedly have us thrown into that pit, for we won't have done his bidding. If, on the other hand, the beast... You see what I mean?"

"If the beast isn't defeated?"

"No, if the beast defeats him, dear colleague. If that happens, the King's successor may not let us off so easily."

"You don't think we'd have to answer for that, do you? As a rule, heirs to the throne are only too happy to see it vacated."

"True, but this will be his son, and whether the son punishes us out of filial devotion or because he thinks the royal court expects it of him, it'll make little difference as far as we're concerned."

"That never occurred to me," muttered Klapaucius. "You're quite right, the prospects aren't encouraging. Have you thought of a way out of this dilemma?"

"Well, we might make the beast multimortal. Picture this: the King slays it, it falls, then it gets up again, resurrected, and the King chases it again, slays it again, and so on, until he gets sick and tired of the whole thing."

"That he won't like," said Klapaucius after some thought. "And anyway, how would you design such a beast?"

"Oh, I don't know... We could make it without any vital organs.

The King chops the beast into little pieces, but the pieces grow back together."

"How?"

"Use a field."

"Magnetic?"

"If you like."

"How do we operate it?"

"Remote control, perhaps?" asked Trurl.

"Too risky," said Klapaucius. "How do you know the King won't have us locked up in some dungeon while the hunt's in progress?"

Our poor predecessors were <sup>1</sup>fools, and look how they ended up.

More than one of them, I'm sure, thought of remote control—yet it failed. No, we can't expect to maintain communication with the beast during the battle."

"Then why not use a satellite?" suggested Trurl. "We could install automatic controls..."

"Satellite indeed!" snorted Klapaucius. "And how are you going to build it, let alone put it in orbit? There are <sup>1</sup>miracles in our profession, Trurl! We'll have to hide the controls some other way."

"But where can we hide the controls when they watch our every step? You've seen how the servants skulk about, sticking their noses into everything. We'd never be able to leave the premises ourselves, and certainly not smuggle out such a large piece of equipment. It's

impossible!"

"Calm down," said prudent Klapaucius, looking over his shoulder.

"Perhaps we don't need such equipment in the first place."

"Something has to operate the beast, and if that something is an electronic brain anywhere inside, the King will smash it to a pulp before you can say goodbye."

## Fierce Simulations

They were silent. Night had fallen and the village lights below were flickering on, one by one. Suddenly Trurl said:

"Listen, here's an idea. We only pretend to build a beast but in reality build a ship to escape on. We give it ears, a tail, paws, so <sup>1</sup>one will suspect, and they can be easily jettisoned on takeoff. What do you think of that? We get off scot-free and thumb our noses at the King!"

"And if the King has planted a real constructor among our servants, which is not unlikely, then it's all over and into the pit with us. Besides, running away—no, it just doesn't suit me.

It's him or us, Trurl, you can't get around it."

"Yes, I suppose a spy could be a constructor too," said Trurl with a sigh. "What then can we do, in the name of the Great Comet?! How about—a photoelectric phantom?"

"You mean, a mirage? Have the King hunt a mirage? <sup>1</sup>thanks!

After an hour or two of that, he'd come straight here and make phantoms of us!"

Again they were silent. Finally Trurl said:

"The only way out of our difficulty, as far as I can see, is to have the beast abduct the King, and then—"

"You don't have to say another word. Yes, that's not at all a bad idea... Then for the ransom we—and haven't you noticed, old boy, that the orioles here are a deeper orange than on Maryland IV?" concluded Klapaucius, for just then some servants were bringing silver lamps out on the veranda. "There's still a problem though," he continued when they were alone again. "Assuming the beast can do what you say, how will we be able to negotiate with the prisoner if we're sitting in a dungeon ourselves?"

"You have a point there," said Trurl. "We'll have to figure some way around that... The main thing, however, is the algorithm!"

"Any child knows that! What's a beast without an algorithm?"

So they rolled up their sleeves and sat down to experiment—by simulation, that is mathematically and all on paper. And the mathematical models of King Krool and the beast did such fierce battle across the equation-covered table, that the constructors' pencils kept snapping. Furious, the beast writhed and wriggled its iterated integrals beneath the King's polynomial blows, collapsed into an infinite series of indeterminate terms, then got back up by raising itself to the  $n$ th power, but the King so belabored it with differentials and partial derivatives that its Fourier coefficients all canceled out (see Riemann's Lemma), and in the ensuing confusion the constructors completely lost sight of both King and beast.

So they took a break, stretched their legs, had a swig from the Leyden jug to bolster their strength, then went back to work and tried it again from the beginning, this time unleashing their entire arsenal of tensor matrices and grand canonical ensembles, attacking the problem with such fervor that the very paper began to smoke. The King rushed forward with all his cruel coordinates and mean values, stumbled into a dark forest of roots and logarithms, had to backtrack, then encountered the beast on a field of irrational numbers ( $F1$ ) and smote it so grievously that it fell two decimal places and lost an epsilon, but the beast slid around an asymptote and hid in an  $n$ -dimensional orthogonal phase space, underwent expansion and came out, fuming factorially, and fell upon the King and hurt him passing sore.

But the King, nothing daunted, put on his Markov chain mail and all his impervious parameters, took his increment to infinity and dealt the beast a truly Boolean blow, sent it reeling through an  $x$ -axis and several brackets—but the beast, prepared for this, lowered its horns and wham!! —the pencils flew like mad through transcendental functions and double eigen transformations, and when at last the beast closed in and the King was down and out for the count, the constructors jumped up, danced a jig, laughed and sang as they tore all their papers to shreds, much to the amazement of the spies perched in the chandelier—perched in vain, for they were uninitiated into the niceties of higher mathematics and consequently had <sup>1</sup>idea why Trurl and Klapaucius were now shouting over and over,

"Hurrah! Victory!!"

## The Secret Police

Well after midnight, the Leyden jug from which the constructors had on occasion refreshed themselves in the course of their labors was quietly taken to the headquarters of the King's secret police, where its false bottom was opened and a tiny tape recorder removed. This the experts switched on and listened to eagerly, but the rising sun found them totally unenlightened and looking haggard. One voice, for example, would say:

"Well? Is the King ready?"

"Right!"

"Where'd you put him? Over there? Good! Now—hold on, you have to keep the feet together. Not yours, idiot, the King's! All right now, ready? One, two, find the derivative! Quick! What do you get?"

"Pi."

"And the beast?"

"Under the radical sign. But look, the King's still standing!"

"Still standing, eh? Factor both sides, divide by two, throw in a few imaginary numbers—good! Now change variables and subtract—Trurl, what on earth are you doing?! The beast, not the King, the beast! That's right! Good! Perfect!! Now transform, approximate and solve for x. Do you have it?"

"I have it! Klapaucius! Look at the King now!!"

There was a pause, then a burst of wild laughter.

That same morning, as all the experts and high officials of the secret police shook their heads, bleary-eyed after a sleepless night, the constructors asked for quartz, vanadium, steel, copper, platinum, rhinestones, dysprosium, yttrium and thulium, also cerium and germanium, and most of the other elements that make up the Universe, plus a variety of machines and qualified technicians, not to mention a wide as sortment of spies—for so insolent had the constructors become, that on the triplicate requisition form they boldly wrote: "Also, kindly send agents of various cuts and stripes at the discretion and with the approval of the Proper Authorities." The next day they asked for sawdust and a large red velvet curtain on a stand, a cluster of little glass bells in the center and a large tassel at each of its four corners; everything, even down to the littlest glass bell, was specified with the utmost precision. The King scowled when he heard these requests, but ordered them to be carried out to the letter, for he had given his royal word. The constructors were thus granted all that they wished.

All that they wished grew more and more outlandish. For instance, in the files of the secret police under code number 48ggg/llk/T was a copy of a requisition for three tailor's mannequins as well as six full police uniforms, complete with sash, side arm, shako, plume and handcuffs, also all available back issues of the magazine *The Patriotic Policeman*, yearbooks and supplements included—under "Comments" the constructors had guaranteed the return of all items listed above within twenty-four hours of delivery and in perfect condition. In another, classified section of the police archives was a copy of a letter from Klapaucius in which he demanded the immediate shipment of ( 1 ) a life size doll representing the Postmaster General in full regalia, and (2) a light gig painted green with a kerosene lamp on the left and a sky-blue sign on the back that said THINK. The doll and gig proved too much for the Chief of Police: he had to be taken away for a much-needed rest. During the next three days the constructors asked only for barrels of red castor oil, and after that—nothing.

From then on, they worked in the basement of the palace, hammering away and singing space chanteys, and at night blue lights came flashing from the basement windows and gave weird shapes to the trees in the garden outside. Trurl and Klapaucius with their many helpers bustled about amid arcs and sparks, now and then looking up to see faces pressed against the glass: the servants, as if out of idle curiosity, were photographing their every move. One evening, when the weary constructors had finally dragged themselves off to bed, the components of the apparatus they had been working on were quickly transported by unmarked balloon to police headquarters and assembled by eighteen of the finest cyberneticians in the land, who had been deputized and duly sworn in for that very purpose, whereupon a gray tin mouse ran out from under their hands, blowing soap bubbles and dropping a thin trail of chalk dust from under its tail, which spelled, as it danced this way and that across the table,

WHAT, DON'T YOU LOVE US ANYMORE? Never before in the kingdom's history did Chiefs of Police have to be replaced with such speed and regularity.

The uniforms, the doll, the green gig, even the sawdust, everything which the constructors returned exactly as promised, was thoroughly examined under electron microscope. But except for a minuscule card in the sawdust which read JUST SAWDUST, there was nothing out of the ordinary. Then individual atoms of the uniforms and gig were thoroughly searched—with equal lack of success.

## The Great Hunt

At last the day came when the work was completed. A huge vehicle on three hundred wheels, looking something like a refrigerator, was drawn up to the main entrance and opened in the presence of witnesses and officials; Trurl and Klapaucius brought out a curtain, the one with the tassels and bells, and placed it carefully inside, in the middle of the floor. Then they got in themselves, closed the door, did something, then went and got various containers from the basement, cans of chemicals, all sorts of finely ground powders—gray, silver, white, yellow, green—and sprinkled them under and around the curtain, then stepped out, had the vehicle closed and locked, consulted their watches and together counted out fourteen and a half seconds—at which time, much to everyone's surprise, since the vehicle was stationary and there could be <sup>1</sup>question of a breeze inside (for the seal was hermetic), the glass bells tinkled. The constructors exchanged a wink and said:

"You can take it now!"

The rest of the day they spent blowing soap bubbles from the veranda. That evening Lord Protozor, Master of the Royal Hunt, came with an escort and politely but firmly informed them that they were to go with him at once to an assigned place. They were required to leave all their possessions behind, even their clothes; in exchange they were given rags, then put in irons. The guards and police dignitaries present were astounded by their perfect sang-froid: instead of demanding justice or trembling with fear, Trurl giggled as the shackles were being hammered on, saying he was ticklish. And when the constructors were thrown into a dark and dismal dungeon, they promptly struck up a rousing chorus of "Sing Sweet Software."

Meanwhile mighty Krool rode forth from the village on his mighty hunting chariot, surrounded by all his retinue and followed by a long and winding train of riders and machines, machines that included not only the traditional catapult and cannon, but enormous laser guns and beta ray bazookas, and a tar-thrower guaranteed to immobilize anything that walked, swam, flew or rolled along.

And so this grand procession wended its way to the royal game preserve, and many jokes were made, and boasts, and haughty toasts, and <sup>1</sup>one gave a thought to the two constructors, except perhaps to remark that those fools were in a pretty pickle now.

But when the silver trumpets announced His Majesty's approach, one could see a huge vehicle-refrigerator coming up in the opposite direction. Its door flung open, and for one brief moment there gaped the black maw of what appeared to be some sort of field gun. Next there was a boom, a puff of yellow smoke, and something came rocketing out, a form as blurry as a tornado and with the general consistency of a sandstorm; it arced through the air so fast that <sup>1</sup>one really got a good look at it anyway.

Whatever it was flew a hundred paces or more and landed without a sound; the curtain that had been wrapped around it floated to the earth, glass bells tinkling oddly in that perfect silence, and lay there like a crushed strawberry.

Now everyone could see the beast clearly—though it wasn't clear at all, but looked a little like a hill, rather large, fairly long, its color much like its surroundings, a clump of dried-up weeds. The King's huntsmen unleashed the whole pack of automated hounds (mainly Saint Cybernards and Cyberman pinschers, with an occasional high-frequency terrier); these hurled themselves, howling and slavering, at the crouching beast. The beast didn't rear back, didn't roar, didn't even breathe fire, but only opened its two eyes wide and reduced half the pack to ashes in a trice.

"Oho! Laser-eyed, is it?" cried the King. "Hand me my trusty duralumin doublet, my bulletproof buckler, my halberd and arquebus!" Thus accoutered and gleaming like a supernova, he rode out upon his fearless high-fidelity cyber steed, came nigh the beast and smote it such a mighty blow that the air crackled and its head tumbled neatly to the ground. Though the retinue dutifully hallooed his triumph, the King took <sup>1</sup>delight in it; greatly angered,

he swore in his heart to devise some special torment for those wretches who dared to call themselves constructors. The beast, however, shook another head out of its severed neck, opened its new eyes wide and played a withering beam across the King's armor (which, however, was proof against all manner of electromagnetic radiation). "Well, those two weren't a total loss," said the King to himself, "though this still won't help them." And he recharged his charger and spurred it into the fray.

This time he swung full and cleaved the beast in twain. The beast didn't seem to mind—in fact, it positioned itself helpfully beneath the whistling blade and gave a grateful twitch as it fell. And small wonder! The King took another look: the thing was twinned instead of twained! There were two spitting images, each a little smaller than the original, plus a third, a baby beast gamboling between them—that was the head he had cut off earlier: it now had a tail and feet and was doing cartwheels through the weeds.

"What next?" thought the King. "Chop it into mice or little worms? A fine way to hunt!" And with great ire did he have at it, hewing with might and main until there were <sup>1</sup>end of little beasts underfoot, but suddenly they all backed off, went into a huddle, and there stood the beast again, good as new and stifling a yawn.

"H'm," thought the King. "Apparently it has the same kind of stabilization mechanism that—what was his name again? —Pumpington—that Pumpington tried to use. Yes, I dealt with him myself for that idiotic trick... Well, we'll just wheel out the antimatter artillery..."

He picked one with a six-foot bore, lined it up and loaded it himself, took aim, pulled the string and sent a perfectly silent and weirdly shimmering shell straight at the beast, to blow it to smithereens once and for all. But nothing happened—that is, nothing much. The beast only crouched a little lower, put out its left hand, long and hairy, and gave the King the finger.

"Bring out our biggest!" roared the King, pretending not to notice. And several hundred peasants pulled up a veritable giant of a cannon, all of eighty-gauge, which the King aimed and was just about to fire—when all at once the beast leaped. The King lifted his sword to defend himself, but then there was <sup>1</sup>more beast. Those who saw what happened next said later that they were sure they had taken leave of their senses, for as the beast flew through the air, it underwent a lightning transformation, the grayish hulk divided up into three men in uniform, three policemen, who, still aloft, were already preparing to do their duty.

The first policeman, a sergeant, got out the handcuffs, maneuvering his legs to keep upright; the second held on to his plumed shako with one hand, so it wouldn't blow off, and with the other pulled out a warrant from his breast pocket; the third, apparently a rookie, assumed a horizontal position beneath the feet of the first two, to cushion their fall—after which, however, he jumped up and carefully dusted off his uniform.

Meanwhile the first policeman had handcuffed the dumbfounded King and the second slapped the sword from his hand. Feebly protesting, the suspect was then summarily trotted off the field.

The entire hunting procession stood rooted to the spot for a minute or two, then gave a yell and followed in hot pursuit. The snorting cybersteeds had practically caught up with the abductors, and swords and sabers were unsheathed and raised to strike, but the third policeman bent over, depressed his bellybutton and immediately the arms grew into two shafts, the legs coiled up, sprouting spokes, and began to turn, while the back formed the seat of a green racing gig to accommodate the other two policemen, who were vigorously plying the now harnessed King with a whip, to make him run faster. The King obliged and broke into a mad gallop, waving his arms frantically to ward off the blows that descended upon his royal head; but now the huntsmen were gaining again, so the policemen jumped on the King's back and one slipped down between the shafts, huffed and puffed and turned into a spinning top, a dancing whirlwind, which gave wings to the little gig and whisked it away over hill and dale till it disappeared altogether in a cloud of dust.

The King's retinue split up and began a desperate search with Geiger counters and bloodhounds, and a special detachment came running up with shovels and flame-throwers and left <sup>1</sup>bone unburned in all the neighboring cemeteries—an obvious error, occasioned most likely by the trembling hand that hastily telegraphed the order from the observation balloon that had monitored the hunt. Several police divisions rushed here and there, searched the grounds, every bush, every weed, and both x-rays and laboratory samples were diligently taken of everything imaginable. The King's charger was ordered to appear before a special board of inquiry appointed by the Prosecutor General. A unit of paratroopers with vacuum cleaners and sieves was dropped on the royal game preserve to sift through every last particle of dust. Finally, the order was issued that anyone resembling a policeman was to be detained and held



without bail, which naturally created difficulties—one half of the police force, as it turned out, had arrested the other, and vice versa. At dusk the huntsmen and soldiers returned to the village dazed and bedraggled with the woeful tidings that neither hide nor hair of the King's person was anywhere to be found.

### The Constructors' Demands

By torchlight and in the dead of night, the chained constructors were taken before the Great Chancellor and Keeper of the Royal Seal, who addressed them in the following way:

"Whereas ye have falsely conspired and perversely plotted against the Crown and Life of Our Beloved Sovereign and Most Noble Ruler Krool and therewith dared to raise a treacherous hand and vilely devise his demise, not to mention impersonating an officer, a great aggravation of your crimes, so shall ye be quartered without quarter, impaled and pilloried, disemboweled, buried alive, crucified and burnt at the stake, after which your ashes shall be sent into orbit as a warning and perpetual reminder to all would-be regicides, amen."

"Can't you wait a bit?" asked Trurl. "You see, we were expecting a letter..."

"A letter, thou-most scurrilous and scurvy knave?!"

Just then the guards made way for the Postmaster General himself—indeed, how could they bar that dignitary's entrance with their poleaxes? The Postmaster approached in full regalia, his medals jingling impressively, pulled a letter from a sapphire satchel and handed it to the Chancellor, saying, "Mannequin though I be, I come from His Majesty," whereupon he disintegrated into a fine powder. The Chancellor could scarcely believe his eyes, but quickly recognized the King's signet impressed there on the purple sealing wax; he opened the letter and read that His Majesty was forced to negotiate with the enemy, for the constructors had employed means algorithmic and algebraic to make him captive, and now they would list their demands, all of which the Great Chancellor had better meet, if he wished ever to get his Mighty Sovereign back in one piece. Signed: "Krool herewith affixes his hand and seal, held prisoner in a cave of unknown location by one pseudoconstabulary beast in three uniforms personified."

There then arose a great clamor, everyone shouting and asking what it all meant and what were the demands, to which Trurl said only, "Our chains, if you please."

A blacksmith was summoned to unfetter them, after which Trurl said:

"We are hungry and dirty, we need a bath, a shave, massage, refreshment, nothing but the best, plenty of pomp and a water ballet with fireworks for dessert!"

The court, of course, was hopping mad, but had to comply in every particular. Only at dawn did the constructors return from their villa, each elegantly pomaded, arrayed and reclining in a sedan chair borne by footmen (their former informers); they then, deigning to grant an audience, sat down and presented their demands—not off the top of their heads, mind you, but from a little notebook they had prepared for the occasion and hidden behind a curtain in their room. The following articles were read:

First, A ship of the finest make and model available shall be furnished to carry the constructors home.

2nd, The said ship shall be laden with various cargo as here specified: diamonds—four bushels, gold coin—forty bushels, platinum, palladium and whatever other ready valuables they happen to think of, eight bushels of each, also whatever mementos and tokens from the Royal Apartments the signatories of this instrument may deem appropriate.

3rd, Until such time as the said ship shall be in readiness for takeoff, every nut and bolt in place, fully loaded and delivered up to the constructors complete with red carpet, an eighty-piece send-off band and children's chorus, an abundance of honors, decorations and awards, and a wildly cheering crowd—until then, no King.

4th, That a formal expression of undying gratitude shall be stamped upon a gold medallion and addressed to Their Most Sublime and Radiant Constructors Trurl and Klapaucius, Delight and Terror of the Universe, and moreover it shall contain a full account of their victory and be duly signed and notarized by every high and low official in the land, then set in the richly embellished barrel of the King's favorite cannon, which Lord Protozor, Master of the Royal Hunt, shall himself and wholly unaided carry on board—no other Protozor but the one who lured Their Most Sublime and Radiant Constructors to this planet, thinking to work their painful and ignominious death thereby.

5th, That the aforesaid Protozor shall accompany them on their return journey as insurance

against any sort of double dealing, pursuit, and the like. On board he shall occupy a cage three by three by four feet and shall receive a daily allowance of humble pie with a filling made of that very same sawdust which Their Most Sublime and Radiant Constructors saw fit to order in the process of indulging the King's foolishness and which was subsequently taken to police headquarters by unmarked balloon.

6th and lastly, The King need not crave forgiveness of Their Most Sublime and Radiant Constructors on bended knee, since he is much too beneath them to deserve notice.

In Witness Whereof, the parties have hereunto set their hands and seals this day and year, etc. and so on. By: Trurl and Klapaucius, Constructors, and the Great Chancellor, the Great Chamberlain, the Great Chief of Secret Police, the Seneschal, Squadron Leader and Royal Balloonmaster.

## The Release of Krool

All the ministers and dignitaries turned blue, but what could they do? They had <sup>1</sup>choice, so a ship was immediately ordered.

But then the constructors unexpectedly showed up after a leisurely breakfast, to surprise the work, and nothing suited them: this material, for instance, was <sup>1</sup>good, and that engineer was an absolute idiot, and they had to have a revolving magic lantern in the main hall, one with four pneumatic widgets and a calibrated cuckoo clock on top—and if the natives here didn't know what a widget was, so much the worse for them, considering that the King was <sup>1</sup>doubt most impatient for his release and would (when he could) deal harshly with anyone who dared to delay it. This remark occasioned a general numbness, a great weakness about the knees, and much trembling, but the work continued apace.

Finally the ship was ready and the royal stevedores began to stow the cargo in the hold, diamonds, sacks of pearls, so much gold it kept spilling out the hatch. Meanwhile the police were secretly running all about the countryside, turning everything upside down, much to the amusement of Trurl and Klapaucius, who didn't mind explaining to a fearful but fascinated audience how it all happened, how they had discarded one idea after another until they hit upon an altogether different kind of beast. Not knowing where or how to place the controls—that is, the brain—so that they would be safe, the constructors had simply made everything brain, enabling the beast to think with its leg, or tail, or jaws (equipped with wisdom teeth only). But that was just the beginning.

The real problem had two aspects, algorithmic and psychoanalytic.

First they had to determine what would check the King, catch him flatfooted, so to speak. To this end, they created by nonlinear transmutation a police subset within the beast, since everyone knows that resisting or interfering with an officer who is making an arrest *lege artis* is a cosmic offense and utterly unthinkable.

So much for the psychology of it—except that the Postmaster General was utilized here on similar grounds: an official of lower rank might not have made it past the guards, the letter then would not have been delivered, and the constructors would have very literally lost their heads. Moreover, the Postmaster mannequin had been given means to bribe the guards, should that have proved necessary. Every eventuality had been anticipated and provided for.

Now as far as the algorithms went: they had only to find the proper domain of beasts, closed, bounded and bonded, with plenty of laws both associative and distributive in operation, throw in a constable constant or two, some graphs of graft, squadratic equations and crime waves and the thing took over from there, once activated by the expedient of writing a document-program (behind the curtain with the bells) in castor oil ink, rendering it thereby sufficiently hard to swallow to serve as a red-tape generator. We might add here that later on the constructors had an article published in a prominent scientific journal under the title of "Recursive B—Metafunctions in the Special Case of a Bogus Polypolice Transmogrification Conversion on an Oscillating Harmonic Field of Glass Bells and Green Gig, Kerosene Lamp on the Left to Divert Attention, Solved by Beastly Incarceration-Concatenation," which was subsequently exploited by the tabloids as "The Police State Rears Its Ugly Head." Obviously none of the ministers, dignitaries or huntsmen understood a single word of what was said, but that hardly mattered. The loving subjects of King Krool knew not whether they should despise these constructors or stand and gape in awe and admiration.

Now all was in readiness for takeoff. Trurl, as stipulated in the agreement, went through

the King's private chambers with a large sack and calmly appropriated whatever object he took a fancy to.

Finally, the carriage arrived and took the victors to the spaceport, where a crowd cheered wildly and a children's chorus sang, then a charming little girl in local costume curtsied and presented them with a ribboned nose gay, and high-ranking officials took turns to express their undying gratitude, bidding them both a fond farewell, and the band played, several ladies fainted, and then a hush fell over the multitude. Klapaucius had pulled a tooth from his mouth, not an ordinary tooth but a transmitter-receiver, a two-way bicuspid. He threw a tiny switch and a sandstorm appeared on the horizon, growing and growing, whirling faster and faster, until it dropped into an empty space between the ship and the crowd and came to a sudden stop, scattering dust and debris in all directions. Everyone gasped and stepped back—there stood the beast, looking unusually bestial as it flashed its laser eyes and flailed its dragon tail!

"The King, if you please," said Klapaucius. But the beast answered, speaking in a perfectly normal voice:

"Not on your life. It's my turn now to make demands..."

"What? Have you gone mad? You have to obey, it's in the matrix!" shouted Klapaucius. Everyone stared, thunder struck.

"Matrix-schmatrix. Look pal, I'm not just any beast, I'm algorithmic, heuristic and sadistic, fully automatic and autocratic, that means undemocratic, and I've got loads of loops and plenty of feedback so none of that back talk or I'll clap you in irons, that means in the clink with the King, in the brig with the green gig, get me?"

"I'll give you feedback!" roared Klapaucius, furious. But Trurl asked the beast:

"What exactly do you want?"

And he sneaked around behind Klapaucius and pulled out a special tooth of his own, so the beast wouldn't see.

"Well, first of all I want to marry—"

But they never learned whom in particular the beast had in mind, for Trurl threw a tiny switch and quickly chanted:

"Eeny, meeny, miney, mo, input, output, out—you-go!"

The fantastically complex electromagnetic wave system that held the beast's atoms in place now came apart under the influence of those words, and the beast blinked, wiggled its ears, swallowed, tried to pull itself together, but before it could even grit its teeth there was a hot gust of wind, a strong smell of ozone, then nothing left to pull together, just a little mound of ashes and the King standing in the middle, safe and sound, but in great need of a bath and mortified to tears that it had come to this.

"That'll cut you down to size," said Trurl, and <sup>1</sup>one knew whether he meant the beast or the King. In either case, the algorithm had done its job well.

"And now, gentlemen," Trurl concluded, "if you'll kindly help the Master of the Royal Hunt into his cage, we can be on our way..."