SCIENCE FICTION

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BINDLESTIFF

Bindlestiff

By James Blish

It was inevitable that, occasionally, one of the cruising cities of space would turn criminal. And they made vicious, deadly enemies!

I.

starmen were used to it—the stardensity of the average cluster was more than enough to give a veteran Okie claustrophobia; but the enormous empty loneliness of the Rift was unique.

To the best of Mayor Amalfi's knowledge, no Okie city had ever crossed the Rift before. The City Fathers, who knew everything.

EVEN to the men of the flying city, the Rift was awesome beyond all human experience. Loneliness was natural between the stars, and

pioneer.

Ahead and behind, the walls of the Rift shimmered, a haze of stars too far away to resolve into individual points of light. The walls curved gently toward a starry floor, so many parsecs "beneath" the keel of

agreed. Amalfi was none too sure that it was wise, for once, to be a

the city that it seemed to be hidden in a rising haze of star dust.

"Above," there was nothing; a nothing as final as the slamming of a door--it was the intergalactic gap.

The Rift was, in effect, a valley cut in the face of the galaxy. A few stars swam in it. light-millennia apart--stars which the tide of human colonization could never have reached. Only on the far side was there likely to be any inhabited planet, and, consequently, work for a migratory city. On the near side there were the Earth police. They would not chase Amalfi's city across the Rift; they were busy consolidating their conquests of Utopia and the Duchy of Gort, barbarian planets whose ties with Earth were being forcibly reestablished. But they would be happy to see the city turn back --there was a violation of a Vacate order still on the books, and a little matter of a trick-- Soberly, Amalfi contemplated the oppressive chasm which the screens showed him. The picture came in by ultrawave from a string of proxy-robots, the leader of which was already parsecs out across the gap. And still the far wall was featureless, just beginning to show a faintly granular texture which gave promise of resolution into individual stars at top magnification. "I hope the food holds out." he muttered. "I never expected the cops to chase us this far."

Beside him, Mark Hazieton, the city manager, drummed delicately upon the arm of his chair. "No reason why it shouldn't." he said lazily. "Of course the oil's low, but the Chiorella crop is flourishing, And I doubt that we'll be troubled by mutation in the tanks. Aren't ultronic

nexi supposed to vary directly with star-density?"

"Sure," Amalfi said, irritated. "We won't starve if everything goes right. If we hadn't been rich enough to risk crossing, I'd of let us be captured and paid the fine instead. But we've never been as long as a year without planet-fall before, and this crossing is going to take all

of the four years the Fathers predicted. The slightest accident, and we'll be beyond help."

"There'll be no accident," Hazleton said confidently.

looked directly at the screen, it was still there. He pointed.

again--"

it's close."

figure me the distance of a star from the source of an ultraphone broadcast?"

"Why, yes," the phone said. "Wait, and I'll pick up your image. Ah--I see what you mean: something at 10:00 o'clock center. can't tell what

yet. Dinwiddie pickups on your proxies? Intensity will tell the tale." The astronomer chuckled like a parrot on the rim of a cracker barrel.

"There's fuel decomposition--we've never had a flash-fire but there's always a first time. And if the Twenty-third Street spindizzy conks out

He stopped abruptly. Through the corner~ of his eye, a minute pinprick of brightness poked insistently into his brain. When he

"Look--is that a cluster? No. it's too small. If that's a freefloating star.

He snatched up a phone. "Give me Astronomy, Hello, Jake, Can you

"Now if you'll just tell me how many proxies you have, and how far they--"
"Five. Full interval."

"Hm-m-m. Big correction." There was a long, itching silence.
"Amalfi?"

"Yeah"

"About ten parsecs, give or take 0.4. I'd say you've found a floater, my bov."

"I don't care. It's a landing point, possibly a fuel or even a food source. Most stars have planets; a freak like this might not, or it might have dozens. Just cross your fingers."

He stared at the tiny sun, his eyes aching from sympathetic strain. A star in the middle of the Rift—almost certainly a wild star, moving at four hundred or five hundred k.p.s. It occurred to him that a people living on a planet of that star might remember the moment when it burst through the near wall and embarked upon its journey into the emptiness.

"There might be people there," he said. "The Rift was swept clean of stars once, somehow. Jake claims that that's an overdramatic way of putting it, that the mean motions of the stars probably opened the

"Thanks." Amalfi put the phone back and drew a deep breath. "What

"You won't find any colonists on a star that isolated." Hazleton

a relief "

reminded him.

populated area. Runaway stars tend to collect hunted criminals as they go by, Mark."

"Possibly," Hazleton admitted. "By the way, that image is coming in from your lead proxy, 'way out across the valley. Don't you have any outriggers? I ordered them sent."

"Sure. But I don't use them except for routine. Cruising the Rift

gap naturally. But either way that sun must be a recent arrival, going at quite a clip, since it's moving counter to the general tendency. It could have been colonized while it was still passing through a

lengthwise would be suicide. We'll take a look if you like."

He touched the board. On the screen, the far wall was wiped away.

Nothing was left but thin haze; down at that end, the Rift turned, and eventually faded out into a nh of emptiness, soaking into the sands of the stars "Nothing there. Lots of nothing."

Amalfi moved the switch again.

On the screen, apparently almost within hallooing distance, a city was burning.

SPACE flight got its start, as a war weapon, amid the collapse of the great Western culture of Earth. In the succeeding centuries it was almost forgotten. The new culture, that vast planar despotism called by historiographers the Bureaucratic State, did not think that way.

Not that the original Soviets or their successors forbade space travel. They simply never thought of it. Space flight had been a natural, if late, result of Western thought-patterns, which had always been ambitious for the infinite, but the geometrically flat dialectic of the succeeding culture could not include it. Where the West had soared from the rock like a seguoia, the Soviets spread like lichens. tightening their grip, satisfied to be at the very bases of the pillars of

sunlight the West had sought to ascend. The coming of the spindizzy-the antigravity generator, or gravitron-

spelled the doom of the flat culture, as the leveling menace of the nuclear reactor had cut down the soaring West. Space flight returned; not, this time, as a technique of tiny ships and individual adventure, but as a project of cities.

There was no longer any reason why a man-carrying vehicle to cross

space needed to be small, cramped, organized foreand-aft, penurious of weight. The spindizzy could lift any-thing, and protect it,

too. Most important, its operation was rooted in a variation of the value of c as a limit. The overdrive, the meteor screen, and antigravity had all avrived in one compact package, labeled "G = (2PC)2/(BU)2." Every culture has its characteristic mathematic, in which histoniographers can see its inevitable form. This one, couched in the algebra of the Magian culture, pointing toward the matrixmechanics of the new Nomad era, was a Western discovery. Blackett had found the essential relationship between gravity and magnetism, and Dirac had explained why it had not been detected before. Yet despite all of the minority groups butchered or "concentrated" by the Bureaucratic State, only the pure mathematicians went unsuspected about the destruction of that State, innocent even in their own minds of revolutionary motives. The exodus began. At first it was logical enough. The Aluminum Trust, the Thorium Trust, the Germanium Trust put their plants aloft bodily, to mine the planets. The Steel Trust made it possible for the rest, for it had turned Mars into the Pittsburgh of the solar system, and lulled the doubts of the State But the Thorium Trust's Plant No. 8 never came back. The revolution

against the planar culture began as simply as that. The first of the Okie cities soared away from the solar system. looking for work among the colonists--colonists left stranded among the stars by the ebb tide of Western civilization. The new culture began among these nomad cities, and before long Earth was virtually deserted. But Earth laws, though much changed, survived. It was still possible

ships shot out into the gap; whatever was causing the destruction let them go. No conceivable life ship could live long enough to cross the Rift. Amalfi cut in the audio circuit, filling the control room with a howl of static. Far behind the wild blasts of sound, a tiny voice was shouting desperately: "Rebroadcast if anyone hears us. Repeat: we have the fuelless drive. We're destroying our model and evacuating our passenger. Pick him up if you can. We're being blown up by a bindlestiff. Rebroadcast if--" Then there was nothing left but the skeleton of the city, glowing whitely, evaporating in the blackness. The pale, innocent light of the quide-beam for a Bethe blaster played over it, but it was still impossible to see who was wielding the weapon. The Dinwiddie circuits in the proxy were compensating for the glare, so that nothing was coming through to the screen that did not shine with its own light. The terrible fire died slowly, and the stars brightened. As the last spark flared and went out, a shadow loomed against the distant starwall. Hazieton drew his breath in sharply.

to make a battleship, and the Okies were ungainly. Steam shovels. by and large, had been more characteristic of the West than tanks had been, but in a fight between the two the outcome was predictable; that situation never changed. The cities were the

AND in the Rift, where there were no police, a city was burning. It was all over in a few minutes. The city bucked and toppled in a maelstrom of lightning. Feeble flickers of resistance spat around its edges--and then it no longer had any edges. Sections of it broke off, and melted like wraiths. From its ardent center, a few hopeless life

citizens--but there were still police.

"Another city! So some outfits really do go bindlestiff. And we thought

the dark city had destroyed its smaller counterpart nearly two years ago, and must now be beyond pursuit. It was even beyond identification, for no orders could be sent now to the proxy which would result in any action until another two years had passed. "You'd think some heavy thinker on Earth would've figured out a way to make Diracs compact enough to be mounted in a proxy." he grumbled. "They haven't got anything better to do back there." Hazleton had no difficulty in penetrating to the speech's real meaning. He said. "Maybe we can still smoke 'em out, boss." "Not a chance. We can't afford a side jaunt." "Well, I'll send out a general warning on the Dirac," Hazie ton said. "It's barely possible that the cops will be able to invest the Rift before the 'stiff aets out."

Amalfi nodded, feeling a little sick. That one city should destroy another was bad enough. But it was even more of a wrench to realize that the whole scene was virtually ancient history. Ultrawaye transmission was faster than light, but by no means instantaneous;

we were the first out here!"

leave the Rift."

"Eh? How do vou know?"

"Did you hear what the SOS said about a fuelless drive?" "Sure." Hazieton said uneasily. "but the guy who knows how to build

"That'll trap us neatly, won't it? Besides, that bindlestiff isn't going to

it must be dead by now, even if he escaped the burning." "We can't be sure of that--and that's the one thing that the 'stiff has to

"That's a big statement, Amalfi."

"Think, Mark. Pirates died out a thousand years ago on Earth when sailing ships were replaced by fueled ships. The fueled ships were faster—but couldn't themselves become pirates, because they had to touch civilized ports regularly to coal up. We're in the same state. But

if that bindlestiff can actually get its hands on a fuelless drive--"

Hazleton stood up, kneading his hands uneasily. "I see what you mean. Well, there's only one place where a life ship could go out here, and that's the wild star. So the 'stiff is probably there, too, by now." He looked thoughtfully at the screen, now glittering once more only with anonymous stars. "Shall I send out the warning or not?"

"Yes, send it out. It's the law. But I think it's up to us to deal with the 'stiff: we're familiar with ways of manipulating strange cultures.

make sure of. If they get ahold of it, 'stiffs won't be a rarity any more.

There'll be widespread piracy throughout the galaxy!"

whereas the cops would just smash things up if they did manage to get here in time."

"Check. Our course as before, then."

"Necessarily."

Still the city manager did not go. "Boss," he said at last, "that outfit is heavily armed. They could muscle in on us with no trouble."

"Mark, I'd call you yellow if I didn't know you were just lazy," Amalfi growled. He stopped suddenly and peered up the length of

"Mark, I'd call you yellow if I didn't know you were just lazy," Amalfi growled. He stopped suddenly and peered up the length of Hazleton's figure to his long, horselike face. "Or are you leading up to something?"

Hazleton grinned like a small boy caught stealing jam.

killers. Are you willing to entertain a small scheme?"

"Ah," Amalfi said, relaxing. "That's better. Let's hear it."

"Well, I did have something in mind, I don't like 'stiffs, especially

II.

THE wild star, hurling itself through the Rift on a course that would not bring it to the far wall for another ten thousand Earth years, carried with it six planets, of which only one was even remotely Earthlike. That planet shone deep, chlorophyll green on the screens long before it had grown enough to assume a recognizable disk shape.

The proxies called in now, arrived one by one, circling the new world

It was everywhere the same: savagely tropical, in the throes of a geological period roughly comparable to Earth's Carboniferous era. Plainly, the only planet would be nothing but a way station; there would be no work for pay there.

Then the proxies began to pick up weak radio signals.

Nothing, of course, could be made of the language; Amalfi turned that problem over to the City Fathers at once. Nevertheless, he continued to listen to the strange gabble while he warped the city into an orbit. The voices sounded ritualistic, somehow.

The City Fathers said:

"THIS LANGUAGE IS A VARIANT
OF PATTERN G, BUT THE SITUATION IS AMBIGUOUS.

like a swarm of ten-meter footballs, eving it avidly.

GENERALLY WE WOULD SAY THAT THE RACE WHICH SPEAKS IT IS INDIGENOUS TO THE PLANET, A RARE CASE BUT BY NO MEANS UNHEARD OF. HOWEVER, THERE ARE TRACES OF FORMS WHICH MIGHT BE DEGENERATES OF ENGLISH, AS WELL AS STRONG EVIDENCES OF DIALECT MIXTURES SUGGESTING A TRIBAL SOCIETY. THIS LATTER FACT IS NOT CONSONANT WITH THE POSSESSION OF RADIO NOR WITH THE UNDERLYING SAMENESS OF THE PATTERN. UNDER THE CIRCUMSTANCES WE MUST POSITIVELY FORBID ANY MACHINATIONS BY MR. HAZLETON ON THIS VENTURE."

"I didn't ask them for advice," Amalfi said. "And what good is a lesson in etymology at this point? Still, Mark, watch your step--"

"Remember Thor V," Hazleton said, mimicking the mayor's fatherbear voice to perfection. "All right. Do we land?"

For answer, Amalfi grasped the space stick, and the city began to settle. Amalfi was a true child of space, a man with an intuitive understanding of the forces and relationships which were involved in astronautics; in delicate situations he invariably preferred to dispense with instruments. Sensitively he sidled the city downward.

auiding himself mainly by the increasingly loud chanting in his

earphones.

At four thousand meters there was a brief glitter from amid the darkgreen waves of the treetops. The proxies converged upon it slowly,

and on the screens a turreted roof showed; then two, four, a dozen. There was a city there--a homebody, grown from the earth. Closer views showed it to be walled, the wall standing just inside a clear ring where nothing grew; the greenery between the towers was camouflage.

ground. The fire-tailed birds wheeled around them, dipping and flashing, weaving a pattern in smoky plumes; yet an Earthman would have thought, not of birds, but of the nuptial flight of drone bees.

Amalfi, who had never seen a bird or a bee, nevertheless sensed the ceremony in the darting cortege. With fitting solemnity he brought the

city to a stop beside its jungle counterpart, hovering just above the tops of the giant cycads. Then, instead of clearing a landing area

At three thousand, a flight of small ships burst from the city like frightened birds, trailing feathers of flame, "Gunners!" Hazleton

Amalfi shook his head, and continued to bring his city closer to the

snapped into his mike. "Posts!"

with the usual quick scythe of the mesotron rifles, he polarized the spindizzy screen.

The base and apex of the Okie city grew dim. What happened to the giant ferns and horsetails directly beneath it could not be seen—they were flattened into synthetic fossils in the muck in a split second—but those just beyond the rim of the city were stripped of their fronds and

splintered, and farther out, in a vast circle, the whole forest bowed low away from the city to a clap of sunlit thunder.

Unfortunately, the Twenty-third Street spindizzy, always the weakest link, blew out at the last minute and the city dropped the last five meters in free fall. It arrived on the surface of the planet rather more cataclysmically than Amalfi had intended. Hazleton hung on to his

cataclysmically than Amalfi had intended. Hazleton hung on to his bucket seat until City Hall had stopped swaying, and then wiped blood from his nose with a judicious handkerchief.

"That," he said, "was one dramatic touch too many. I'd best go have that spindizzy fixed again, just in case."

Amalfi shut off the controls with a contented gesture. "If that bindlestiff

prestige here for a while. But go ahead, Mark, it'll keep you busy."

THE mayor eased his barrel-shaped bulk into the lift shaft and let himself be slithered through the friction fields to the street. Outside, the worn facade of City Hall shone with sunlight, and the City's motto--MOW YOUR LAWN, LAW?—was clear even under its encrustation of verdigris. Amalfi was glad that the legend could not be read by the local folk—it would have spoiled the effect.

Suddenly he was aware that the chanting he had been hearing for so long through the earphones was thrilling through the air around him. Here and there, the sober, utilitarian faces of the Okie citizens were turning to look down the street, and traces of wonder, mixed with amusement and an unaccountable sadness, were in those faces. Amalfi turned.

should show." he said. "they'll have a tough time amassing any

red and white. Several free-swinging panels of many-colored fabric, as heavy as silk, swirled about their legs as they moved.

Each step was followed by a low bend, hands outstretched and fluttering, heads rolling from shoulder to shoulder, feet moving in and out, toe-heel-toe, the whole body turning and turning again. Bracelets of objects like dried pods rattled at wrists and bare ankles. Over it all

A procession of children was coming toward him: children wound in mummylike swatches of cloth down to their hips, the strips alternately

the voices chanted like water flutes.

Amalfi's first wild reaction was to wonder why the City Fathers had been puzzled about the language. These were human children. Nothing about them showed any trace of alienage.

Behind them, tall black-haired men moved in less agile pro- cession, sounding in chorus a single word which boomed through the skirl and

the same topography as human beards; their chests, bared to the sun by a symbolical rent which was torn at the same place in each garment, and marked identically by a symbolical wound rubbed on with red chalk, showed ribs where ribs ought to be, and the telltale tracings of clavicles beneath the skin. About the women there might have been some doubt. They came at the end of the procession, all together in a huge cage drawn by lizards. They were all naked and filthy and sick, and could have been

pitter of the children's dance at widespaced intervals. The men were human. ~too: their hands, stretched immovably out before them. palms up, had five fingers, with fingernails on them; their beards had

The children deployed around Amalfi, evidently picking him out as the leader because he was the biggest. He had expected as much: it was but one more confirmation of their humanity. He stood still while

any kind of animal. They made no sound, but only stared out of purulent eyes, as indifferent to the Okie city and its owners as to their captors. Occasionally they scratched, reluctantly, wincing from their

own claws.

they made a circle and sat down, still chanting and shaking their wrists. The men, too, made a circle, keeping their faces toward Amalfi, their hands outstretched. At last that reeking cage was drawn into the double ring, virtually to Amalfi's feet. Two male attendants unhitched the docile lizards and led them away.

Abruptly the chanting stopped. The tallest and most impressive of the men came forward and bent, making that strange gesture with fluttering hands over the street. Before Amalfi guite realized what

was intended, the stranger had straightened, placed some heavy object in his hand, and retreated, calling aloud the single word the men had been intoning before. Men and children responded together

in one terrific shout, and then there was silence.

It was--a key.

M IRAMON shifted nervously in the chair, the great black sawtoothed feather stuck in his topknot bobbing uncer tainly. It was a testimony of his confidence in Amalfi that he sat in it at all, for in the beginning he

had squatted, as was customary on his planet. Chairs were the

Amalfi was alone in the middle of the circle, with the cage. He looked

down at the thing in his hand.

uncomfortable prerogatives of the gods.

"I myself do not believe in the gods," he explained to Amalfi, bobbing the feather. "It would be plain to a technician, you understand, that your city was simply a product of a technology superior to ours, and you yourselves to be men such as we are. But on this planet religion has a terrible force, a very immediate force. It is not expedient to run counter to public sentiment in such matters."

Amalfi nodded. "From what you tell me, I can believe that. Your situation is unique. What, precisely, happened 'way back then?"

Miramon shrugged. "We do not know," he said. "It was nearly eight thousand years ago. There was a high civilization here then-the priests and the scientists agree on that. And the climate was different; it got cold regularly every year, I am told, although how men

could survive such a thing is difficult to understand. Besides, there were many more stars—the ancient drawings show thousands of them, though they fail to agree on the details."

"Naturally. You're not aware that your sun is moving at a terrific rate?"

"Moving?" Miramon laughed shortly. "Some of our more mystical scientists have that opinion--they maintain that if the planets move, so must the sun. It is an imperfect analogy. in my opinion. Would we

"Yes, you would--you are. You underestimate the size of the Rift. It's impossible to detect any parallax at this distance, though in a few thousand years you'll begin to suspect it. But while you were actually

still be in this trough of nothingness if we were moving?"

changing positions of the neighboring suns."

Miramon looked dubious. "I bow to your superior knowledge, of course. But, be that as it may--the legends have it that for some sin of our people, the gods plunged us into this starless desert, and changed our climate to perpetual heat. This is why our priests say

that we are in Hell, and that to be put back among the cool stars again, we must redeem our sins. We have no Heaven as you have defined the term--when we die, we die damned: we must win 'salvation' right here in the mud. The doctrine has its attractive

among the stars, your ancestors could see it very well, by the

features, under the circumstances." Amalfi meditated. It was reasonably clear, now, what had happened, but he despaired of explaining it to Miramon--hard common sense sometimes has a way of being impenetrable. This planet's axis had a pronounced tilt, and the concomitant amount of libration. That meant that, like Earth, it had a Draysonian cycle: every so often, the

top wabbled, and then resumed spinning at a new angle. The result. of course, was a disastrous climatic change. Such a thing happened on Earth roughly once every twenty-five thousand years, and the first one in recorded history had given birth to some extraordinary silly legends and faiths--sillier than those the Hevians entertained, on the

whole

Still, it was miserable bad luck for them that a Draysonian overturn had occurred almost at the same time that the planet had begun its journey across the Rift. It had thrown a very high culture, a culture

entering its ripest phase, back forcibly into the Interdestructional

phase without the slightest transition. The planet of He was a strange mixture now. Politically the

ago had not been forgotten; now they were exfoliating, bearing "new" fruits Properly, city-states should fight each other with swords, not with missile weapons, chemical explosives, and supersonics--and flying should be still in the dream stage, a dream of flapping wings at that; not already a jet-propelled fact. Astronomical and geological accident had mixed history up for fair. "THAT would have happened to me if I'd unlocked that cage?" Amalfi

regression had stopped just before barbarism--a measure of the lofty summits this race had scaled at the time of the catastrophe--and was now in reverse, clawing through the stage of warring city-states. Yet the basics of the scientific techniques of eight thousand years

demanded suddenly. Miramon looked sick. "Probably you would have been killed--or they would have tried to kill you, anyhow," he said, with considerable

reluctance. "That would have been releasing Evil again upon us. The priests say that it was women who brought about the sins of the Great Age. In the bandit cities, to be sure, that savage creed is no longer maintained--which is one reason why we have so many

deserters to the bandit cities. You can have no idea of what it is like to do your duty to the race each year as our law requires. Madness!"

He sounded very bitter. "This is why it is hard to make our people see how suicidal the bandit cities are. Everyone on this world is

weary of fighting the jungle, sick of trying to rebuild the Great Age with handfuls of mud, of maintaining social codes which ignore the

presence of the jungle--but most of all, of serving in the Temple of the Future. In the bandit cities the women are clean, and do not scratch "The bandit cities don't fight the jungle?" Amalfi asked.

one."

"No. They prev on those who do. They have given up the religion entirely-the first act of a city which revolts is to slav its priests.

doubt upon all--or so they tell us. It is only the priesthood which keeps us fighting, only the priesthood which teaches us that it is better to be men than mud-puppies. So we --the technicians--follow the rituals with great strictness, stupid though some of them are, and consider it

Unfortunately, the priesthood is essential; and our beast-women must be borne, since we cannot modiQv one tenet without casting

a matter of no moment that we ourselves do not believe in the gods." "Sense in that," Amalfi admitted. Miramon, in all conscience, was a shrewd apple. If he was representative of as large a section of

Hevian thought as he believed himself to be, much might vet be done on this wild and untamed world

"It amazes me that you knew to accept the key as a trust," Miramon said. "It was precisely the proper move--but how could you have

quessed that?" Amalfi grinned. "That wasn't hard. I know how a man looks when he's dropping a hot potato. Your priest made all the gestures of a man passing on a sacred trust, but he could hardly wait until he'd got it over with. Incidentally, some of those women are quite presentable now that Dee's bathed 'em and Medical has taken off the under layers. Don't look so alarmed, we won't tell your priests--I gather that

"You are thought to be emissaries from the Great Age," Miramon

we're the foster fathers of He from here on out."

agreed gravely. "What you actually are, you have not said."

"True. Do you have migratory workers here? The phrase comes easily in your language; yet I can't see how--"

"Surely, surely. The singers, the soldiers, the fruit-pickers-- all go from city to city, selling their services." Suddenly the Hevian got it. "Do you... do you imply... that your resources are for sale? For sale to us?"

"But how shall we pay you?" Miramon gasped. "All of what we call wealth, all that we have, could not buy a length of the cloth in your

"Exactly, Miramon,"

sash!"

Amalfi thought about it, wondering principally how much of the real situation Miramon could be expected to understand. It occurred to him that he had persistently underestimated the Hevian so far; it might be profitable to try the full dose—and hope that it wasn't lethal.

"TT'S this way," Amalfi said. "In the culture we belong to, a .1 certain metal, called germanium, serves for money. You have enormous amounts of it on your planet, but it's very hard to obtain, and I'm sure you've never even detected it. One of the things we would like is your permission to mine for that metal."

Miramon's pop-eyed skepticism was comical. "Permission?" he

squeaked. "Please, Mayor Amalfi-is your ethical code as foolish as ours? Why do you not mine this metal without permission and be done with it?"

"Our law enforcement agencies would not allow it. Mining your planet would make us rich-almost unbelievably rich. Our assays show, not

only fabulous amounts of germanium, but also the presence of certain drugs in your jungle--drugs which are known to be anti-

agapics--"
"Sir?"
"Sorry, I mean that, used properly, they cure death."
Miramon rose with great dignity.

"You are mocking me," he said. "I will return at a later date and perhaps we may talk again."

"Sit down, please," Amalfi said contritely. "I had forgotten that death is not everywhere known to be a disease. It was conquered so long ago-before space flight, as a matter of fact. But the pharmaceuticals

involved have always been in very short supply, shorter and shorter as man spread throughout the galaxy. Less than a two-thousandth of one percent of our present population can get the treatment now, and an ampoule of any anti-agapic, even the most inefficient ones, can be sold for the price the seller asks. Not a one of the anti-agapics

an ampoule of any anti-agapic, even the most inefficient ones, can be sold for the price the seller asks. Not a one of the anti-agapics has ever been synthesized, so if we could harvest here--"

"That is enough, it is not necessary that I understand more." Miramon

said. He squatted again, reflectively. "All this makes me wonder if you are not from the Great Age after all. Well-- this is difficult to think about reasonably. Why would your culture object to your being rich?"

"It wouldn't, as long as we got it honestly. We shall have to show that

we worked for our riches. We'll need a written agreement. A permission."

"That is clear," Miramon said. "You will get it, I am sure. I cannot grant it myself. But I can predict what the priests will ask you to do to

"What, then? This is just what I want to know. Let's have it."

earn it "

"They can have it, but we'll see to it that the secret leaks out. The City Fathers know the therapy. What next?"

"You must wipe out the jungle."

Amalfi sat back, stunned. Wipe out the jungle! Oh, it would be easy

moisture, the Hevians would not take proper care of them, would not be able to repair them --how would the brightest Greek have repaired a shattered X-ray tube, even if he had known how? The

"First of all, you will be asked for the secret of this... this cure for death. They will want to use it on themselves, and hide it from the rest of us. Wisdom, perhaps; it would make for more desertions

enough to lay waste almost all of it—even to give the Hevians energy weapons to keep those wastes clear—but sooner or later, the jungle would come back. The weapons would disintegrate in the eternal

otherwise--but I am sure they will want it."

technology didn't exist.

No, the jungle would come back. And the cops would come to He to see whether or not the Okie city had fulfilled its contract—and would find the planet as raw as ever. Good-by to riches.

This was jungle climate. There would be jungles here until the next

"Excuse me," he said, and reached for the control helmet.

"Give me the City Fathers," he said into the mouthpiece.

Draysonian catastrophe, and that was that.

Give the the City Fathers, the said into the moduliplece.

"SPEAK," the spokesman vodeur said after a while. "How would you go about wiping out a jungle?" There was a moment's silence.

CREATE FATAL LEAF-BLISTER. ALSO THERE IS A FORGOTTEN COMPOUND, 2.4-D WHICH WOULD SERVE FOR STUBBORN SECTIONS. OF COURSE THE JUNGLE WOULD RETURN " "That's what I meant. Any way to make the job stick?" "NO. UNI ESS THE PLANET EXHIBITS DRAYSONIANISM"

SPRAY WOULD SERVE IN A WET CLIMATE IT WOULD

"SODIUM FLUOSILICATE

"What?"

"NO. UNLESS THE PLANET EXHIBITS DRAYSONIANISM. IN THAT CASE ITS AXIS MIGHT BE REGULARIZED. IT HAS NEVER BEEN TRIED. BUT THEORETICALLY IT IS QUITE

SIMPLE; A BILL TO REGULARIZE EARTH'S AXIS WAS

DEFEATED BY THREE VOTES IN THE EIGHTY-SECOND COUNCIL. OWING TO THE OPPOSITION OF THE CONSERVATION LORBY"

"Could the city handle it?" "NO THE COST WOULD BE PROHIBITIVE MAYOR AMALE! ARE YOU CONTEMPLATING TIPPING THIS PLANET?

WE FORBID IT! EVERY INDICATION SHOWS-"

Amalfi tore the helmet from his head and flung it across the room.

Miramon jumped up in alarm.

through it on roller skates. "Here, boss--what's the--"

"Hazleton!" The city manager shot through the door as if he had been kicked on and do something! Quick, man--" Hazleton was already gone. On the other side of the control room, the phones of the helmet squawked dead data in italic capitals.

"Get down below and turn off the City Fathers--fast, before they catch

Then, suddenly, they went silent, The City Fathers had been turned off, and Amalfi was ready to move a world.

III.

THE fact that the City Fathers could not be consulted--for the first time in two centuries--made the job more difficult than it need have been, barring their conservatism. Tipping the planet, the crux of the iob, was simple enough in essence; the spindizzy could handle it. But

the side-effects of the medicine might easily prove to be worse than the disease. The problem was seismological. Rapidly whirling objects have a way

of being stubborn about changing their positions. If that energy were overcome, it would have to appear somewhere else--the most likely place being multiple earthquakes.

Too, very little could be anticipated about the gravities of the task. The planet's revolution produced, as usual, a sizable magnetic field. Amalfi did not know how well that field would take to being tipped

with relation to the space-lattice which it distorted, nor just what

would happen when the spindizzies polarized the whole gravity field.

During "moving day" the planet would be, in effect, without magnetic moment of its own, and since the Calculator was one of the City

He broached the latter question to Hazleton, "If we were dealing with an ordinary case. I'd say it would show up as velocity." he pointed out. "In which case we'd be in for an involuntary junket. But this is no ordinary case. The mass involved is... well, it's planetary, that's all. What do you think. Mark?" "I don't know what to think." Hazleton admitted. "When we move the

city, we change the magnetic moment of its component atoms; but

Fathers, there was no way of finding out where the energy would

reappear, in what form, or in what intensity.

the city itself doesn't revolve, and doesn't have a gross magnetic moment. Still--we could control velocity: suppose the energy reappears as heat, instead? There'd be nothing left but a cloud of gas." Amalfi shook his head. "That's a bodev. The gyroscopic resistance may show up as heat, sure, but not the magnetogravitic. I think we'd be safe to expect it to appear as velocity, just as in ordinary spindizzy operation. Figure the conversation equivalency and tell me what you get." Hazleton bent over his slide rule, the sweat standing out along his forehead and above his mustache in great heavy droplets. Amalfi could understand the eagerness of the Heyans to get rid of the jungle

and its eternal humidity--his own clothing had been sopping ever since the city had landed here.

"Well," the city manager said finally, "unless I've made a mistake somewhere, the whole kit and kaboodle will go shooting away from here at about half the speed of light. That's not too bad--less than cruising speed for us. We could always loop around and bring it back into its orbit."

"Yes we do," Hazleton objected. "Along the axis of spin, of course."

"Cant? And torque?"

"No problem—yet there is. I keep forgetting we're dealing with a planet instead of electrons." He applied the slipstick again. "No soap. Can't be answered without the Calculator and he's turned off. But if we can figure a way to control the flight, it won't matter in the

end. There'll be perturbations of the other planets when this one goes massless, whether it moves or not, but nobody lives there anyhow."

"All right, go figure a control system, I've got to get the Geology men

"Ah, but could we? Remember, we don't control it! It appears automatically when we turn on the spindizzies. We don't even know in

which direction we're going to move."

"Yes. sir."

to--"

The door slid back suddenly, and Amalfi looked over his shoulder. It was Anderson, the perimeter sergeant. The man was usually blasé in the face of all possible wonders, unless they threatened the city. "What's the matter?" Amalfi said, alarmed.

"Sir, we've gotten an ultrawave from some outfit claiming to be

refugees from another Okie--claim they hit a bindlestiff. They've crashlanded on this planet up north and they're being mobbed by one of the local bandit towns. They were holding 'em off and yelling for help, and then they stopped transmitting."

Amalfi heaved himself to his feet. "Did you get a bearing?" he demanded.

"Give me the figures. Come on, Mark. We need those boys."

that some rudimentary form of friction-field was keeping the mud in a state of stiff gel. He had visions of foot-soldiers sinking suddenly into liquid ooze as defenders turned off the fields, and quickened his pace. Inside the gates, the guards summoned a gueer, malodorous vehicle which seemed to be powered by the combustion of hydrocarbons,

and they were shot through the streets toward Miramon. Throughout the journey, Amalfi clung to a cloth strap in an access of nervousness. He had never traveled right on the surface at any speed before, and the way things zipped past him made him jumpy.

THEY grabbed a cab to the edge of the city, and went the rest of the way on foot, across the supersonics-cleared strip of bare turf which surrounded the Hevian town. The turf felt rubbery; Amalfi suspected

"Is this bird out to smash us up?" Hazleton demanded petulantly. "He must be doing all of four hundred kilos an hour." "I'm glad you feel the same way," Amalfi said, relaxing a little. "Actually I'll bet he's doing less than two hundred. It's just the way the-

The driver, who had been holding his car down to a conservative fifty out of deference to the strangers, wrenched the machine around a corner and halted neatly before Miramon's door. Amalfi got out, his knees wobbly. Hazleton's face was a delicate puce. "I'm going to figure a way to make our cabs operate outside the city."

he muttered. "Every time we make a new planet-fall, we have to ride

in ox carts, on the backs of bull kangaroos, in hot-air balloons, steam-driven airscrews, things that drag you feet first and face down through tunnels, or whatever else the natives think is classy

transportation. My stomach won't stand much more."

suggested laughter smothered with great difficulty.

"What brings you here?" the Hevian said. "Come in. I have no chairs,

Amalfi grinned and raised his hand to Miramon, whose expression

but--"
"No time," Amalfi said. He explained the situation quickly. "We've got to get those men out of there, if they're still alive. This bindlestiff is a

bandit city, like the ones you have here, but it has all the stuff we have and more besides. It's vital to find out what these survivors know about it. Can you locate the town that's holding them? We have a fix

Miramon went back into his house--actually, like all the other living quarters in the town, it was a dormitory housing twenty-five men of the same trade or profession--and returned with a map. The mapmaking conventions of He were anything but self-explanatory, but

after a while Hazieton figured out the symbolism involved. "That's your city, and here's ours," he said, pointing. "Right? And this peeled orange is a butterfly grid. I've always claimed that was a lot more faithful to spherical territory than our parabolic projection, boss."

"Easier still to express what you want to remember as a topological

relation," Amalfi grunted. "Show Miramon where the signals came from."

"Up here, on this wing of the butterfly."

Miramon frowned. "That can only be Fabr-Suithe. A very bad place

to approach, even in the military sense. However, we shall have to try. Do you know what the end result will be?"

"No; what?"

on it."

"The bandit cities will come out in force to hinder the Great Work. They do not fear you now-they fear nothing, we think they take drugs--but they have seen no reason to risk probable huge losses by attacking you. When you attack one of them, they will have that reason: they learn hatred very quickly." Amalfi shrugged. "We'll chance it. We'll pick our own town up and go calling: if they don't want to deliver up these Okies--" "Boss--" "Fh?" "How are you going to get us off the ground?" Amalfi could feel his ears turning red, and swore, "I forgot that Twenty-third Street machine. And we can't get anything suitable into a Hevian rocket--a pile would fit easily enough, but a frictionator or a dismounted spindizzy wouldn't, and there'd be no point in taking

popguns-Maybe we could gas them."

"Excuse me," Miramon said, "but it is not certain that the priests will authorize the use of the rockets. We had best drive over to the temple directly and ask."

temple directly and ask."

"Belsen and bebop!" Amalfi said. It was the oldest oath in his repertoire.

repertoire.

TALK, even with electrical aid, was impossible in the rocket. The whole machine roared like a gigantic tamtam to the vibration of the

whole machine roared like a gigantic tarmam to the vibration of the jets. Morosely Amalfi watched Hazleton connecting the mechanism in the nose with the powerleads from the pile--no mean balancing feat, considering the way the rocket pitched in its passage through

the tortured Hevian air currents. The reactor itself had not been filled all the way, since its total capacity could not have been used, and the

straightfaced Miramon had invented the need for religious permission, just to get the two Okies back into the ground car again. Still, the discomforts of that ride were small compared to this one. The pilot shifted his feet on the treadles and the deck pitched. Metal

rushed back under Amalfi's nose, and he found himself looking through misty air at a crazily canted jungle. Something long, thin, and andry flashed over it and was gone. At the same instant there was a piercing inhuman shriek, sharp enough to dwarf for a long instant the

Then there were more of the same: ptsouiiirrr! ptsouiiirrr! ptsouiiirrr! The machine ierked to each one and now and then shook itself violently, twisting and careening across the jungle-top. Amalfi had never felt so helpless before in his life. He did not even know what the noise was; he could only be sure that it was ill-tempered. The coarse blaam of high explosive, when it began, was recognizable-the city had often had occasion to blast on jobs--but nothing in his

There had been no difficulty with the priests about the little rocket task force itself. To the end of his life Amalfi was sure that the

heavy water sloshed and foamed in the transparent cube.

song of the rocket.

experience went kerchowkerchowkerchowkerchow like a demented vibratory drill, and the invisible thing that screamed its own pep-vell as it flew--eeeeeeeevowKRCHKackackarackarackaracka-seemed wholly impossible. He was astonished to discover that the hull around him was stippled with small holes, real holes with the slipstream fluting over them. It took him what seemed to be three weeks to realize that the whooping and cheer-leading which meant nothing to him was

riddling the ship and threatening to kill him any second. Someone was shaking him. He lurched to his knees, trying to Something burst outside and threw Amalfi to the deck. Doggedly he crawled to the port and peered down through the shattered plastic. The bandit Hevian city swooped past, upside down. He was sick suddenly, and the city was lost in a web of tears. The second time it came he managed to see which building had the heaviest quard.

"Amalfi! Ainalfi!" The voice, though it was breathing on his ear, was parsecs away. "Pick your spot, quick! They'll have us shot down in a-

blank deck port, his own blood spraying back in a fine mist into his face from his cut fingers.

"Now!"

Nobody heard, but Hazleton saw his nod. A blast of pure heat blew through the upended cabin as the pile blew off the shielded nose of

The rocket threw its tailfeathers over the nearest cloud and bored beak-first for the ground. Amalfi hung on to the edge of the suddenly-

the rocket. Even through the top of his head, the violet-white light of that soundless concussion nearly blinded Amalfi, and he could feel the irradiation of his shoulders and chest. He would have no colds for the next two or three years, anyhow--every molecule of histamine in his blood must have been detoxified at that instant

what an "aching void" might be. The machine fell into a steep glide,

The rocket yawed wildly, and then came under control again. The ordnance noises had already quit, cut off at the moment of the flash.

The bandit city was blind.

unfreeze his eveballs.

and pointed, choking.

The sound of the jets cut off, and Amalfi understood for the first time

bandit towns kept no supersonic no-plant's-land between themselves and the rank vegetation.

The moment the rocket stopped moving, Amalfi and a handpicked squad of Okies and Hevians were out of it and slogging through the muck. From inside the bandit city drifted a myr iad of screams-human screams now, screams of agony and terror, from men who thought themselves blinded for life. Amalfi had no doubt that many of them were. Certainly anyone who had had the misfortune to be looking at the sky when the pile had converted itself into photons would never see again.

But the law of chance would have protected most of the renegades, so speed was vital. The mud built up heavy pads under his shoes, and the jungle did not thin out until they hit the town's wall itself.

the air howling dismally outside it. Another rocket, under the guidance of one of Hazleton's assistants, dived down before it, scything a narrow runway in the jungle with a mesotron rifle—for the

greenery. The Hevians hacked their way through it with practiced knives and cunning.

Inside, the going was still almost as thick. The city proper presented a depressing face of proliferating despair. Most of the buildings

The gates had been rusted open years ago, and were choked with

were completely enshrouded in vines, and many were halfway toward ruins. Iron-hard tendrils had thrust their way between stones, into windows, under cornices, up drains and chimney funnels. Poison-green, succulent leaves plastered themselves greedily upon every surface, and in shadowed places there were huge blood-

every surface, and in shadowed places there were huge bloodcolored fungi which smelled like a man six days dead; the sweetish taint hung heavily in the air. Even the paving blocks had sproutedinevitably, since, whether by ignorance or laziness, most of them had

been cut from green wood.

soiled finery and gleamingly clean nakedness; it was as if two different periods had mixed in the city, as if a gathering of Hruntan nobles had been sprinkled with Noble Savages. Possibly the men who had given in completely to the jungle had also slid back far enough to discover the pleasures of bathing--if so, they would shortly discover the pleasures of the mud-wallow, too, and would not look so noble after that. "Amalfi. here they are--"

The screaming began to die into whimpers. Amalfi did his best to keep from inspecting the inhabitants. A man who believes he has just been blinded permanently is not a pretty sight, even when he is wrong. Yet it was impossible not to notice the curious mixture of

mauled to begin with, and after that sundry little attentions had been paid to them which combined the best features of savagery and decadence. On~ of them, mercifully, had been strangled by his comrades early in the "trial." Another, a basket case, should have been rescued, for he could still talk rationally, but he pleaded so persistently for death that Amalfi had him shot in a sudden fit of sentimentality. Of the other three men, all could walk and talk, but two

The mayor's suppressed pity for the blinded men evaporated when he got a look at the imprisoned Okies. They had been systematically

were mad. The catatonic was carried out on a stretcher, and the manic was gagged and led gingerly away. "How did you do it?" asked the rational man in Russian, the dead

universal language of deep space. He was a human skeleton, but he radiated a terrific personal force. He had lost his tongue early in the "guestioning." but had already taught himself to talk by the artifical

method--the result was inhuman, but it was intelligible. "They were coming down to kill us as soon as they heard your jets. Then there was a sort of a flash, and they all started screaming--a pretty sound, "I'll bet," Amalfi said. "That 'sort of a flash' was a photon explosion. It was the only way we could figure on being sure of getting you out

let me tell vou."

alive. We thought of trying gas, but if they had had gas masks they would have been able to kill you anyhow."

"I haven't seen any masks, but I'm sure they have them. There are traveling volcanic gas clouds in this part of the planet, they say; they

must have evolved some absorption device-charcoal is well known here. Lucky we were so far underground, or we'd be blind, too, then. You people must be engineers."

"More or less," Amalfi agreed. "Strictly, we're miners and petroleum geologists, but we've developed a lot of sidelines since we've been

aloft--like any Okie. Here's our rocket-- crawl in. It's rough, but it's transportation. How about you?"

"Agronomists. Our mayor thought there was a field for it out here along the periphery--teaching the abandoned colonies and the offshoots how to work poisoned soil and manage lowyield crops without heavy machinery. Our sideline was waxmans."

"What are those?" Amalfi said, adjusting the harness around the wasted body.

"Soil-source antibiotics. It was those the bindlestiff wanted —and got.

The filthy swine. They can't bother to keep a reasonably sanitary city; they'd rather pirate some honest outfit for drugs when they have an epidemic. Oh, and they wanted germanium, too, of course. They blew us up when they found we didn't have any—we'd converted to a

barter economy as soon as we got out of the last commerce lanes."

"What about your passenger?" Amalfi said with studied

"Dr. Beetle? Not that that was his name, I couldn't pronounce that even when I had my tongue. I don't imagine he survived; we had to keep him in a tank even in the city, and I can't guite see him living

them, too. That no-fuel drive of his--"

Outside, a shot cracked, and Amalfi winced. "We'd best get off-they're getting their eyesight back~ Talk to you later. Hazleton, any incidents?"

through a life-ship journey. He was a Myrdian, smart cookies all of

"Nothing to speak of, boss. Everybody stowed?"

"Yep. Kick off."

There was a volley of shots, and then the rocket coughed, roared, and stood on its tail. Amalfi pulled a deep sigh loose from the

acceleration and turned his head toward the rational man.

He was still securely strapped in, and looked quite relaxed. A brassnosed slug had come through the side of the ship next to him

and had neatly removed the top of his skull.

IV

nonchalance.

WORKING information out of the madmen was a painfully long, anxious process. The manic was a threehundred-fifty-hour case, and even after he had been returned to a semblance of rationality he could contribute very little.

The life ship had not come to He because of the city's Dirac warning, he said. The life ship and the burned Okie had not had any Dirac

because it was the only possible planetfall in the desert of the Rift. Even so, the refugees had had to use deep-sleep and strict starvation rationing to make it. "Did you see the 'stiff again?"

police had spotted them and scrammed-or maybe they thought there was a military base or au advanced culture here on the planet." "You're guessing," Amalfi said gruffly. "What happened to Dr.

equipment. The life ship had come to He, as Amalfi had predicted.

"No. sir. If they heard your Dirac warning, they probably figured the

"He wasn't put off in another life ship?"

Beetle?" The man looked startled. "The Myrdian in the tank? He got blown up with the city, I quess."

"Doesn't seem very likely. But I was only a pilot. Could be that they took him out in the mayor's gig for some reason."

"You don't know anything about his no-fuel drive?"

"First I heard of it."

Amalfi was far from satisfied; he suspected that there was still a short circuit somewhere in the man's memory. The city's auditors insisted that he had been cleared, however, and Amalfi had to

accept the verdict. All that remained to be done was to get some

assessment of the weapons available to the bindlestiff~ on this subject the manic was ignorant, but the city's analyst said cautiously that something might be extracted from the catatonic within a month or two

another problem. He had already decided that the simplest answer to vulcanism, which otherwise would be inevitable when the planet's geophysical balance was changed, was to reinforce the crust. All over the surface of He. drilling teams were sinking long, thin, slanting shafts, reaching toward the stress-fluid of the world's core. The shafts interlocked intricately, and thus far only one volcano had been created by the drilling--in general the lava-pockets which had been tapped had already been anticipated and the flow had been bled off into half a hundred intersecting channels without ever reaching the surface. After the molten rock had hardened, the cloqued channels were drilled again, with mesotron rifles set to the smallest possible dispersion. None of the shafts had yet tapped the stress fluid; the plan was to complete them all simultaneously. At that point, specific areas. riddled with channel-intersections, would give way, and immense plugs would be forced up toward the crust, plugs of iron, connected by ferrous cantilevers through the channels between. The planet of He would wear a cruel corset, permitting not the slightest flexure--it would be stitched with threads of steel, steel that had held even granite in solution for millennia. The heat problem was tougher, and Amalfi was not sure whether or not he had hit upon the solution. The very fact of structural resistance would create high temperatures, and any general formation of

Amalfi accepted the figure, since it was the best he had. With Moving Day so close, he couldn't afford to worry overtime about

would create high temperatures, and any general formation of shearplanes would cut the imbedded girders at once. The method being prepared to cope with that was rather drastic, and its aftereffects unknown.

On the whole, however, the plans were simple, and putting them into effect had seemed heavy but relatively simple labor. Some

opposition, of course, had been expected from the local bandit

But Amalfi had not expected to lose nearly twenty percent of his crews during the first month.

It was Miramon who brought in the news of the latest camp found slaughtered. Amalfi was sitting under a tree fern on high ground overlooking the city, watching a flight of giant dragonflies and thinking about heat-transfer in rock.

"You are sure they were adequately protected?" Miramon asked cautiously. "Some of our insects..."

Amalfi thought the insects, and the jungle, almost disturbingly beautiful. The thought of destroying it all occasionally upset him.

"Yes, they were," he said shortly. "We sprayed out the camp areas with dicoumarins and fluorine-substituted residuals. Besides--do any

"Explosives! There was dynamite used? I saw no evidence--"

of your insects use explosives?"

towns

describe. We used to use TDX to get a cutting blast; it has a property of exploding in a flat plane."

Miramon goggled. "Impossible. An explosion has to expand evenly in the open."

"Not if it's a piperazo-hexybitrate built from polarized carbon atoms.

"No. That's what bothers me. I don't like all those felled trees you

"Not if it's a piperazo-hexybitrate built from polarized carbon atoms. Such atoms can't move in any direction but at right angles to the gravity radius. That's what I mean. You people are up to dynamite, but not to TDX."

He paused, frowning. "Of course some of our losses have just been by bandit raids, with arrows and crude bombs--your friends from The men had been forced out of their masks—which had been designed solely to protect them from volcanic gases—to vomit, had taken the stuff into their lungs by convulsive sneezing, and had blistered into great sacs of serum inside and out. That, obviously, had been the multiplebenzene ring Hawkesite; very popular in the days of the Hruntan Empire, when it had been called "polybathroomfloorine" for no discoverable reason. But what was it doing on He?

There was only one possible answer, and for a reason which he did

Fabr-Suithe and their allies. But these camps where there was an

He fell silent. There was no point in mentioning the gassed corpses. It was hard even to think about them. Somebody on this planet had a gas which was a regurgitant, a sternutatory and a vesicant all in one.

explosion and no crater to show for it--"

real enemy; now Ainalfi knew that that intuition had been right. The real enemy had declared itself, stealthily, but with a stealth which was naiveté itself in comparison with the ancient guile of the jungle.

"Miramon," Amalfi said tranquilly, "we're in a spot. That city I told you about—the bindlestiff—is already here. It must have landed before we arrived, long enough ago to hide itself thoroughly. Probably it came down at night in some taboo area. The men in it have leagued

not try to understand, it made Amalfi breathe a little easier. All around him, the jungle sighed and swayed, and humming clouds of gnats made rainbows over the dew-laden pinnae of the fern. The jungle, almost always murmurously guiet, had never seemed like a

A moth with a two-meter wingspread blundered across the clearing, piloted by a gray-brown nematode which had sunk its sucker above the ganglion between the glittering creature's pinions. Amalfi was in a mood to read parables into things, and the parasitism reminded

themselves with FabrSuithe, anyhow, that much is obvious."

manipulating a new culture: a shrewd Okie never attempts to overwhelm a civilization, but instead pilots it, as indetectably as possible, doing no apparent harm, adding no apparent burden, but turning history deftly and tyrannically aside at the crucial instant-Amalfi snapped the belt switch of his ultraphone. "Hazleton?" "Here, boss." Behind the city manager's voice was the indistinct rumble of heavy mining. "What's up?" "Nothing vet. Are you having any trouble out there?" "No. We're not expecting any, either, with all this artillery." "Famous last words." Amalfi said. "The 'stiff's here, Mark." There was a short silence. In the background. Amalfi could hear the shouts of Hazleton's crew. When the city manager's voice came in again, it was moving from word to word very carefully, as if it expected each one to break under its weight. "You imply that the 'stiff was already on He when our Dirac broadcast went out. Right? I'm not sure these losses of ours can't be explained some other way, boss; the theory... uh lacks elegance."

him anew of how greatly he had underestimated the enemy. The bindlestiff evidently knew, and was skillful at, the secret of

Amalfi grinned tightly. "A heuristic criticism." he said. "Go to the foot of the class. Mark, and think it over. Thus far they've out-thought us six ways for Sunday. We may be able to put your old plan into effect vet, but if it's to work, we'll have to provoke open conflict."

"How?"

Moving Day is hereby advanced by one thousand hours."

"Everybody here knows that there's going to be a drastic change when we finish what we're doing, but we're the only ones who know exactly what we're going to do. The 'stiffs will have to stop us,

whether they've got Dr. Beetle or not. So I'm forcing their hand.

spasm of anger, "That's as may be," he growled, "Nevertheless, spread it around: let the Hevians hear it. And just to prove that I'm not kidding, Mark, I'm turning the City Fathers back on at that time. If vou're not ready to spin by then, you may well swing instead." The click of the belt-switch to the "Off" position was unsatisfying. Amalfi would much have preferred to conclude the interview with something really final--a clash of cymbals, for instance. He swung suddenly on Miramon. "What are you googling at?" The Hevian shut his mouth, flushing. "Your pardon. I was hoping to understand your instructions to your assistant, in the hope of being of some use. But you spoke in such incomprehensible terms that it sounded like a theological dispute. As for me, I never argue about politics or religion." He turned on his heel and stamped off through the trees. Amalfi watched him go, cooling off gradually. This would never do. He must be getting to be an old man. All during the conversation he had felt his temper getting the better of his judgment, yet he had felt sodden and inert, unwilling to make the effort of opposing the momentum of his anger. At this rate, the City Fathers would soon depose him and appoint some stable character to the mayoralty--not Hazleton, certainly, but some unpoetic youngster who would play everything by empirics. Amalfi was in no position to be threatening anyone else with liquidation, even as a joke.

He walked toward the grounded city, heavy with sunlight, sunk in reflection. He was now about a thousand years old, give or take fifty; strong as an ox, mentally alert and "clear," in good hormone balance, all twenty-eight senses sharp, his own special psi faculty-orientation--

"What! I'm sorry, boss, but that's flatly impossible." Amalfi felt a rare

unsane became equally dictatorial.

It was funny; before death had been conquered, it had been thought that memory would turn immortality into a Greek gift, because not even the human brain could remember a practical infinity of accumulated facts. Nowadays, however, nobody bothered to remember many things. That was what the City Fathers and like machines were for; they stored facts. Living men memorized nothing but processes. throwing out obsolete ones for new ones as invention

made it necessary. When they needed facts, they asked the

In some cases, even processes were thrown out, if there were simple, indestructible machines to replace them--the slide rule, for

still as infallible as ever, and all in all as sane as a compulsively peripatetic star man could be. The anti-agapics would keep him in this shape indefinitely as far as anyone knew-but the problem of

The older a man became, the more quickly he saw answers to tough questions; and the less likely he was to tolerate slow thinking among his associates. If he were sane, his answers were generally right answers; if he were unsane, they were not; but what mattered was the speed of the thinking itself. In the end, both the sane and the

patience had never been solved.

machines.

instance. Amalfi wondered suddenly if there were a single man in the city who could multiply, divide, take square root, or figure pH in his head or on paper. The thought was so novel as to be alarming-as alarming as if an ancient astrophysicist had seriously wondered how many of his colleagues could run an abacus.

No, memory was no problem. But it was very hard to be patient after a thousand years.

The bottom of a port drifted into his field of view, plastered with

section where he had intended to go on board. Feeling like a stranger, he went in.

Inside, the corridor rang with bloodcurdling shrieks. It was as if someone were flaying a live dinosaur, or, better, a pack of them. Underneath the awful noises there was a sound like water being expelled under high pressure, and someone was laughing madly.

brown tendrils of mud. He looked up. The port was a small one, and in a part of the perimeter of the city a good distance away from the

nearest door.

SURELY there had never been such a place in the city. It was a huge, steamy chamber, walled with some ceramic substance placed in regular tiles. The tiles were slimy, and stained; hence, old--very

Hordes of nude women ran aimlessly back and forth in it. screaming.

old.

Alarmed, Amalfi hunched his bull shoulders and burst through the

battering at the wall, dodging wildly, or rolling on the mosaic floor. Every so often a thick stream of water caught one of them, bowling her howling away or driving her helplessly. Amalfi was soaking wet almost at once. The laughter got louder. Overhead, long banks of nozzles sprayed needles of mist into the air.

The mayor bent quickly, threw off his muddy shoes, and stalked the laughter his toes gripping the slippery mosaic. The heavy column of

The mayor bent quickly, threw off his muddy shoes, and stalked the laughter, his toes gripping the slippery mosaic. The heavy column of water swerved toward him, then was jerked away again.

"John! Do you need a bath so badly? Come join the party!"

"John! Do you need a bath so badly? Come join the party!"

It was Dee Hazleton, the Utopian girl who had become the city manager's companion shortly before the crossing of the Rift had

been undertaken. She was as nude as any of her victims, and was

gleefully plying an enormous hose.

It did not sound much like the old Dee, who had been full of solemn thoughts about politics—she had been a veritable commissar when Amalfi had first met her. He expressed his opinions of women who had lost their inhibitions so drastically. He went on at some length, and Dee made as if to turn the hose on him again.

"No, you don't," he growled, wresting it from her. It proved extremely hard to manage. "Where is this place, anyhow? I don't recall any such torture chamber in the plans."

"It was a public bath, Mark says. It's in the oldest part of the city, and

"Isn't this fun? We just got a new batch of these creatures. I got Mark to connect the old fire hose and I've been giving them their first

wash "

Mark says it must have been just shut off when the city went aloft for the first time. I've been using it to sluice off these women before they're sent to Medical. The water is pumped in from the river to the west, so there's no waste involved."

"Water for bathing!" Amalfi said. "The ancients certainly were wasteful. Still I'd thought the static jet was older than that."

He surveyed the Hevian women, who were now huddling, temporarily reprieved, in the warmest part of the echoing chamber. None of them shared Dee's gently curved ripeness, but, as usual, some of them showed promise. Hazleton was prescient; it had to be granted. Of

course it had been expectable that the Hevian would turn out to be human, for only eleven nonhuman civilizations had ever been discovered, and of these only the Lyrans and the Myrdians had any brains to speak of.

But to have had the Hevians turn over complete custody of their women to the Okies, without so much as a conference, at first

own psi-gift—not true clairvoy ance, but an ability to pluck workable plans out of logically insufficient data. Time after time only the seemingly miraculous working-out of Hazieton's plans had prevented his being shot by the blindly logical City Fathers.

"Dee, come to Astronomy with me," Amalfi said with sudden energy. "I've got something to show you. And for my sake put on something, or the men will think I'm out to found a dynasty."

contact—after Hazleton had proposed using any possible women as bindlestiff-bait—a proposal advanced before it had been established that there even was such a place as He— Well, that was Hazelton's

wasn't customary--a compensation, Amalfi supposed, for her Utopian upbringing, where she had been taught that nudity had a deleterious effect upon the purity of one's politics. The Hevian women moaned and hid their heads while she put on her shorts-most of them had been stoned for inadvertently covering themselves at one time or another, for in Hevian society women were not people but reminders of damnation, doubly evil for the slightest secrecy.

History. Amalfi thought, would be more instructive a teacher if it were

"All right," Dee said reluctantly. She was not yet used to the odd Okie standards of exposure, and sometimes appeared nude when it

not so stupefyingly repetitious. He led the way up the corridor, searching for a lift, Dee's wet soles padding cheerfully behind him.

In Astronomy, Jake was as usual peering wistfully at a nebula somewhere out on the marches of no-when, trying to make ellipses out of spirals without recourse to the Calculator. He looked up as Ainalfi and the girl entered.

"Hello," he said, dismally. "Amalfi, I really need some help here. How can a man work without facts? If only you'd turn the City Fathers back

on--"

problems." "I know that. But let's take a look. I have an idea that we're not as alone in the Rift as we thought." Resignedly. Jake went to his control desk and thumbed buttons. "What do you expect to find?" he demanded, his voice petulant, "A

"Shortly. How long has it been since you looked back the way we

"Not since we started across the Rift. Why, should I have? The Rift is just a scratch in a saucer; you need real distance to work on basic

"Well." Amalfi said, pointing to the screen, "those aren't wine hottles."

haze of iron filings, or a stray meson? Or a fleet of police cruisers?"

The police cruisers, so close that the light~of He's sun twinkled on their sides, shot across the screen in a brilliant stream, long tails of false photons striping the Rift behind them. "So they aren't." Jake said, not much interested. "Now may I have my

Amalfi only grinned. Cops or not cops, he felt young again.

Mud

scope back. Amalfi?"

came. Jake?"

HAZLETON was mud up to the thighs. Long rib ands of it trailed behind him as he hurtled up the lift shaft to the control tower. Amalfi

watched him coming, noting the set whiteness of the city manager's face as he looked up at Amalfi's bending head.

"The cops are here. They're coming in from the northwest quadrant, already off overdrive, and should be here day after tomorrow." "Surely they're not after us," Hazleton said. "And I can't see why they should come all this distance after the 'stiffs. They must have had to use deep-sleep to make it. And we didn't say anything about the nofuel drive in our alarm 'cast--" "We didn't have to," Amalfi said. "Some day I must tell you the parable of the diseased bee--as soon as I figure out what a bee is. In the meantime things are breaking fast. We have to keep an eye on everything, and be able to jump in any direction no matter which item on the agenda comes up first. How bad is the fighting?" "Very bad. At least five of the local bandit towns are in on it, including Fabr-Suithe, of course. Two of them mount heavy stuff, about contemporary with the Hruntan Empire in its heyday... ah, I see you

know that already. Well, it's supposed to be a holy war on us. We're meddling with the jungle and interfering with their chances for salvation-through-suffering, or something--I didn't stop to dispute the

"That's bad; it will convince some of the civilized towns, too --I doubt that Fabr-Suithe really believes the religious line, they've thrown all

"What's this about cops?" Hazleton demanded while still in flight. "The message didn't get to me straight. We were raided, all hell's broken loose everywhere. I nearly didn't get here straight myself." He sprang into the chamber, his boots shedding gummy clods.

"I saw the fighting. Looks like the Moving Day rumor reached the

'stiffs, all right,"

point."

"Sure. What's this about cops?"

could persuade all the civilized towns to come in on our side we wouldn't need it, but so many of them are scared."

"The enemy lacks mobility, too, until the bindlestiff is ready to take a direct hand," Amalfi said thoughtfully. "Have you seen any signs that the tramps are in on the fighting?"

"You're right there. Only a few of the civilized towns, the ones that have been helping us from the beginning, are putting up a stiff fight. Almost everyone else, on both sides, is sitting it out waiting for us to cut each other's throat. Our handicap is that we lack mobility. If we

that overboard, but it makes wonderful propaganda."

"Not yet. But it can't be long now. And we don't even know where they are!"

"They'll be forced to locate themselves today or tomorrow. I'm

certain. Right now I want you to muster all the rehabilitated women we have on hand and get ready to spring your scheme. As soon as I

get a fix on the bindlestiff I'll locate the nearest participating bandit town, and you can do the rest."

Hazieton's eyes, very weary until now, began to glitter with amusement. "And how about Moving Day?" he said. "You know, of course—you know everything—that not one of your stress-fluid plugs is

course—you know everything—that not one of your stress-fluid plugs is going to hold with the work this incomplete."

"I'm counting on it," Amalfi said tranquilly. "We'll spin when the time comes. If a few plugs spring high, wide, and tall, I won't weep."

The Dinwiddie Watch blipped sharply, and both men turned to look at the screen. There was a fountain of green dots on it. Hazieton took

"How--"

three quick steps and turned on the coordinates, which he had had

readjusted to the butterfly grid.
"Well, where are they?" Amalfi demanded.

under your fingernails. There's supposed to be a lake of boiling mud on that spot."

"There probably is--they could be under it with a mediumlight screen."

"Right smack in the middle of the southwestern continent, in that vine-jungle where the little chigger-snakes nest--the ones that burrow

"All right, we've got them placed-but what are they shooting up?"
"Mines, I suspect," Amalfi said.

"That's dandy," Hazleton said bitterly. "They'll leave an escape lane

for themselves, of course, but we'll never be able to find it. They've got us under a plutonium umbrella, Amalfi."

"We'll get out. Go plant your women, Mark. And--put some clothes on 'em first. They'll make more of a show that way."

'em first. They'll make more of a show that way."

"You bet they will," the city manager said feelingly. He went out.

A MALFI went out on the balcony. At moments of crisis, his old

predilection for seeing and hearing and breathing the conflict, with his senses unfiltered and unheightened by any instruments, became too strong to resist. There was good reason for the drive, for that matter; for excitement of the everyday senses had long ago been shown to bring his orientation-sense to its best pitch.

From the balcony of City Hall, most of the northwest quadrant of the

perimeter was visible. There was plenty of battle noises rattling the garish tropical sunset there, and even an occasional tiny toppling

first sign of attack; but the jungle men had broad skis, of some metal no Hevian could have fashioned so precisely. Disks of red fire marked bursting TDX shells, scything the air like death's own winflows. No gas was in evidence, but Amalfi knew that there would be gas before long. The city's retaliatory fire was largely invisible, since it emerged below the top of the perimeter. There was a Bethé fender out, which would keep the wall from being scaled-- until one of the projectors was knocked out; and plenty of heavy rifles were being kept hot. But the city had never been designed for warfare, and many of its most efficient destroyers had their noses buried in the earth, since their intended function was only to clear a landing area. Using an out-andout Bethé blaster was, of course, impossible where there was an adiacent planetary mass. He sniffed the scarlet edges of the struggle appraisingly. Under his fingers on the balcony railing were three buttons, which he had had placed there four hundred years ago. They had set in motion different things at different times. But each time, they had represented choices of action which he would have to make when the pinch came: he had never had reason to have a fourth button installed. Rockets screamed overhead. Bombs followed, crepitating bursts of noise and smoke and flying metal. He did not look up; the very mild spindizzy screen would fend off anything moving that rapidly. Only slow-moving objects, like men, could sidle through a polarized gravitic field. He looked out to the horizon, touching the buttons very delicately.

Suddenly the sunset snuffed itself out. Amalfi, who had never seen a tropical sunset before coming to He. felt a vague alarm, but as far as

figure. The city had adopted the local dodge of clearing and gelling the mud at its rim, and had returned the gel to the morass state at the

After a while there was a dog-fight far aloft, identifiable mostly by traceries of jet trails and missiles. The jungle jammered derision and fury without any letup.

Amalfi stood, his senses reaching out slowly, feeling the positions of things. It was hard work, for he had never tried to grasp a situation at such close quarters before, and the trajectory of every shell tried to capture his attention.

he could see the abrupt darkness was natural, if startling. The fighting went on, the flying disks of TDX much more lurid now against

the blackness

"Sure. But--"

About an hour past midnight, at the height of the heaviest raid yet, he felt a touch at his elbow.

"Boss--"

Amalfi heard the word as if it had been uttered at the bottom of the Rift. The still-ascending fountain of space mines had just been touched, and he was trying to reach the top of it; somewhere up there the trumpet flattened into a shell encompassing the whole of He, and it was important to know how high up that network of orbits began.

But the utter exhaustion of the voice touched something deeper. He said, "Yes, Mark."

"It's done. We lost almost everybody. But we caused a very nice riot."

A ghost of animation stirred in the voice for a moment. "You should

have been there."

"I'm-almost there now. Good... wo~rk, Mark. Get . some rest."

Till-airiost there now. Good... wo Tk, Mark. Get . some rest.

Something very heavy described a searing hyperbola in Amalfi's mind, and then the whole city was a scramble of magnesium-white and ink. As the light faded, there was a formless spreading and crawling, utterly beyond any detection but Amalfi's.

"Gas alarm, Mark," he heard himself saying. "Hawkesite barium suits for everybody."

"Yes. Right. Boss, you'll kill yourself running things this way."

Amalfi found that he could not answer. He had found the town where the women had been dropped. Nothing clear came through, but there was certainly a riot there, and it was not entirely within the town itself. Tendrils of movement were being turned back from the Okie city, and

were weaving out from places where there had been no sign of

activity before.

At the base of the mine fountain, something else new was happening. A mass rose slowly, and there was a thick flowing around it. Then it stopped, and there was a sense of doors opening, heavy potentials moving out into tangled desolation. The tramps were

leaving their city. The unmistakable, slightly nauseating sensation of

a spindizzy field under medium drive domed the boiling of the lake of mud.

Dawn coming now. The riot in the town where the women were still would not come clear, but it was getting worse rather than better. Abruptly there was no town there at all, but a boiling, mushrooming pillar of radioactive gas—the place had been bombed. The struggle

pillar of radioactive gas—the place had been bombed. The struggle moved back toward the area of tension that marked the location of the bindlestiff.

Amalfi's own city was shrouded in sick orange mist, lit with flashes of

no-color. The gas could not pass the spindizzy screen in a body, but

and evidently had plastered him with the stuff in default of trying to get a suit on him. Even his eyes were covered, and a feeling of distension in his nostrils bespoke a Kolman respirator.

The emotional and gravitic tensions in the bindlestiff city continued to gather; it would soon be unbearable. Above, just outside the space mines, the first few police vessels were sidling in cautiously. The war

it diffused through, molecule by heavy molecule. He realized suddenly that he had not heeded his own gas warning, and that there was probably some harm coming to him; but he could not localize it. He moved slightly, and instantly felt himself incased. What-- Barium paste. Hazleton had known that Amalfi could not leave the balcony.

nothing but the destruction of Fabr-Suithe and its allies. Fabr-Suithe could hold them off for a long time, but it was clearly time for the bindlestiff to leave—time for it to make off with its women and its antiagapics and its germanium, time for it to lose itself in the Rift before the Earth police could invest all of He.

in the jungle had already fallen into meaninglessness. The abduction of the women from the Hevian town by the tramps had collapsed all Hevian rivalry; bandits and civilized towns alike were bent now upon

The tension knotted suddenly, painfully, and rose away from the boiling mud. The 'stiff was taking off. Amalfi pressed the button--the only one, this time, that had been connected to anything.

Moving Day began.



Π began with six pillars of glaring white, forty miles in diameter, that

burst through the soft soil at every compass point of He. Fabr-Suithe had sat directly over the site of one of them. The bandit town was

thermite-blue with steel meteors. Outside, the space mines, cut off from the world of which they had been satellites by the greatest spin-dizzy screen of all time, fled into the Rift.

And when the meteors had burned away, the sun was growing.

The world of He was on over-drive, its magnetic moment transformed, expressed as momentum; it was the biggest city ever flown. There was no time to feel alarmed. The sun flashed by and was dwindling to a point before the fact could be grasped. It was gone. The far wall of the Rift began to swell, and separate into individual points of light.

Appalled, Amalfi fought to grasp the scale of speed. He failed. The planet of He was moving, that was all he could comprehend; its speed gulped light-years like gnats. Even to think of controlling so

nothing but a flake of ash in a split second, a curled flake borne aloft

The pillars lunged roaring into the heavens, fifty, a hundred, two hundred miles, and burst at their tops like popcorn. The sky burned

on the top of a white-hot piston.

stupendous a flight was ridiculous.

Stars began to wink past He like fireflies. Then they were all behind.

The surface of the saucer that was the galaxy receded.

"Boss, we're going out of the--"

2000, No to going out of the

"I know it. Get me a fix on the Hevian sun before it's too late."

Hazleton worked feverishly. It took him only three minutes, but during those three minutes, the massed stars receded far enough so that

the gray scar of the Rift became plain, as a definite mark on a spangled ground. The Hevian sun was less than an atom in it.

vears to cross to the next galaxy. We'll have to abandon He. boss, or we're sunk " "All right. Get us aloft. Full drive." "Our contract--"

"Got it. But we can't swing the planet back. It'll take us two thousand

"Fulfilled--take my word for it. Spin!"

The city screamed and sprang aloft. The planet of He did not dwindle--it simply vanished, snuffed out in the intergalactic gap. It

was the first of the pioneers.

Amalfi took the controls, the barium casing cracking and falling away

from him as he moved. The air still stank of Hawkesite, but the

concentration of the gas already had been taken down below the harmful level by the city's purifiers. The mayor began to edge the city

away from the vector of He's movement and the city's own, back toward the home lens

Hazieton stirred restlessly.

"Your conscience bothering you, Mark?"

"Maybe." Hazieton said. "Is there some escape clause in our

contract that lets us run off like this? If there is I missed it, and I read the fine print pretty closely."

"No, no escape clause," Amalfi said, shifting the space stick

delicately. "The Hevians won't be hurt. The spindizzy screen will protect them from loss of heat and atmosphere--their volcanoes will

supply more heat than they'll need, and their technology is up to artificial UV generation. But they won't be able to put out enough UV to set up a proper orbit. Or maybe they'll like roaming better by then. and decide to be an Okie planet. Either way, we did what we promised to do. fair and square." "We didn't get paid," the city manager pointed out, "And it'll take our last reserves to get back to any part of our own galaxy. The bindlestiff got off, and got carried 'way out of range of the cops in the processwith plenty of dough, women, everything." "No, they didn't," Amalfi said. "They blew up the moment we moved He." "All right," Hazieton said resignedly. "You could detect that; I'll take

to keep the jungle alive. By the time they reach the Andromedan star that suits them, they'll understand the spindizzy principle well enough

vour word for it. But vou'd better be able to explain it." "It's not hard to explain. The 'stiffs had captured Dr. Beetle. I was pretty sure they would. They came to He for no other reason. They needed the fuelless drive, and they knew Dr. Beetle had it, because

of the agronomists' SOS. So they snatched him when he landed--

notice how they made a big fuss about the other agronomist life ship. to divert our attention?--and worked the secret out of him." "So?"

"So," Amalfi said, "they forgot that any Okie city always has

passengers like Dr. Beetle--people with big ideas only partially worked out, ideas that need the finishing touches that can only be provided by some other culture. After all, a man doesn't take passage on an Okie city unless he's a third-rate sort of person, hoping to make his everlasting fortune on some planet where the

people know less than he does."

Hazleton sighed and began to plot the probable point at which the city would return to its own galaxy. It turned out to be a long way away from the Rift, in an area that, after a mental wrench to visualize it backwards from the usual orientation, promised a fair population.

"Look," he said, "we'll hit about where the last few waves of the

Amalfi didn't, since he hadn't been born then, nor had Hazleton; but he remembered the history, which was what the city manager had meant. With a sidelong glance, he leaned forward, resumed the helmet he had cast aside a year ago, and turned on the City Fathers.

The helmet phone shrilled with alarm. "All right, all right," he growled.

would have blown up He at the same time."

Acolytes settled--remember the Night of Hadjiii?"

Hazleton scratched his head ruefully. "That's right. We had the same experience with the Lyran invisibility machine. It didn't work, until we took that Hruntan physicist on board; he had the necessary extra knowledge--but he couldn't have discovered the principle himself.

"Exactly. The 'stiffs were in too much of a hurry. They didn't carry their stolen fuelless drive with them until they found some culture which could perfect it. They tried to use it right away--they were lazy. And they tried to use it inside the biggest spindizzy field ever generated. It blew up. If we hadn't left them parsecs behind in a split second, it

either."

"What is it?"

"No," Amalfi said. "We sent it on its way as it was."

"MAYOR AMALFI, HAVE YOU TIPPED THIS PLANET?"

There was a short silence, humming with computation.

WE LEAVE THE RIFT STAND BY FOR DETERMINATION " Amalfi and Hazleton grinned at each other. Amalfi said, "We're coming in on the last Acolyte stars. Give us a determination for the present setup there, please--" "YOU ARE MISTAKEN THAT AREA IS NOWHERE NEAR THE RIFT. WE WILL GIVE YOU A DETERMINATION FOR THE FAR

"VERY WELL, WE MUST NOW SELECT THE POINT AT WHICH

RIFT WALL: STAND BY" Amalfi removed the headset gently.

"That," he said, moving the phone away from his mouth, "was long ago--and far away."