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COVER: ZENYA by FRANK KELLY FREAS

King Midas in Reverse
That almost wraps up the art side of this issue, but we’ve still managed to fill up the rest of the pages with some pretty good material. There’s a new story from Kenneth Harker with whom you may already be acquainted; he is the author of The Symmetrians and The Flowers of February. He’s given up full-time writing now and returned to his work as a physict but he’s still found time to write Sadim’s Touch (in the words of the old Hollies’ song ‘He’s King Midas in reverse’). It stretches to five pages of text, so unfortunately we’ve only room for one more story and that comes from an Australian, Anthony Peacey, who has been working around the ever popular sf theme of mutations.

Galactic Empires
Talking of themes, Peter Weston has at last finished his mammoth investigation into the theme of space travel in sf. In part four he tackles the incredible idea of galactic empires and the sort of future envisaged by, among others, Isaac Asimov, Larry Niven and Poul Anderson.

Next Month
As SFM Vol 3 No 3 will be the last issue before MacCan, the Easter SF Convention in Manchester, it will carry a special feature on this year’s guest of honour, Robert Silverberg. An article about the author’s life and work has been prepared by fellow sf author Brian Stableford and there’ll be a new short story from Mr Silverberg to accompany it. In the next issue we’ll be reviewing the new art book from Roger Dean, which so many of you have written in about, and also publishing a number of illustrations from it.

FRANK KELLY FREAS

As the cover tells you, this is a special issue of SFM featuring the artwork of Frank Kelly Freas. He is, perhaps, the best-known American sf illustrator and much of his work has appeared on the cover of Astounding/Astounding over the years. His first Astounding cover was published in 1943 and since then Kelly has been awarded nine Hugo Awards as Best Professional Artist.

We’ve reproduced ten of his paintings in this issue, all of which, in fact, Kelly selected himself - so they’re all favourites of his for one reason or another. To accompany the artwork, Sandra Meisel (our American correspondent) has contributed two articles about Kelly; one is based on an interview and the other provides Kelly with an opportunity to explain just where he gets his crazy ideas from.

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“Some years ago,” he explained, “I was doing psychosis work on withdrawal symptom behaviour patterns. To relate these to brain cell structure, I used a rare tracer isotope, which I first had to produce myself. This entailed the measurement of some microsecond half-lives. But things kept on going wrong. And you know why? Because I’d upset the half-lives by measuring them. And from this simple fact, I evolved a completely new approach to the measurement.” His brown eyes gleamed over puffy blue half-moon lids. “Temporal matrices or, as you’d call them, time statistics?”

**BY KENNETH HARKER**

When Kepler Banterman switched on the television that evening, the last person he expected to see being interviewed was Sadim.

The interviewer was addressing him not as Sadim, but by his real name: Dr Lucas Moncreif. But Kepler remembered the long solemn face, the brushed-back hair greying at the temples, the thin-lipped mouth. It was Sadim right enough.

Three years ago, was it, when Kepler had talked with him? Even now, the subject, futuristic theories, was the same.

As a science correspondent, Kepler rarely found time to bother with television. But now, he sat down in his dingy armchair and watched.

“It’s not conventional prediction,” Moncreif was arguing, with dry distaste. ‘Not a question of spotting winners.’

‘Then how about weather-forecasting?’ the interviewer encouraged, with a smoothness that nauseated Kepler.

‘Weather-forecasting is an ordinary science,’ Moncreif countered, smiling balefully. ‘My idea don’t apply there.

The camera angle changed. Kepler craned his square face forward. His pale grey eyes studied the background behind the interviewer’s head. Bits of glassware; corner of a bench. Yes, that could be Moncreif’s own laboratory at Leckford, not eight miles away.

The pockers deepened on Kepler’s brow. Trust a tv interviewer to aim for public appeal: foncasses, investments – all by scientific prediction. But there was more to it than that, from what Moncreif had claimed three years ago. Bewilderingly more.

As Moncreif talked now, rubbing his fingers slowly together, Kepler felt bathed in the glow of the screen, curiously tangible – as if Moncreif, as if the touch of Sadim, was actually in the room.

Crushing the impression, he reached out a shirt-sleeved arm for his glass of iced beer and sipped hungrily, knocks white around the glass.

A lot could happen in three years. How much development work might Moncreif have done? Kepler had heard nothing. For six years now, he’d been stuck with his weekly review-supplement, the Renforth Chronicle, the journalistic work that he’d won him the Nobel Prize in literature.

But after all, was his old ambition, of getting anchored to some big project, instead of weekly thumbnail accounts of science news? Caution could stifle a man too long. Until tonight.

His attention jerked back to the screen. Maybe by now Moncreif had put his techniques into some profitable invention. Restlessly Kepler swirled the last inch of drink in his glass, and his broad mouth smiled wryly.

Moncreif must have been crazy three years back, trying to tap him for funds. Did he think science correspondents were made of money? And yet, if Kepler had invested his few savings then, perhaps something would have paid off.

Was Moncreif still looking for financial support? “Thank you for your views, Dr Moncreif,” the interviewer cut short Moncreif’s disclaimers. “And good luck with your work.”

The studio announcer took over. “That interview with Dr Lucas Moncreif took place this afternoon. We had hoped he might predict the rest of tonight’s programme, but...”

Kepler marked a smirk, “it seems he doesn’t work that way.”

“You’re dead right, he doesn’t. Moncreif thought. He rose, and snapped the switch. The sudden silence grated into him. Recorded this afternoon... So the solitary, middle-aged Moncreif might be alone now, only eight miles away. Moodyly, Kepler paced the threadbare carpet. There was still the weekly gap to fill. Science had hit another spot, this time the other talk with Moncreif – with Sadim. Now, too, science had lived a dull week. So he’d taken a chance, and visited Moncreif.

And if he hadn’t backed out, Kepler Banterman might have been reclining in furnished luxury now, instead of a dump flat with a shared bathroom.

He lowered the window. The balmy breeze fanned his healthy complexion. Yet his mind felt caged, as he recalled how he’d sat in Moncreif’s parlour. Moncreif, reserved, almost boorish, had stood over him.

“Don’t understand how you got on to me.”

“Whispers, Kepler,” had answered conversationally. “Weren’t you a big researcher at the university?”

Moncreif granted. “Once, perhaps.”

“Time statistics, wasn’t it? Tell me a few more.”

“True, true, I’ve been acquainted with old research policy,” Moncreif sighed tiredly. “But it isn’t easy, going it alone.”

“You research here? On prediction?”

“Converted a back room into a small laboratory. But you can forget the whispers. Prediction doesn’t work.”

Now, as Kepler headed down for a left turn, he pondered cynically, would Moncreif have shown him the fabulously sophisticated? Moncreif showed him the lab so radically, if he hadn’t been after money? They’d stood on the threshold, Kepler’s gaze assessing the sparse shelves on yellowed-papered walls; the meagre glassware and electronic equipment that covered the brushwood top of the workbench.

“For my project here,” Moncreif unfolded secretively, “I like to think of myself not as Lucas Moncreif, but as Sadim.”

His elegant face threw a sly little glance from under the academic brow. “Sadim?” Kepler repeated, not comprehending. “How much do you know about scientific principles?”

Kepler shrugged. “They all lend down to one – a systematic approach,” he answered easily.

“In general terms, yes, but take the direct determination of physical quantities.” Smiling occasionally, his chin tilted into his chest, Moncreif drifted into explanations.

“You know we can never obtain absolute measurement? All things, ourselves included, are grains in the universal mill; each grain affected, perhaps crushed by the others.”

“You mean we always upset what we try to measure? That’s fundamental stuff.” Kepler lounged up against the bench. “You must draw energy from the measured, to make the measuring device respond.”

“Precisely,” Moncreif waggled his head. “To measure, is to mar. Just as a beautiful painting, if touched in appreciation, can end up shabby.”

“Or like temperature,” Kepler compared. “You use up some heat, to make the thermometer read.”

Moncreif was gracing around. He took a cylindrical potted plant from the cupboard under the bench, unscrewed the end-cap and tipped out the battery. “And if I check the voltage of a dry cell, my voltmeter uses up a fraction of the stored electricity. There’s always this sort of – touch – between the two. Now in many cases,” Moncreif rapped his lips, “this difference between true and measured value may not matter. In large-scale engineering, the accuracy’s close enough. But in delicate work – living cell, the atomic nucleus, aha! – the disturbing touch might be worth careful correction.”

“And, can you do this? Measure the impossible?”

“Effectively, yes. But the only way is to measure without measuring.” Moncreif allowed himself a twitch of a grin, aware he was talking in riddles.

“Some years ago,” he explained, “I was doing psychosis work on withdrawal symptom behaviour patterns. To relate these to brain cell structure, I used a rare tracer isotope, which I first had to produce myself. This entailed the measurement of some microsecond half-lives. But things kept on going wrong. And you know why? Because I’d upset the half-lives by measuring them. And from this simple fact, I evolved a completely new approach to the measurement.” His brown eyes gledem over puffy blue half-moon lids. “Temporal matrices or, as you’d call them, time statistics.”

Slowly, Kepler scratched one side of his nose. “So?”

“So I dropped psychosis work to master this new technique. Now, if I’d the money to make the isotope in bulk, I could produce a fortune’s worth.”

“Fortune for whom? The medical world, or you? Because if it’s you, you’d be able to do it cheaper, to commercialise something? Adapt your discovery? Develop some gadget with public appeal?”

Moncreif fondled the battery. “True enough. But versatility needs thought and financial backing. I don’t... or... suppose...”

“Don’t look at me,” Kepler wanted to laugh, as Moncreif shrugged uncomfortably. “You don’t expect anyone to chip in their savings on the strength of what you’ve said?” And yet, he couldn’t afford to miss out. “Put me in the picture some more, about temporal matrices,” he invited.
**K**

Epler’s hands felt sticky on the steering-wheel. Maybe that had been the moment, he reckoned, when his judgment had really roused. Menfolk had set the battery down. He resumed pacing along the concrete floor to the cracked sink, trying to choose his words. He glanced at the clock. A little over half an hour since the last call. Before doing a measurement, we might learn the value we’re about to obtain. The measurement needn’t be done. ‘Foresee something that never happens?’ Epler stared, baffled. ‘That’s crazy.’

Mondragon leered, exposing yellow teeth. ‘At any moment, there’s an infinite choice of time branches. Naturally, we can only follow one; and apart from an impression of so-called free choice, we’ve left out these other paths as well.’

**T**

At the top of the hill, Kepler cut the engine and gazed down the grey slopes towards Leckford. He lit a cigarette. Fine music drifted up from the market town. The annual fair, he realised. Lights were already up in the church. But his mind was on Mondragon peering at the black cube, hesitating.

The Midas touch affected everything. But I do the one thing Midas could not do. I do not affect what I touch or measure. I am opposite to and superior to Midas.

**Epler** drove on, aiming across town for Mondragon’s house. Doubts invaded him. Surely this was a foolish venture? Surely if Mondragon had followed my advice, developed a pocket-size gadget, he would have got financial backing elsewhere?

The old pebble-dashed house was detached at the edge of the road. Kepler saw the double line outline, dark against the dusk sky, house’s sad. He sat for a moment. Odd. Now that he was here, he tended to think of the man as something like himself, as though the touch had reached into his mind from a three-year-old past. He strode up the stub-end path, stepping over the common. Then he spotted a solitary glow from the rear of the house. Mondragon’s laboratory. As he pressed the bell-push, a fleeting uneasiness crossed his mind. There was some turning-point in his life. Then it had gone. He waited, amid the music and laughter, which drifted across from the fair. When Mondragon opened the door, his face remained blank for only a moment. ‘Well, well. The science man from the Randall Chronicle. Let me think—’

‘Kepler’s mind gave a slight lurch, as though Sedim’s remark was time-linked with his own thoughts of a second earlier. He watched Sedim pocket the Konipak.

‘I saw your interview,’ Kepler began. ‘I wondered how you came by this thing.’

Interview? Sedim said, on a scornful note. ‘I did my best to wriggle out of it. You’ve got to be first and on record, you know.’

Yes, I’m intrigued. How did they see you out? Same as I once did, Sedim frowned. ‘You’re still playing with microcubes, with so much more to predict’

Surely you heard me say any prediction rubbish? ‘Granted. And you stick by it. ’Sedim hesitated, loaded with mistrust. ‘I don’t deny certain developments, but not so much in predicting the future as in giving confidence in it.’

Surely. ‘Kepler murmured. ‘Mondragon’s touch is making it mark. Surely if you’d handled that interview right.

But does it, you might have won some interested backers.

What of it? What sort of interest is yours? ‘ ‘It seems as though I’ve hoarded three years. ’Sedim’s expression remained chilly. ‘I gave you my chance to then come in with more. But you wouldn’t listen.’

Perhaps I’m reconsidering. ‘Kepler said, on the edge of developing a pocket version— ‘public appeal’

Sedim’s lips thinned. ‘I never heard of it.’

Continued on page 9
impression you’ll get with a Konfipak is of yourself, micro-
seconds later, but still using the Konfipak. So why not a chain
of overlapping images, extending forward to the future.

"No!" Sadim’s voice rang in warning. "I once tried it
and I don’t recommend it. You could really be tied in a vicious
claw..."

Kepler fell silent. Even so, wouldn’t the sales potential be
greater with prediction, rather than with morale-
booster? His doubts flickered irritably. He was rushing things.
He still needed a demonstration before clinching the deal. Suddenly the lab felt stuffy, as though the whole of
summer was compressing its scented warmth into that one
evening. From outside, came inviting murmurs of the fair-
grounds.

"You’d like a demonstration?" Sadim suggested, with
a comically puckering of his lips. "Shall we take a look at
the facts?"

**KEPLER’S mind gave a slight lurch, as though
Sadim’s remark was time-linked with his own
recollection of a second earlier. He watched Sadim
pocket the Konfipak. Yes, at least the fairground
should be far enough from Sadim’s lair of fantasy.**

"Unfair!" Sadim snarled. "You know I never
had enough of yours before they burn me!"

Sadim gestured tetchily. "Can you see that how
device works? It’s the computer-age version. The
number’s altered before each attempt. Randomly selected
electronically counted."

Kepler nodded, demurely. The woman, spotting
Sadim’s interest, lifted forward a jar of blue beads.

"Guess the lucky beads, sir?" she chanted. "Go within ten
and win a trinket; exact number, any prize on the stall.

She swept of her bangled arm into the array of
dolls and trinkets.

Sadim switched on the Konfipak in his pocket. He
chuckled, just between his bony fingers, turning so
the loose mass of beads patterned around inside. Kepler
noticed his attention locked onto his face. He saw the eyes
flash shut in concentration; he noted the surge of the brain.

Sadim shifted a hand towards the tabulator, and his
eyes snapped open. "Three hundred and forty-six,"
he announced, setting up the figure.

The woman took back the jar, and locked its keyless base
into the counting-unit. She pressed a button. A pink ticket
jumped out onto a tray. She lifted it and read: "And 346 it
is! She barely concealed her satisfaction. "Your lucky number.
Now, pick your prize, sir."

Affecting an air of boredom, Sadim deliberated between
a charming rosary and a set of kitchen carving-knives.
Kepler rein ed in thoughts, trying to analyse what had
happened. He saw the carvings, tinged for their
old-world appeal: solid metal gilt in plush-lined case.

"I’d do a repeat," Sadim turned from the stall, switching
off the Konfipak, excusing his fair hand. "Never mind a repeat."

"On an impulse, Kepler plucked the Konfipak from
Sadim’s wriggling grasp. "If you want to convince me,
let me have a go myself."

Sadim’s eyes widened a little. His lined complexion
looked yellow in the fairground dazzle. "You
don’t have to go on with this, you know."

"Sadim’s face darkened. "You can’t just rush this into this..."

"But all you did was switch the damned thing on."

Sadim brandished the Konfipak under Sadim’s nose. "If you
want to sell, let people try the goods."

Kepler’s heart beat frantically. "I don’t know why you
bothered to come. If you still think it’s trickery, I’ll find
something else."

"He snatched the Konfipak from Kepler’s grasp and
didn’t bother to come. If you still think it’s trickery, I’ll find
something else."

"But all you did was switch the damned thing on."

Sadim switched on the Konfipak, pocketed it,
and sauntered forward, his intentions vague. He tried to
relax, to open his mind, but sensed nothing but blankness.

With his back to Kepler, the attendant raked the coins
into a cash-box, and picked up a pencil to make an entry
in a ledger. Then Kepler’s mind was flooded with
imagination – as though his viewpoint had been partly
projected to become as one with the attendant’s. A twinge
of alarm shot through him. With his own eyes he could see the
pencil quite had not touched the paper. Yet with his
attention, he could view all existing at each stage in the
writing – so that pencil and hand were a blur through
which the figures entered into the ledger could be seen.

"Everything about Sadim, his patience, his co-opera-
tion, even his temper, seemed part-proof that he was
genuine. Kepler felt it was his duty, yet some-
how a disquieting duty, to go along."

"Two pounds, ten pence," Kepler muttered to himself,
and moved in closed behind the attendant. "Change a pound",
he asked, as the fellow jerked round.

In his pocket, he snapped off the Konfipak. Reality jolted
back to normal, leaving only a memory of the figures
which had flashed into his head. Then as the attendant reached
into the cash-box, Kepler saw past his arm. "Two pounds,
ten pence," he read silently from the page. He changed his
pound and backed out quickly.

"Any luck?" Sadim was smiling warmly.

"The figure I imagined..." Kepler said, in sobered awe.

"He wrote it a moment later. I saw him writing, in advance."

"Before he worked for you?"

"Before the Konfipak and stowed it away with care as they left
the booth, he walked back to the last blue-ribbon prize. ספר
deep in study, Sadim placid. Indoors, Sadim placed the
case of carvings down on top of the black cube. He rubbed his
hands with dry anticipation. "Well, it works, after pro-
term's..."

Kepler sat down, reflecting hard. Everything about
Sadim, his patience, his co-operation, even his temper,
seemed part-proof that he was genuine. Kepler felt it was
his duty, yet somehow a disquieting duty, to go along.

"I’m sure you’ve appreciated the main limitation," Sadim
continued. "It’s one of selection; but then, I think imagery from all that comes crowding in. Practice is impor-
tant here. Practice and development..."

"So I realised," Kepler remained cautious. "Could you go
straight into production?"

"We’d develop and produce side by side." "Very well." Kepler tugged his chair up to the lab table.

"Let’s draw up an agreement."

"Er... agreement?"

"I’m handling the business side, aren’t I? If I’m to cough up
nearly five hundred quid, I want conditions put on paper."

"Ah, yes. Benignly, Sadim rummaged for a pad of fools-
cap. "You columnists; you like things in black and white."

"Well, I’m inclined to plug back profits into our business;
but cut out middlemen; kick down overheads. Kepler suckled his
pencil and the best way I can keep an eye on you, is by
coming here as part-time assistant."

**HAT first evening, three difficult hours passed be-
fore the agreement, headed ‘Konfipak Unlimited’,
was knocked into shape. Kepler prepared three drafts:
one copies: one each for safe keeping, and a spare for the
lab, for easy reference. By the time he left, his head was
thoroughly muddled. The following morning, he found
Sadim was glad of the poor response. All the less to diversify
Sadim. Even so, back in his Konbrath flat each night, Kepler took his
time lying into a cluttered slumber. What of deferred
philanthropy had he latched onto, he wondered? He tried to
remove himself. Anyone would just find he was as
wisted in his savings would be anxious for quick returns. Human nature.
He’d be all right, provided he kept Sadim straight.

"We’ve really got brought off our guard yet..."

Sadim chuckled, with a pleased little smirk, as he started to
concert his first dozen empty torch cases.

"It’s only sense. Make Sadim’s touch bring in the money."

"The touch of greed." Sadim fingered his lip with
sadness.

"Rather out of keeping. More of a Midas touch, than
Sadim."

"Depends how you look at it. We’re aiming to give the
public something they’ll want."

Yet Kepler thought filled over his invested savings, he
had to admit Sadim’s touch was muttering a mercenary
flavour.

Sadim worked goonishly. Besides redesigning the pro-
totype for improved operation, he launched into plans for
mass production. At first, trough cases could only be bought
in small numbers. When a sudden rash of fingers grew busy, fitting the intricate contents inside. Then after a time, he found he had only five Konfipaks to hand, he doubled output. When another two hundred cases arrived, he tripled it. The bench became a production line, empty cases stacked at one end. Konfipaks shipped off the other for storage in the cupboard underneath.

Kepler soon gave up his weekly column. His first move,
when exploring market contacts, was to secure his own
Konfipaks, on which he practised in spare moments. Another
five hundred cases arrived. Within three weeks, over two
hundred Konfipaks had been produced. Of Sadim’s original
bench equipment, only the black cube remained, orna-
mented by the case of carvers in honour of the night Kepler
and Sadim had pledged agreement on.

"You’ll need a proper assembly shop before long."

"That will come," Sadim promised jauntily. "How’s the organisation of buyers going?"

"Passably. A few contacts should be on spec. But what
are readers going to think? I’ve got enough ground-
ing now in the techniques. Believe me, if we’re to win
custom..."

"None of your demonstration. It’s risky. Konfipaks aren’t patented."

So although Kepler carried his Konfipak habitually, he
continued to rely on his gift talk for securing buyers.

"Payment in advance, or no deal," became his stock expec-
tation.

"Payment for what? Is this cheap gadget?"

"Konfipak. Pocket-size morale-booster. Gives you a snap
judgment of humanity."

"Says who?... OK, book me for a dozen."

"Few buyers risked asking for more. Kepler worked with
real time, finding enough orders to warrant Sadim’s
efforts. He stayed reluctant to demonstrate his Konfipak, not just
because of what Sadim said, but perhaps he felt the
improve his own methods. With snap-gauss beads-in-your-head
situations, he soon had no bother. His confidence mounted.

But what of the refinements, the prediction angle Sadim
had warned him against? Kepler pondered. In refusing to examine this angle, surely Sadim wasn’t using Konflips to guard the sheet. So, before giving demonstrations, maybe he should investigate it more fully himself.

"He found his mood became more receptive to flashes of the new, Russell. Hardly frightening, more like extensions of himself somehow over several seconds, blurred by the infinity of paths ahead." 

"Still chain-reaction of self-image had naged Kepler’s reasoning, because Sadim himself once scared himself off didn’t mean it wouldn’t work. It could lead to predictions. Obviously, Kepler experimented with his Konflips, concentrating to produce slightly more advanced-impressed images of himself using the square, and left, the future. The first time, it gave him a haunting feeling of lurking several ways out. Yet this, his body, was simply a first real sign that an infinity of time branches could exist.

"I joined one of Sadim’s midget screwdrivers and fiddled with tiny pre-set under the end-cap. He found his mood became more receptive to flashes of confused imagery. No, hardly flashes, more like extensions of himself smeared over several seconds, blurred by the infinity of paths ahead. A path of self. He decided. He decided. It was the only thing Sadim..."

"No! Sadim remonstrated. ‘It will do no good.’"

"Why? What’s wrong with pre-knowledge of oneself? It’s as good as the snap-guess method for boosting confidence..."

"Never. The snap-guess entails Sadim’s touch with the external reality. It was denied to yourself. With self-entrenchment. Dangerous. The vicious circle."

"But surely...", Kepler justified himself angrily, there’s self-..."

"Of course there is, Sadim reasoned earnestly. ‘There can be no escape from yourself. Can you see? You’re so self-conscious, you’ll block every...”

"Okay, you’re right. I’ll foolproof them, if I could."

"Then why don’t you?"

"Oh, excuse itself of its failure and undecided; but not for long. He continued to enjoy a sense of doing something financially rewarding and morally worthwhile. Occasionally, he would sit over the spare copy of the agreement, and picture the workbench as an automated production line: Kepler considered the process as it passed under the curious black cube: money, those long-awaited first payments from banks and stockbrokers."

"But as his search for market contacts eased, hisintroverts staged experiments continued, seeing more distant glimmering faces. Effectively, he began to feel stark and gallible. Sometimes he would look up, to find Sadim’s gazing lingering on him in a knowing, involved way. And when doubt, he’d try at the first try-out, at the wall, he felt sure now, there’s been some projected imagery of himself at which the time he hadn’t fully recognized. He began to cherish the impression, longing to channel his free will onto the richest course."

"But he didn’t consider for switching on his Konflips, so that he seemed to live in a blunted enlargement of himself. For in all possible futures, he had to follow these ways from this stationary position. An overpowering sensation. From each viewpoint, his subconscious paths ran across and through."

"Throw the first ghost away, except for switching on his Konflips, so that he seemed to live in a blunted enlargement of himself. For in all possible futures, he had to follow these ways from this stationary position. An overpowering sensation. From each viewpoint, his subconscious paths ran across and through."

"He stepped into the first light of the initial dispatch of Konflips. Two mornings earlier, Kepler arrived at the house before Sadim was about. On the mat a scattering of envelopes, addressed to Konflips Unlimited. He accepted them, entered the lab, and ripped them open. Cheques! His dark frame of mind gave way to relief. Hearing a step, he turned to find Sadim entering from the house, still sipping his morning tea.

"Where are you?" Kepler rejoiced. ‘Advances of over £900 and still half the payments to come.’"

"Excellent,’ Sadim brightened. ‘That covers your outlay. Just one thing more. Sit on the table. He raised his face, eyes still puffy with sleep, and set his cup aside. ‘Sadim’s touch, Konflips. So much pleasurable with loving care. Perhaps, one day we’ll be rich enough to give our Konflips away.’"

"Well, let’s rambled. Basking in allusion, he sat on the table for a more accurate count of the cheques. ‘Leave them,’ Sadim reiterated. ‘I’ll pay them in.’"

"That’s good, Kepler thought, it’d be a good start to..."

"But it’s left me untied, Kepler noticed, a hint of his voice twisted around. ‘Now you’ve got us together in a favourable context, you didn’t want me messing your plans up.’"

"What do you mean? ‘I still haven’t forgotten your voice again. From the start, I’ve stressed — no personal gain.’"

"All part of the sadim’s touch."

"Kepler’s eyes began to pitch Sadim into another time branch. Yet he couldn’t, they were integrated; incoherent. He pulled his Konflips back against the stream of time, switching to a favourable context of events. Sadim’s eyes had drawn, in shattered fascination, towards the trampled Konflips. Masking fear, he crashed his face into a tanometer. ‘Very well. Why shouldn’t you try? I convinced myself I could touch the public for its money. It was only fitting you should be the first one to be touched.’"
ON THE WAY TO THE TAR

PART FOUR: GALACTIC EMPIRES

BY PETER WESTON

And Then There Were None' was written in the early 1920s, said Eric Frank Russell, that with the advent of star-drive every disaffected sect and nut-cult could head out and find its own world. Further, suppose one group were followers of Gandhi and carried his principles through into every phase of life on their distant planet. How would they react when rediscovered by an Earth government interested in tidying-up the fragmented cosmos? The result is hilarious! Mack Reynolds takes exactly the same basic idea, a universe colonised willy-nilly by every type of oddball splinter-group. Worlds of anarchists (Kropotkin), matrarchs (Amazonia) and everything else:

"Here’s Moret, originally colonised by a bunch of painters, writers, musicians. They had dreams of starting a new race... with everyone artists. For three hundred years they were untouched. What did they have in the way of government by that time? A military theocracy, something like the Aztecs. And what’s their religion based on? That of ancient Phoenecia, including plenty of human sacrifice to good old Moloch."

However, in ‘Ultima Thule’ the Earth government officially practises a strictly ‘hands-off’ policy. As part of the United Planets organisation each world is entitled to run its own affairs, no matter how weird its institutions. But in Section G of the Bureau of Justice is a little-known group whose job it is to subvert these worlds, nudge them out of the artificial patterns and nasty habits into which they have been set by their founding fathers.

There’s an interesting philosophical idea here, which Reynolds doesn’t fully develop. Will every society, freed of constraints, gradually evolve for the better? Will all these planets eventually reach a common level of maturity and enlightenment, a sort of Utopia from which the last vestiges of capitalistic, totalitarian, imperialistic, and so on will appear as children’s games?

Developed in this way the story might have been a parable upon our own world, in much the same way as Ursula LeGuin’s magnificent The Dispossessed. But Reynolds isn’t this sort of writer. Instead his protagonist goes on a Grand Tour to various planets, handing out transistor radios to make the young people of Kropotkin desire material possessions and destroy their state of anarchy and so on. Why? Because alien intelligences have been discovered and Earth and mankind must be ready for the inevitable conflict, when it comes.

Still, even if Russell’s and Reynolds’ ideas are a little corny, it’s quite likely that some existing national characteristics will be carried into space. In Heinlein’s Citizen of the Galaxy we have the Terran Hegemony, a vast sphere of stars some hundred lightyears in diameter, with its individual worlds retaining their distinctive flavours. Woolamurra, for instance, a pioneering, farming planet. Or more sinister, Jubulpore, capital of the Nine Worlds, settled by Irish and Orientals and riddled with nasty customs like branding, fogging, and slavery. Even more fascinating than Heinlein’s portrayal of these land-bound cultures are the ‘Free Traders’, a whole people who live permanently in space, nomads roaming from star to star and paying allegiance to none:

‘Oh, the People are free; this old Galaxy has never seen such freedom. A culture of less than a hundred thousand people spread through a quarter of a billion cubic lightyears and utterly free to move anywhere at any time. There has never been a culture like it and may never be again.

1 A mile-long spacecraft, a bicycle and an idea; combined together they could destroy the power of Earth!"
The notion is not entirely new; Anderson's 'Commercial Spaceport' predated Heinlein by several years in *Low Way Home*. But no one else could so well visualise the intimate customs the Traders have developed to keep them sane and contented. The only comparison that can be drawn is with James Blish's classic 'Okinawan trilogy', in which his flying cities are similar wanderers through interstellar space.

Many writers, however, prefer to think that exploration will be more controlled, less fragmentary. The arena of some sort of overall union is a familiar one in science fiction. Heinlein and Anderson's 'Future History' series centred around the Terran Federation which he expected would colonise many hundreds of other planets in the next thousand years or so. Piper's stories are not widely available today, although the writer, that an American public will shortly be re-issuing most of them in book form. The 'Future History' series comprises several novels, notably *Space Viking* and *Junkyard Planet*, plus *The Elves* and two sequels. There are also a half-dozen shorter works of which the most interesting is 'A Slave is a Slave'.

'Will all these planets eventually reach a common level of maturity and enlightenment, a sort of Utopia from which level all earlier doctrines of capitalism, Communism, and so on will appear as children's games?'

In Piper's chronology all dating is reckoned in terms of the 'Atomic Era', beginning 2 December 1942, on which the first self-sustaining atomic reaction was achieved. Thus by AE 200 the first voyage has taken place to other stars, and by AE 300 the first human colony is basically colonising hands of planets. However there is civil war, the secession of the System States Alliance, from AE 842 to 854.

The Terran Federation wins, but the strain has been too much. In less than three centuries it has vanished completely, and has left the worlds in such a state of savagery that only a few of the oldest-settled are able to retain their civilisation. Meanwhile, on a few isolated planets many hundreds of lightyears away the descendants of the System States fleet, which fled at the collapse of their rebellion, have grown strong and powerful. These, the Sword-Worlds, cautiously probe back into the space-volume of the old Federation... to find... picnics among the disorganised and disorfaced planets.

For three hundred years these 'Space Vikings' plunder and loot, until in turn their vanquished are vanquished by the rise of the Galactic Empire, the beginnings of which are described in the novel, *Space Viking*. The events parallel with our own history are clear; there is a little of the US Civil War, the fall of the Roman Empire, and even, as readers will find, the birth of Nazism. Piper was a great believer in the cyclic nature of history, and partly for this reason some have found his writings distasteful. Certainly his political opinions were, and are clearly seen to be, highly conserva- tive; but even so the sheer wealth of detail with which he endows his scenes makes them fascinating to the end.

Despite its grandiose title, Piper's Galactic Empire never encompasses more than a tiny fragment of the Milky Way. Much the same applies to Poul Anderson's Terran Federation which, like Piper's, consolidates an earlier, much looser state of government (or non-government).

Nicholas van Rijn is a character well known in science fiction. He is the fat, oily, but deadly shrewd boss of the Solar Spice & Liquors Company, one of a number of trading companies, human and non-human, which have banded together to establish their spheres of influence, form alliances and, for their selfish reasons, keep the peace:

'Selfliness is a potent force. Governments, officially dedicated to altruism, remained divided; the Polotes- technic League became a superpowerscience from Canopus to Polaris, drawing its membership from a thousand Melkens. It was a horizontal society, cutting across all political and cultural boundaries. It set its own policies, made its own treaties, established its own bases, fought its own minor wars-- and, in the course of milking the Milky Way, did more to spread a truly universal civilisation and enforce a last Pax than all the diplomacies in the galaxy.'

'Trader to the Stars'

'I like the Polotechnic League; it offers credibility where so many of the Hegemonic Empires and Federations did not. What are the silly lags for? Read Niven and Pou- nelle's *Mote in God's Eye* where there is a particularly firmish wordboard 'Empire' and compare it with the Terran's, where van Rijn and his cronies are so utterly true to life, engaged in everyone's favourite occupation -- making money? But all good things come to an end. Poul Anderson has combined the 'Trader' series with another set of stories he has written, made fuller in conception. These, the Dominic Flandry tales of swashbuckling interstellar intrigue, are entirely published in the flamboyant days of Planet Stories.

Andrew Thomas, Jr

'According to Asimov, the Empire at its peak encompasses two hundred million inhabited worlds and something like 8 x 10^4 people. We would then have the audacity to conceive such a monster!'

Written at a time of Earthly Empires, *Foundation* suffers these more liberal, more realistic data. In contrast, there is one writer who better than most has succeeded in cutting adrift from our own century and visualising an interstellar future of true grandness and enormity. Jack Vance began writing for the pulp magazines of the 1940s, but from the beginning brought a richness of description and an altogether new perspective to science fiction. His work leans heavily upon cultural anthropology, to present the most weirdly intricate societies, both human and non-human. A passage from a recent novel, *The Grey Prince*, explains the setting of his current series of stories:

'The space age is thirty thousand years old. Men have been able to reach star to star in search of wealth and glory; the Gasea Reach embraces a perceptible fraction of the galaxy. Trade routes thread space like capillaries in living tissue; thousands of worlds have been colonised, each different from every other, each working its specific change upon those men who live there. Never has the human race been less homogenous.'

So, in various books Vance introduces his differentiated types of man; in *Fire Gold Bands* the skeletal Alpharząt Eagles, and the sinister Shabo in *Jig*; the whole variety of physical types. Socially, his people live in equally disparate communities; good examples can be found in his famous *Raj Planet* and more recent compression novel, *Sleep-boat World*, and in the first of the 'Durance' trilogy, *The Astounding May 1980*.

Finally there is a beautiful short story by Walter M Miller which has always been one of my favourites. In a poetic, epigram style his *The Big Hungar* in his collection, *The View from the Stars*, captures in a few thousand words the flavour of that restive drive to some other world:

'They wanted the Big Freedom. They built me, these pale, proud bipeds, these children of an Ape-Prince who walked like a god. They packed themselves in cylinders of steel and wandering, riding starward on a heart-tempest that had once sunk them down from the trees to stalk the plains with club and torch. The pod of earth opened, scattering its seed spaceward. It was the time of the great bursting, the big-giving. Energy shattered in the storm. Sky and men throwing themselves upward to vanish beyond the fringes of atmosphere.'

Miller's idea is that the call to space is implicit in our genes. A fraction of the population -- the most restless, footloose contingent -- will go outwards, leaving the stay-at-home generation to remain on Earth in peace. The mutants land, settle, invariably revert to a primitive condition before climbing upward again and once more building starships. So the process goes on: man's trial and crossing; Earth lost and forgotten among the stars; each generation growing more restless than the one before it. The restless cry on moving, the complacent desire for peace. And eventually the whole Galaxy is filled -- with the planet-bourning men, the men in space, the last story, probably the ultimate expression of its theme.

4 The huge ships of the Space Vikings descend to plunder in the aftermath of the Terran Wars (Space Viking by H Beamer Pierce).

5 The entire galaxy has been colonised by men, and a monstrous Foundation is established. 300 years of barbarism (part of Asimov's Foundation trilogy).
Frank Kelly Freas was born in Hornell, New York, on 27 August long time ago. At present he resides in Virginia Beach, Virginia. He is a regular contributor to Analog, DAW Books, and other American publishers and is the exclusive cover artist for Harlequin’s Laser series. His Freas universe is a lush habitat populated by voluptuous women and craggy-faced men whose gleaming spacecraft race towards gloriously brilliant stars. It is, in short, romantic. Freas advocates romanticism in st illustration because that is the most intense means of communicating the human reaction to imaginary environments. For him, communication is the essence of art, and the relationships between people and their universe the essence of sf. His purpose is to show his audience how some new aspect of reality would feel to a participant.

Freas attacks this challenge by combining authentic details with a sensuous symbolism, thus convincing the viewer that a hypothetical situation is inevitable. The spaceship, one of his most distinctive images, is a good example of this process. Its design embodies a rationale for drive type and function and its luminous surface is rendered with extraordinary virtuosity, but it is also a consciously employed symbol of forward thrust and a component of our racial libido. Note the phallic feel about Zebina. In Freas’ work space travel is an emotional experience rather than a technological feat. He paints dreams, not hardware.

Freas treats astronomical subjects in similar fashion. The rays and auroras of his stars are scientifically justifiable but his romantic sensibility infuses them with an enthralling quality no stellar photograph can convey. His approach contrasts with the classicism of a Bonestell. Stars as decorative devices and symbols of the marvellous are recurring motifs as, for instance, in the Sin of the Fathers and Womanly Talent covers. It is tempting to consider stars as the feminine counterparts to the masculine spaceships in Freas’ iconography. Although his symbols balance there is an interesting divergence in the treatment of men and women in the artist’s figurative work. His men, often stocky of build and sonorous of expression, are individual members of a stylistic family; his glossy, curvaceous women are much less individuated. Not that Freas’ women really all look alike any more than Utamaro’s but they have been unduly idealised. They are archetypal rather than personages.

Freas’ figures may betray a touch of advertising art slickness in their lineages but he likes to display them against backgrounds of clouds, fire, ruins, or fantastic landscapes rendered in abstract expressionist style. Such effects are achieved by working with a loose, fluid medium (usually acrylics) and ‘letting as much happen incidentally as possible.’ The cover for The Second Kind of Loneliness is a typical example of this representational–abstract tension while that for The City Machine demonstrates the artist’s skill at leading from the familiar to the fantastic.

But, however far afield the viewer’s destination, Freas insists that art should begin with reality. First of all, this means awareness of the real world. For example, he takes compositions from random natural phenomena like oil slicks and wood grains in order to keep his designs as nearly organic as he can. It also means knowledge about the real world. The emotional and aesthetic qualities of Freas’ art are buttressed by careful research, processes in which the assistance of his wife Polly can never be adequately assessed (let alone stated). Manuscripts are read three times, files studied, scholars consulted (one prime reference tool is a list of experts’ telephone numbers), models built, and costumes made. Once he had to endure the company of a rotting duck for two weeks while struggling to capture the exact appearance of light shining through its feathers. Acquiring enough information to build a mental universe for one assignment, then tearing it down to start preparing the next, is a considerable mental strain. For the serious sf illustrator, he observes, ‘future shock is almost a way of life.’

Freas never fails to do his work properly although fine details are doomed to be lost in reproduction. Almost as a matter of routine his illustrations are cropped, blurred, or saturated with the wrong colour ink. One was even printed upside down and back- wards. Frustration has led him to issue portfolios of high quality reproductions himself. These enable the public to see the picture as it was actually painted.

Freas attributes his zeal for authenticity to his long association with editor John Campbell who taught him ‘a great deal about the intransigence of facts. Campbell liked facts, the more obscure the better.’ The discipline of ‘working with this relentlessly practical man combined successfully with the inspiration he received from other artists. Among main-stream figures he cites Blissett, Moran and Church for their ability to convey the alieness of the New World; Remington, Russell and other Western painters for representing accurate detail; and Klint for colour and light. Within the sf field he expresses great admiration for Finlay’s superb penwork and Cartier’s ‘light-hearted and light-handed’ approach to illustration. Beyond these, he claims, ‘I have been influenced by every painter that I have ever seen’. Freas maintains that the only proper approach for an illustrator is eclecticism. He pursues appropriately varied hobbies (history, Oriental studies, weaponry, music and, formerly, the martial arts) and has enjoyed an unusually diversified career. Although Freas has read sf since childhood and sold artwork since his teens, it was only after serving in the army, programmes in engineering, mathematics and medicine; studying art at the Art Institute of Pittsburgh, Carnegie Institute, and the Columbus School of Art; doing commercial art for the aircraft and construction equipment industries, and directing television advertising, that he brought all his interests together and became a science fiction illustrator. He sold his first cover to Weird Tales in 1950 and worked extensively in the pulp before obtaining his first Astounding appearance in 1953. (This cover, for Tom Godwin’s ‘The Gulf Between’, was subsequently used on the John W. Campbell Memorial Anthology.) His two decades of contributions to Astounding/Analog have shaped its visual image. He has won more Hugo’s than any other individual in as well as awards for fashion design, billboard art, and editorial illustration.

Freas has also painted comic covers for Mad, done hundreds of portraits of saints (who look suspiciously like Analog characters), and illustrated children’s books (most recently Gremlins, Go Home by Gordon R Dickson and Ben Bova).

Freas has expressed his keen support of the space programme in a set of posters which is in the collection of the Smithsonian Institution. He has attended the launches of five manned space missions and was an official NASA artist for the recent Apollo-Soyuz Test Project. He designed the mission patch for the Skylab I crew at the request of the astronauts. Barring the availability of a berth to Mars, his fondest wish is for a chance to ride the Space Shuttle.

Freas is the complete professional. His romantic vision is coupled with devotion to fine craftsmanship, self-discipline, and technical competence (‘a word in disrepute among the painters and their agents who prefer to stress novelty and shock value, which they can palm off on the uninformed as originality and deep insight’). He regards art as a pleasure-giving mode of communication, not an expression of the artist’s psyche. The artist must subordinate his private concerns to his work’s purpose, in the case of an illustrator to conveying fictional moods and ideas. He insists that ‘any illustration must be the better for knowledge of the story. (Conversely, one might maintain that many stories seem the better for his illustrations.) He is especially proud of the cover for The Warriors of Dawn as both an illustrative and an aesthetic achievement.

But rather than be cited for this or any other single accomplishment, Freas would prefer to be remembered as an illustrator who ‘tried his very goddamnest’ in working for the field that he loved. Not only does Freas love sf, he has a lofty opinion of the genre’s importance for civilization. ‘If it is a literature and art of inquiry and alternative,’ he declares, ‘Culture, human or alien, is our business. Our work is nothing less than the growth and development of the human soul.’ He is anxious to convince society of sf’s message “that this is a very big and very beautiful universe.’ Freas predicts: ‘There will always be a need for artists, particularly of the type we call “Science Fiction Artists”,’ to ‘put around the edge of reality and point out their perception of its beauty and its wonder.’
FRANK KELLY FREAS

THE ARTIST IN HIS STUDIO

BY SANDRA MIESL

Whether it means confronting a goat or cruising on a nuclear submarine, Frank Kelly Freas will do whatever is necessary to produce effective illustrations. This dedication expresses his confidence in the importance of his profession. “It’s all right to question your own ability to express the idea; but when an artist questions the value of what he has to say, he hasn’t anything to say.” Worthwhile pictures are the fruit of firm convictions.

Among Freas’ own convictions are beliefs in the value of illustration and in the legitimacy of commercial art. An illustrator is first of all an adept fine artist; “but his work begins where his play as an easel painter ends.” He denies any automatic superiority of status to fine art. This species is now chiefly defined by its usefulness although the admired works of other ages were purposeful creations which expressed the concerns of their societies. “Self-expression is unquestionably good psychotherapy – but there its significance stops.” Artists should not be solipsists. Illustrators cannot be.

Illustrators are distinguished from other artists by a “desire, which eventually becomes an ability, to dig into and drag out of the subject aspects, moods, relationships, nuances which are absolutely not expressible in words.” They make their audience ask questions (Why does a crossbow exist with a high-energy artillery piece in The MoleWorkers? How were those glassy battlements constructed? Who, or what, is wearing that ghastly costume?) and summarise their emotional experiences (desire in Zenya, trust in The Gulf Between). Illustrators function by expanding and focusing their viewers’ minds.

Freas strives to create mind-expanding and mind-focusing science fiction illustrations that will be both aesthetically pleasing and commercially useful. The following descriptions of his working methods are necessarily schematic. Each assignment is unique.

The artist tries to avoid stereotyped routines lest he hobble his imagination.

First catch your rabbit; first catch your manuscript. At the beginning of a career getting work can be more difficult than doing it. The first portfolio Freas submitted to John Campbell was a masterpiece of neophyte pretension consisting of expensively contrived mockups of Astounding pages. It was returned to him scathingly by Campbell’s wrath. Only after several humiliating years in the pulps (when the train fare to a magazine office might equal the fee earned there) did he dare approach Campbell again. This meeting soon led to his first AstF cover, The Gulf Between, which Freas still counts among his special favours. The painting shows a giant robot beseeching someone to heal the mortally-injured human he holds in his hand. This sombre and innovative illustration ignited the artist’s career in sf.

Over the past decades Freas has worked with every breed of editor: experienced ones able to propose illustrations intelligently and those whose notions of sf are shaped entirely by Japanese monster movies; those who leave everything to the artist’s own initiative and those who leave nothing; ones who specify the exact quantities of nuts, bolts or bubbles on a gadget, and others more concerned with the number of sequins on a costume.

As a joke, Freas recently sent one of his more restrictive clients a preliminary sketch featuring a totally nude girl. (A few spangles painted on an acetate overlay sheet only compounded the scandal.) After the shrieks subsided he dutifully clothed the heroine in a skin-tight garment on the finished cover – just as he had intended all the while. The usual compromise in such cases is a judicious pose. This approach can be more titillating than actual nudity, as in the cover for Ambassadors of Flesh from Planet Stories.

In addition to the editor, an illustrator also has to satisfy the art director. His challenge is to reconcile the demands of a verbal (but not visual) party with those of a visual (but non-verbal) one. Freas’ response to this challenge begins with thorough preparation for each assignment.

When a manuscript arrives in the mail, Freas reads it. (Most sf artists do the same, but other kinds of commercial illustrators often work from a page of specifications instead of a text.) His wife reads the story too, and they discuss it. Then he reads it again with a critical eye, searching for potential subjects of illustration. His notebook contains such entries as a
helmet, or a doll wrapped in plastic film for a girl in a transparent spacesuit, work in some cases but others require a more delicate touch.

Fres almost wanted to do a lunar Christmas scene with the moon-

basil reflected in a Christmas tree ball as the focal point. Rather than

distort the distortion and perspective, he set up a mini-furnished

ornament on one corner to photograph the building reflected on the

spherical surface. The resultant image gave him a useful starting point

for his own work.

Work involving people requires simple costuming and accessorising

and so Fres focused on the Kettles family (his daughter posed for A Womanly Talent; the boy in Second Kind of Loneliness resembles his son), friends, and local enterprise. So indefatigable is he in the pursuit of interesting faces – restaurants and bars! – and situations that an American fan has written a warning poem to

stay alert to the artist’s presence lest when you wake up your

decency has been snatched. See the poem (which appears on the cover for Renegades of Time). Fres also impresses himself into service as a model occasionally. He can grimace and wave a blaster convincingly (as for Your Haploid Planet) but finds comic roles more comfortably

eaten by green, grey venoer in Marslans, Go Home! and the battered lion-man in Pandora’s Planet.

The artist is continually adding to his mental file of artefacts as well as faces. Real jewellery becomes the perfect accessory worn in Hard to Be a God was so flattened he bought the cover painting to all his books from the book to use in advertising.) Structures at Kennedy Space Centre are transferred to other planets. Alien creatures are designed to look like dolphins since form can be reasonably expected to follow the same function elsewhere. The extraterrestrial being in Sins of the Fathers has extra fingers but which are not unlike our own.

These are the usual ingredients of the cover on which Fres

obeys his own injunction to observe the known world before that of the unknown one. He insists that ‘the more fantastic the effect desired, the more essential it becomes to produce a feeling of conviction in the reader. At last the artist is ready to distil his accumulated knowledge into image. The chosen study must be enlarged to working size (usually 16 inch x 20 inch). One way of doing this with an opaque projector is to project the line drawing. Fres normally paints with acrylics which he prefers to oils because he thinks the paint with brushes, pens, palette knives, sponges, crumpled paper or plastic film, hollow reeds, spit, airbrush, or any other tool that comes to hand. He uses the airbrush only sparingly (for example, to accent the hearts of siblings in Family Will Call with the instrument. He does not object to its mechanical nature but to its obviousness. However, he obtains unusually subtle effects by glazing layers of dyes suspended in thinned acrylic gel. There is little chance of over- using this technique, which is fortunately very difficult to clean the airbrush afterwards.

Work begins with thin layers of paint which grow progressively stronger as they dry. Fres applied with a virtually dry brush. The suble colouring of the back- ground in Second Kind of Loneliness was stroked on with a palette knife on top of brushwork.

Frees achieves some especially lovely effects in his backgrounds by cracking the paint, blotting it with tissues or paper towels, or spreading its paint with the effect of detergent. The enclosing maelstrom in Second Kind of Loneliness and the dappled night sky in The City, Machine are examples of such controlled randomisation.

Frees’ debt to abstract expressionism has been

imperceptible. The artist is most often asked about his techniques of rendering surfaces: ‘How do you make metal look so metallic?’ His exasperating answer is: ‘You look at metal and paint what you see.’ A shining surface appears as if it could be seen with the light shining on it, faceted, shiny, so that when the viewer comes to look at it they recognize the way they absorb, reflect, or scatter light.

The call light ‘my most important pigment’ and explains, ‘I use call light as a subsidiary, a shadow. When I work I am not concerned with how to render a lighting effect. I am concerned with how to use the call light to express the mood or idea I am after.

Fres, using mixing paint in Zenya, a science fictional cousin of Gustav Klimt’s Judith. He expresses the allure of feminine ecstasy in the simmering language of the face. The most subtle touch is the glow from the rocket reflected on the woman’s satins-like cheek. This links the major and minor composition. Thus the title and the visual and the archetype share the same order of sense.

The same virtuosity is splendidly exhibited in The Warriors of Dawn. Colour tones unmistakably indicate the time of day. The atmosphere is heady and holds rugged mountain peaks and orbiting meteors inconvincing aerial perspective. A styly vehicle and the sparkling trail of its exhaust lend scale to an enormous ovoid vessel. All the elements blend, recognize, and tell something to Magritte but the luminosity is pure Fres.

The artist takes certain ingenious precautions to protect his work. He has got so skillfully used to

work to last for the sake of his collectors and also to save his work from the destructive forces of time. Fortunately, acrylics are exceptionally durable – the paint film can be expected to outlast the illustration which supports it. But finicky to the intense lights used in photographing art for reproduction and probably very fadeable. The acrylics can be damaged under these conditions. Fres knows from experience which pigments are most likely to suffer. He reduces the possibility of spraying them with a dye sensitive to light suspended in acrylic by using a cyan base. He does not expect the pigment and the picture returns to normal. Forever coats of polyurethane varnish and a special matt-finishing spray sold for protecting photographs. The cover painting is ready for delivery.

The cover may or may not be accompanied by interior illustrations. These go through a much shorter evolution, from simple compositional sketches to final drawing executed in pen and ink, tempera, marking pen, or acrylic. The interiors are not necessarily easier to do – they may require extensive background work of their own apart from the research already done for the cover. Although printed in black and white they are not always drawn that way. The acrylics are often painted in monochrome brown – these works were the cheapest and most advantageous of uses can still be negated by bad printing. The originals of the fuzzy, murky interior of Lifeboat had been expected to reproduce well, but the cover painting had been colored by red, sound brown and deep purple tempera.

Since the cover painting is often the most notable interior illus-

trations than covers, Fres has more opportunities to experiment inside. He can employ a wider variety of styles in the same story. The style of the serialised Pitcher Mass is illustrated in a differ-

ent way from that of the long story. A style which is also

characterised by humour and abstract design. The confident draughtsm-

manship which characterises Fres’ drawings, what-

ever the style, was developed over the years to correct errors. When the artist makes a mistake, he starts again.

Delivering the cover would seem to be too routine a matter to deserve mention. But like every other aspect of illustration, it has its pitfalls. Fres chose a standard dimension for his cover paintings because he used to cover the largest size of photographs on his portfolio he could carry on an aeroplane as hand luggage. Covers that must be shipped in plywood cases sturdily enough to survive being knocked by a truck – as has happened. When Fres was living in Mexico he had even passing tourists to carry his paintings across the border. The export restrictions on mailing art are as severe for a magazine cover as for a Mayan fresco.

The editor must approve the finished work before putting it in the magazine. Fres was apprehensive that a third cover for Campbell was a surrealistic landscape in which an airbrushed ochre plain receded into an arid, sandless infinity. To the artist, the styling was an exercise in tour de force. To the editor, it was illogical. Campbell demanded a more liberal, more contemporary, less ‘romantic less plain’. Only after Fres had painted the turf, blade by individual blade, did he admit this improved the picture. Now the editor’s corrections are expected to be able to paint out the changes later. But he had not received the cover until after submission.

So a few weeks (or even sometimes a few days) after the manuscript was received the completed art-work goes to the printer. Covers are photographed with a one-shot camera which sometimes colours into the three primaries plus black. Four-colour offset lithography is the standard means of commercial reproduction today, but pulp magazines used a cruder three-colour system which did not register black at all. (Muddy purple made a poor substitute.) Moreover, an offset print reproduces the contrasting colours isolated in different parts of a photograph. The lack of proper shading and the inability to show transi-

tions between the phases of light proved frustrating. The vividness and sheen of his originals stem from these strong contrasts and measures. All too often, he need not have bothered.

Bad printing is not the only way to spoil visual impact which supports it. But the submission Fres not only devised a striking emblem, he paid equal attention to practical considerations. His design work knowledge of type and typography, of modernism in embroidery. But he could not foresee how NASA would make it work.

Yet despite everything, visual excellence does prevail. The disciplined imagination of Frank Kelly Fres has given science fiction illustration another dimension – the eye and stimulate the mind. In our enjoyment is his vision.
Forty-two years ago Universal Studios made a mediocre Adolph Wohl's novel The Invisible Man. It starred Claude Raines in the title role, a version by the great James Whale and was not only a fast-moving, exciting film but also a very funny one, full of black humour and some eccentric touches that Whale, himself a rather eccentric person, loved to include in his work. Even when seen today it remains an admirable film, despite the occasional creaky line of dialogue, and of course the special effects also remain as impressive as ever thanks to the skill of Universal's effects chief of that period, the late John P. Fulton.

This year Universal, continuing their recent tradition of remaking their fantasy classics of the 1930s for television, have put out The Invisible Man. Frankenstein and Dracula are two others that have suffered this indignity; they were turned into four-hour specials for American tv but released in Britain, in shortened form, as feature films. The Invisible Man, however, has suffered even worse fate: it's been made into an entire series (actually it's the second time that a tv series has been based on the character – some years ago there was an awful British version produced by Ralph Smart) and though I've only seen a few episodes to date that's more than enough to be able to say that any similarity between the series and the film is minimal. In fact the only thing the same, apart from the title, is that both Claude Raines and David McCallum, the star of the series, are rather short men of British origin. McCallum, unfortunately, lacks a distinctive voice – an impersonation of playing the character. It is thanks to Raines' velvety tone that the character remained so memorable (and also launched him as a Hollywood star) despite one seeing his face until the end of the film.

The story in the first episode of the series was mediocre in comparison to the Whale film, in that the Raines' character, called Griffin, was a scientist whose mind had been affected by the invisibility drug, turning him into a megalomaniac with dreams of world conquest. McCallum is also a scientist but he discovers the secret of invisibility as a spin-off while working on a matter transmitter (that's similar to trying to find a cure for cancer and coming up with a faster-than-light drive instead). His mind isn't affected by the experience, at least not in any obvious way, and most of the drama in the first episode resulted from his trying to prevent his secret from falling into the hands of the military and a group of criminals. All rather basic formula stuff that you can see on almost any American tv series. The humour of the original was also missing, though there were one or two wry jokes about what effect being invisible was going to have on his sex life. The one touch I really liked was the sequence where he broke into a blind man's home and asked for assistance, but instead of being the kindly souls that blind men usually are in films of this type, this one pulled out a gun and started blinding in the general direction of our hero.

Another major difference is that McCallum, unlike Raines, isn't invisible all the time. Instead, with the help of a plastic surgeon friend, he has devised a 'life-like' mask and gloves which, when he's wearing clothes and a wig, make him seem all there. Obviously he can't open his mouth too wide, for people would see the back of his wig. The problem of his eyes was overcome with contact lenses – overlooking the basic problem that if a man was really invisible the light would pass right through his retinas, causing him to be completely blind.

Of course, the major attraction of the whole thing is the invisibility itself and the skill with which it is handled by the effects people. The major difference in the effects is that in the film they were created photographically, while in the tv series they are created electronically with the use of Video Image Transform techniques. In a recent issue of The American Cinematographer the head cameraman on the series wrote, "Filming the effects involved the use of two sets, each of which was shot with its own separate video camera. One was the actual set designed and constructed exactly like any conventional set with real furniture and props. There was the blue set, which was backed by a large monochromatic blue cyclorama and had duplicate furniture and props also painted in the same light monochromatic blue. When the system was properly balanced by the video engineers anything in the blue set that was blue remained invisible while anything that was not blue appeared as visible. The signal from the video camera viewing the blue set would insert anything that was not blue into the signal from the second video camera which was framed on the actual set. Thus an object, face or body that was not painted blue could be made to appear realistically in the actual set, provided that positioning, aligning and panning of the separate cameras were matched and synchronised precisely. By using monochromatic blue makeup, blue body stockings etc., parts of a body wearing a sweater or trousers could be made to move around on the actual set. This composite picture was then recorded on video tape and transformed to film." So now you know.

Actually, because I'm a traditionalist in most things, I prefer cinematic special effects to the rather more modernly developed video ones. No matter how well the latter are executed and there have been some spectacular achievements in the field in recent years, they still somehow seem cheap compared to the conventional photographic methods; they seem to lack a certain artistry (I feel the same way about most aspects of the film versus videotape question). That probably just proves you can be pretentious about anything, even special effects, but I do believe that the effects in the film version of The Invisible Man were more impressive and more of an achievement, despite the primitive techniques, than those in the series. Obviously there's a limit to what you can do in a tv series because of the lack of time and money and I do admit that some of the effects in the first episode were quite spectacular, particularly in the sequence where the surgeon painted McCullum's invisible face with the rubber solution, and also the one where he inserted the contact lenses into McCullum's eyes (it takes a brave man to allow someone to insert lenses into your eyes when you can't even see your face), but many of the effects were just too carelessly handled. For instance, not enough care was taken with sequences that involved the collar or the cuffs of the invisible man's sweater – naturally the camera on the blue set is only going to transmit those parts of the sweater that are visible, which means that even though McCullum's blue-painted face, hands and neck will appear invisible in the finished composite they will still obscure parts of the sweater, such as the back of the collar. In other words, if he was really invisible you should, from certain angles, be able to see into the sweater but of course this is not possible. The same thing applied when, in one scene, he unzipped his trousers (purely in the interests of fighting crime) – you should have been able to see the back of his trousers but instead you saw through them. It would be extremely difficult to overcome this problem, it would probably involve the old and time-consuming technique of hand-painting each frame of film and that's obviously out of the question as far as a tv series is concerned. Really, all they can do is try and avoid using set-ups which reveal this rather serious flaw in the system.

The possibilities of what one could do with the subject of invisibility are almost endless, but on the evidence of this series it is not going to break any new ground. Instead it appears to be just another variation on the theme of cops, robbers and secret agents, and there's enough of that kind of thing on tv already.
ManCon 5: A Reminder

The 27th Annual Science Fiction Convention will be held from 16 to 19 April this year at the Owensa Park Hotel, Manchester. Robert Silverberg will be the Guest of Honour and several other sf personalities are expected to attend. Full attendance membership will cost you £2.50 and details can be obtained from Brian Robinson in 9 Linwood Grove, Manchester, M12 40H.

The 'Death Ray' Arrives

The 1976 edition of James Weapons Systems includes mention of a 'death ray', a weapon which has previously only existed within the world of science fiction. Mr Ronald Pretty, the book's editor, refers to it in his discussion of the advances made in the military use of lasers. Lasers are extremely powerful beams of light which are already being used in bomb-guidance systems and the kind of ranging devices for guns that can be found in Britain's Chifley tank.

In the foreword, Mr Pretty says, 'Beneath the guarded references to high-energy laser research and development in American Department of Defence publications, and behind the virtual Soviet silence on the subject, it is probable that these lasers have not only been looked at in a costly super-scientific struggle to first with a practical laser weapon capable of destroying a military target...[by means of the energy the laser is able to generate...in fact the death ray so beloved of generations past]'.


MUSIC & SCIENCE FICTION

RED OCTOPUS
Jefferson Starship (RCA BFL1-0999)
Reviewed by Maxim Jakubowski

One of these days, if time, wife, bouncing daughter and SFM ed allow it, I might well neglect current releases and get around to writing a long, in-depth analysis and review of a critically underrated record issued back in 1970. I am referring to Jefferson Starship's Blows Against the Empire, a beautiful, hallucinatory, spirit and image- and high-flying music full of feeling and energy, devised by Paul Kantner and assorted friends in the San Francisco area.

This idea is of course prompted by the fact that Red Octopus, the new offering by Jefferson Starship, is now in the shops and, furthermore, at the recording works. No 1 in the US record charts. Of course it hasn't got anywhere in the UK, thanks to our ever discerning record buyers!

Ever since the famed Jefferson Airplane began to crumble and reorganise as a Starship around Kantner and Grace Slick, there had been a severe critical backlash against their various musical contributions. It is only with the new record that reviews have once again become favourable and commercial success has followed. This is a pity. Don't get me wrong. Red Octopus is way ahead of most of the music being released nowadays and unashamedly deserves its popularity. What I do regret is the fact both with the return of mellow-

voiced, sentimentaliser Marty Balin to the group. Kantner has had some success in levelling his obsession with fury. I, for one, was very fond of Starship's latest album. It is an injection of Kantner's idealistic immature at injecting the soul of social revolution into rock music through the intermediary of SF, in spite of the admitted naivety of the subject matter, it is almost perfect.

Red Octopus? Well, it's a lovely album in its own right and deserves a listen, but I fear the Starship's next record might not warrant inclusion in a sf and music column. Musically, it's a treat: Balin's unctuous vocals might well bring the rare back to bed-sitterland: Grace Slick (who, in recent photos, is getting to look more and more like the Elizabeth Taylor of rock) still has that incredible soaring voice; Papa John Creach's violin swills over everything. Kantner and Kantner does contribute one Wagnerian driving sf song 'I Want to See Another World', while Pete Sears' instrumental 'Sandalphon' goes nowhere beyond its evocative title. There is no doubt that Marty Balin's obsession was not only on record, but also are the best and, I don't know if it's wishful thinking, but there are hints here and there in his lyrics that he might well have caught that old sf bug off Kantner.

(You're)...warm as a piece of the sun and darker than night to a blind man...softer than starlight shining...

A love and sf album? Now, that is something I would look forward to.

SF IN THE CINEMA

BUG
Reviewed by John Brosnan

Last year we reviewed interviewing American producer/director William Castle he was very enthusiastic about the film he was then about to make. At that time it was called The Hephæstus Plague, based on the novel of the same name by Thomas Page, but it has now been released in England as Bug. (No doubt an attempt to get on the Jaws bandwagon, though obviously they couldn't call it Bugs for fear of creating the impression it was about a well known rabbit.) However, it isn't quite the same film that Mr Castle was enthusing about. For one thing the bugs themselves seem to have shrunk. According to Castle they were going to be this time the jungles of South America and are nearly a foot long and very frightening. Perhaps the main reason that the 'bugs' died off before shooting began, leaving behind only their smaller relations who appear to be a mere four to five inches long is that the 'bugs' are missing is the 'feeling' gimmick Castle told me would accompany the film. During the opening of the picture the roaches will seem to lose in the theatre for the roaches actually crawling over their legs! I will be similar to the vibrations in Earthquake. I wasn't very impressed with the idea. It is one thing to have your fillings shaken out by a simulated earthquake but to feel cockroaches crawling over your legs, even four inch ones, while watching a film seems to me to be the sort of thing that would just amuse the rather than fill it. Apparently someone succeeded in getting across to Mr Castle; either that or it was found to be too expensive to produce.

William Castle has always been a showman, he made his reputation with a series of horror films in the 1950s that utilised far-fetched publicity gimmicks such as 'flight breaks' which involved stopping the film for sixty seconds to allow frightened patrons to leave the theatre (of course, few ever did). However, it is usually one of the cheap exploitation variety though often they contained at least one sequence of outstanding horror. Castle had always been the sort of maker when he wanted to be but had long ago decided that exploitation films were his forte and he maintained this attitude until he produced the classic Rosemary's Baby in 1968.

Now it appears that he has returned to exploitation with a vengeance, as Bug offers little more than cheap and unlikely thrills. I suspect that the novel, which I have not read, may have a serious method - an Old Testament type warning for mankind to mend its evil ways lest God be provoked into unleashing a fiery retribution - although the author had a hand in the screenplay his original intention, whatever it may have been, is kept obscure. True, the film (which is directed by Jeanne Szwacz) does begin with the interruption of a church sermon by a timely earthquake but after that the biblical theme gets lost in the confusion. The earthquake, situated near a small midwestern American town, creates a fissure from which emerge a number of strange insects. (Castle's South American roaches). The bugs are capable of creating fire by means of rubbing two rear appendages together and immediately start igniting sections of the surrounding countryside, all with care, people and good fortune. Bradford Dillman, becomes obsessed with the unusual little creatures and discovers that they are unable to breed, or even survive for very long, because they come from deep inside the earth and are therefore suffering from enormous internal air pressure (he proves this by sticking a pin in one and watching as its insides blow out with incredible velocity). While he is carrying out this nauseating experiment his own wife falls victim to the bugs. One of them crawls up her back while she is at work in the kitchen and sets her head alarm (in a typically macabre Castle touch she is reading aloud from a cook book on how to prepare smoked salmon when the bug strikes). Up she goes in flames, and at the same time is transformed from a slim woman in a den suit to a hefty stunted man dressed in bulky protective clothing.

The scientist gives a little more blood and starts breeding the bugs in a special pressure chamber. He mates them with a local variety of insect and ends up with a new species that has a liking for raw meat besides the ability to spell (yes, spell). He discovers this latter attribute when they spell his name on a wall with their bodies. This upsets him a lot but he doesn't crack up completely until they consume his best friend's wife who had come to lend him, of all things, a bible. The bugs will disappear then and when he goes out into the night to look for them a number of glowing insects fly out of the fissure (very spectacular too). He runs back inside the house but they break in and set him on fire, so he runs back out and falls straight into the fissure. The fissure explodes in flames, the bugs all fly back down into it - then the fissure conveniently closes. End of film and the members of the audience begin to scratch their heads in puzzlement.

What it was all supposed to mean I have no idea; nor, I suspect, does Mr Castle. It certainly wasn't good enough for the scientists to be, and if it was supposed to be religious propaganda it was equally ineffective. Actually it reminded me a great deal of Phase IV. Both films were about a scientist who became obsessed with the problems of life as a class was eventually destroyed by his obsession (oddly enough, both scientists fell down a hole at the end). Another thing the films have in common is that the brilliant Ken Middelheim handled the insect photography in both, though his work was put to better use in Phase IV. I don't know - perhaps the roaches crawling over the legs of the audience would have been a good idea after all.

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BUG

BU
Matz looked sideways at Jorvin, that lumpish head inches away to the right who shared the shoulders, shared all of the muscular, skin-chew body with him. Jorvin was intent upon the goat in the verdant, snug-in space between the stained cliffs of dead buildings with their rows of empty, black eye-sockets. They needed the goat. They had queued the thirst of the dust bowl in a sewer where the water ran sweet after a couple of centuries of winter rains; but their hunger remained.

A girl appeared, walking into the sunlight from a dark, square cave at the foot of one of the buildings. She skirted the corn patch, coming towards the goat. Her hair was long, the colour of honey. She, too, was dressed in skins. Matz glanced sideways again. Jorvin was staring; his near, crooked eye had managed to widen a little from its usual droopy-lidded state.

Matz stirred too. "She’s a normal!" he said.

"Norm pig." Jorvin raised the bow and aimed at the shaft.

"Two eyes and a nose don’t make a norm, Jorv."

"Two eyes and a nose, two feet and ten toes..." mocked Jorvin. "It’s enough for me. Jorv, so! She’s beautiful!"

The girl was perhaps 18 years old and came close to the normal ideal of symmetrical looseness that all freaks secretly acknowledged.

"She’s a norm pig," said Jorvin again as he drew the bow back in an angry curve, his skew eye glaring.

"We’d caught a norm. Matz tossed him a knife and he killed himself before we could torture him.

As the archer, Jorvin needed to control the arms; he could usually master them both in spite of Matz when a struggle of wills developed, if he was prepared for it. But Matz gave no signal. He jerked the left arm just as Jorvin released the arrow. The dart buzzed past the girl, piercing the rusty tin wall beyond with a clang. She ran like a scared rabbit.

"My little idiot left-hand brother," hissed Jorvin. "One of these days I’m going to cut your throat!" He began to run.

Matz could probably not have hindered the legs, he did not try; he was loath to lose sight of the girl. They ducked into one of the buildings. In the first small room a few eloquent, eerie skeletons in the rubbish that had collected in the corners. They rushed along a gloomy corridor emerging beside a stairway in a hall where their footsteps echoed. Through a broken door in a wall of glass, and they were running down wide steps out into the yard. Some of the trees that lined the street were dead and fallen. A few wild ones grew, cracking the asphalt. An old barrack stood stretch out, partly buried in blown earth and grass with the rusted frames of cars sticking out like the skeletons of dinosaurs.

A manhole cover banged shut.

"She’s strong," said Matz as they lifted it.

The iron rungs still jutted solidly from the concrete wall of the shaft. At the bottom were black tunnels and the low-key sound of running water.

"We’ll never find her down here without a light," said Jorvin. They began to ascend again.

Matz and Jorvin were once more at the sixth-floor window from which they had first observed the oasis of green. The sun was setting, baking the upper walls of the silent buildings in gentle warm light. Down below, the corn patch, the vegetable garden, the hut and sheds and water tanks lay sunken in a filling pool of shadow.

"Do you think she’ll come back, Jorv?"

"Where else would she go?"

"I don’t know. But what’s she doing here all alone?"

"What anybody doing anywhere?" He paused. "She’ll be back."

"There are the goats, I suppose. She’s young and alone—she must love the goats."

"Love?"

"There was a silence.

"Jorv..."

"What?"

"You’re not still going to kill her, are you?"

"My soft little brother! You’re cow-eyed over a norm."

"No, Jorv... but you mustn’t kill her."

"Well what shall we do with her, then? Oh, I know, I know. I saw her legs when she ran. That’s it, isn’t it?"

Silence.

"Well, why not?" went on Jorvin. "So what if she’s a norm? There’s no one here to find out."

"No, Jorv... I don’t know."

The last index finger was winding upon the concrete cliffs.

Matz spoke again. "We’d better find something to sleep on. It’s getting dark in here."

"Yeah. She’ll be back in the morning."

She was. She watched her cross the space to the goats. She seemed to speak to them, they shivered with their but, warmly. Matz and Jorvin ran down the stone enormous, some window.

The thin door of the hut was ajar. They looked around the post, leapt and grabbed her before she could make for the sick-hung window. Her eyes were wide, a clear grey-blue. Then she kicked and tore one hand free. Quick as that! I’ll break your arm," said Jorvin.

She shrieked.

"Matz said, ‘Don’t, Jorv;’ and to the girl, ‘It’s all right. We won’t hurt you. We just want some food.’"

"Who are you?"

"They still had her wrist. ‘I’m Matz, he’s Jorvin. We’re alone. We’re just travelling through, but we ran out of food and water in the dust bowl.’"

Her tears were less fearful now. She looked away. ‘I can get you some food, but not while you hold my arm.’

Matz made to let her go, but only the left hand slackened its grip, then it tightened again as Jorvin took over. ‘He won’t hurt you, but I will if you don’t behave, and I control the body. Don’t try to run away again. I’ll find you and kill you. I can follow scent like a dog.’

Matz felt an impulse to reveal this lie, but he let it pass.

She gave them leathery cakes of cornflour, some apples and some goat’s milk. She sat upon the earthen floor before the stove, spread her knees and took a block of softwood between her bare feet. She placed a hard spindle in a hole in the wood and began to twist it with a fire bow.

"What’s your name?" said Matz.

She did not answer immediately, concentrating her whole body upon the production of fire. The stick squeaked as it whirled, smoke rose from the tinder about its lower end. The goatskin skirt had slipped back from her knees. Jorvin paused in his eating.

The girl picked up the wood, blew the tender gentry and carried it to the stove.

"What’s your name?" said Matz again.

"Aminka. She was watchful."

"How is it that you’re living here alone?

"My father died."

"He was a norm too, of course?"

"No. His left arm was tiny with six fingers. Some norms cut it off."

Jorvin spoke, his voice deeper than Matz’s, his mouth full of food. ‘So you and your father were always alone.’

Aminka looked at him. ‘What’s your name?’ she said.

"We told you, Jorvin."

"Where are you going?"

"Anywhere, or maybe nowhere."

To Matz this answer held a threat, but if the girl noticed she gave no sign. She had built a blazing fire in the stove and was warming a pot of stew. ‘What about your family?"

"They threw us out," said Matz.

"They threw out my idiot brother, here,’ said Jorvin. He showed his teeth. ‘We’d caught a norm. Matz tossed him a knife and he killed himself before we could torture him."

"Why didn’t you stop Matz? She watched the pot, stirring.

"I didn’t know what he was going to do quick enough."

"And if you hadn’t argued about it afterwards no one else would have known," said Matz.

"He’s always been soft, but lately he’s got worse," said Jorvin. "I’ll cut him off in the end and burn over his neck."

Aminka divided the stew into two bowls which she placed before them. ‘I’ve never seen a freak with two heads. Were they both there when you were born?"

"Yes," Jorvin showed distinction.

"Sometimes things grow later," she said. ‘A boy in our family grew a third arm, but it wasn’t much use. I’ve heard normals can grow new parts, too."

"Then their families kill them,’ said Jorvin.

"When I was young I used to wish I could grow another eye and be a proper freak. ‘You had a family,’ said Matz.

BY ANTHONY PEACEY

"It was small. Father was bosman. Three normal children were born, I was one. Our parents made nearly half the family, so they kept us, but there was a lot of trouble."

"You were driven from the family too?"

"No. We got along until I was 9; then the family was wiped out in a norm raid. Only father and I escaped. We travelled a year before we found an empty city."

"Has no one ever been here?" asked Jorvin.

"A few have passed through. One man found us. He stayed a few days then disappeared. I think father killed him."

The stew had been hot. Now they started eating it.

"How do you catch the pigeons?" asked Matz.

"Fish hooks baited with corn cake. She looked in the stove. ‘I’m going to some wood.’

She went out.

Matz turned to Jorvin. ‘We’re going to treat her well, or..."

"Or what?"

Matz spanned his stee. ‘I’ll kill you’ was Jorvin’s phrase; Matz said nothing.

"Jorvin was in control once more. He cut the throats of the two norms with savage delight."

The cry seemed to come from some distance: ‘Matz, help! Matz’s impulse was to run to the door, to the girl, but Jorvin was in control seizing the bow and arrows, tossing out of the window. As they crashed through the young corn plants Matz looked back. Aminka was running to the buildings on the opposite side pursued by four norms. Two of them turned and raced towards Matz and Jorvin, the others caught Aminka and she fell. Jorvin threw their body down and shot like a snake into a hole at the foot of the grey cliff. They crawled through a room filled with blown earth, bumping their back against the ceiling. Deep into the dark they went, a shout sounding behind them. They found a narrow concrete stair more by touch than sight. They climbed rapidly, both their mouths open, gasping. At the third level they made for a window. The norms that had chased them were walking back to the middle of the garden where the others held Aminka, twisting her arms to that she doubled over.

‘It’s the norms from the dust bowl,’ said Matz. ‘An arrow, Jorv. Those there, holding her. ‘What’s she to do? There’s four of ‘em, maybe more."

"No, hurry! They’re hurting her; they’ll kill her; they saw her with us and she warned us. You want her don’t you? I know, when she was making the fire..."

As he said it Matz knew he betrayed her, and perhaps it was not even necessary—Jorvin was already fitting a shaft.

We ignored the norms holding the girl and took one of the nearest ones. The bowstring whirled the air, the arrow fled. The norm fell, hammerred iron arrowhead digging into the earth beneath him, flight feather standing from his back.

Now one norm held Aminka and the other two readied their bows, facing Matz’s
Matz looked at Annika, and after a moment she smiled back. 'A busy day,' he said.

'It's been loudly here sometime,' said the girl. 'I've wished for somebody to come, but I never thought... She was not facing Matz fully. The light and shadow of the lamp deepened the relief of her face. Her cheekbones were high and smooth, her mouth wide, curving. 'All my dreams were peaceful ones,' she said.

'Yes, you were,' he replied. He passed. 'But you don't expect you wanted a freak to turn up."

But you...

'He looked at her. 'Who knows what's inside me waiting to grow out? Maybe another head. But you wish you had only one. I don't like Matz.' She had risen to look at the fire in the stove. 'The right hand one is always the boss, isn't it?"

'Yes, it is when we were children, too.'

'Matza turned her head. 'Matza's crooked eye glared at the girl. 'His eye, his eye, he mimicked. 'Well Matza has told you how that happened, hasn't he? And you wish he hadn't."

'I wish there were only two,' she said again. Suddenly her face was startled. 'Matza, he's awake!」

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'It's been loudly here sometimes,' said the girl. 'I've wished for somebody to come, but I never thought... She was not facing Matz fully. The light and shadow of the lamp deepened the relief of her face. Her cheekbones were high and smooth, her mouth wide, curving. 'All my dreams were peaceful ones,' she said.

'Yes, you were,' he replied. He passed. 'But you don't expect you wanted a freak to turn up."

But you...

'He looked at her. 'Who knows what's inside me waiting to grow out? Maybe another head. But you wish you had only one. I don't like Matz.' She had risen to look at the fire in the stove. 'The right hand one is always the boss, isn't it?"

'Yes, it is when we were children, too.'

'Matza turned her head. 'Matza's crooked eye glared at the girl. 'His eye, his eye, he mimicked. 'Well Matza has told you how that happened, hasn't he? And you wish he hadn't."

'I wish there were only two,' she said again. Suddenly her face was startled. 'Matza, he's awake!」

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CONDUCTED BY THOMAS SHERIDAN

Readers’ questions on any aspect of science fiction are dealt with in this regular feature by Thomas Sheridan, who is internationally known as one of the foremost experts on the medium. Address your questions to the QUERY BOX, ‘Science Fiction Monthly’, New English Library Ltd, Barnard’s Inn, Holborn, London ECIN 2JR. They will be answered as soon as possible.

ZENNA’S PEOPLE

Could you give me any information on Zenna Henderson and her work? DJ Arnold, Bromley, Kent

Zenna Henderson has written trilogies of novels called The People have been published as a book? Larry Arndt, Cirencester

Except for two years teaching in France, Zenna Henderson has lived in Arizona, where she took up writing on graduation from the State University. Her experience as a primary school teacher and her sensitive nature enabled her to write stories about children from the viewpoint of an adult, and her stories were later collected in The People – survivors of an alien race who had lived on Earth before they were largely消灭 been highly praised since they first appeared in Fantasy and Science Fiction in the early 1950s.

The earliest of these tales formed the basis of her novel Pilgrimage: The Book of the People (Coward 1963; Panther 1969), which was followed by The People: No Billion Year Slumber (Coward 1969; Penguin 1970). Collections of her short stories from several magazines have appeared under the title The Anytime Book (Heinemann 1961; New York, 1963; Panther 1969) and Hiding from God (Doubleday 1961; Avon, New York, 1974).

LORD TAREAN

I notice that Philip Joseph Farmer’s Tarean Alire is a real person? He is seriously suggesting that Tarean is based on a real person? Noah Brown, London

No, he is not. The story is based on a real person.

William S Kerr, Dalkeith, Midlothian

The Panther (1964) edition of Tarean Alire is described in the introduction by the editor of the book and is set in their work list under Biography. The Tarean Alire story is a comedic tale told to a group ofVariable Litons by a Japona named Lord Tryger, who dedicated to his wife Alktra and to his wife Lady Alisac, leaving the key to be raised by the woman’s age – it is a pithy and pithy character.

Burgos argues that he derived his first account of Tarean’s exploits, which appear in 1964, from the book in the form of a manuscript and dry official records of a previously unmentioned Office and the yellow, mellowed pages of the diary of a long-dead man, the Moors of Mars (Rale, New York, 1970), edited by Sue Martin.

MEMORABLE MORGAN

Can you tell me the name of the Sf radio series of the early 60s which featured a character named Morgan? F Beard, London

You are thinking of ‘Jet’, Morgan, hero of the series called Space Leaves, which broke all BBC radio listening records in 1964. The programme was directed by Andrew Faulds, and the other voices were created by the Australian actor Mitzi (Don) Sharp, a radio script editor, and Don Matthews (Glynis Penson), who kept a diary of the adventure, which was published as a novel by JENKINS the same year, and in paperback by Pan in 1967.

The author was Charles Chilton, the BBC producer who selected a listener and it was written by the listener, Paul Jenkins. After visiting the Moon, Morgan and his men led an expedition to Mars in the flagship Discovery; this story was told in a version of Sunday Times‘ Planet (Jenkins 1969). Pan. How they served the world from a Martian journey was put down in The Return of (Jenkins 1969). Jet’s exploits were also featured in strip form in Eagle.

LINK-UP

I have an aged Digbeth paperback edition of Alex Van Vogt’s Mission to the Moon, which I believe is adapted from three linked stories which appeared in Astounding. One of them is The Storm; can you give any information on the other two? Joseph M Nicholas, Cambridge, Survey also appears in The Stars, as published by Digbi in 1960, in a version of the British edition. A new title from the story later appeared in a true ‘linked story’ of The Storm. Captain Malory and the Death Robots which appeared in Astounding (January 1943) and in Digbi (November 1943). The Storm is included in The Beast of AE van Vogt (Sphere 1974) and The Astounding: A Link Reader: Book 2 (Sphere 1973), but I have no knowledge of the other stories being reprinted separately.

COLLECTOR’S ITEM

I have a copy of Wonders of the Spaceways No 6 which seems to have been published in 1954. Could you give the correct date and say if it is likely to be worth something to a collector? Mark Jenkins, Shrewsbury

Two issues of this British magazine were published by John Spencer between 1950 and 1954. No 6 appeared in April 1960. I fancy a collector might pay anything between 75p and 810p for it, depending on its condition, and its enthusiasm.

FREE FALL

Several years ago I read in an anthology a story in which Columbus sailed westward to communicate the Earth and sail over the edge. Do you know who it was and where it can be found? Rudolfo A Parkers, Woodhouse Park, Manchester


ARTISTS ANONYMOUS

I have seen many fine illustrations by Mike Little in SFM. Did he paint the cover for the Cortic paperback edition of New Worlds in ‘72? The style seems to be similar. Duncan Carr, Eastleigh

I wonder why so many publishers – as different from editors, who often have little say in this department – still hesitate to give cover artists a credit, especially when they rely so much on a striking cover to sell the book.

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THE QUERY BOX

I am writing because I am becoming increasingly bemused by the growing significance certain types of SF novels are having in the world today. The kind of novel I am referring to is the ‘doom’ novel, the New Wave, Nineteen Eighty-four, Brave New World type of thing. Not so long ago I was intending to write about this but with exactly the opposite intentions. I remember someone writing in saying how prophetic sf was and how it was the literature of the future. I also remember that I was planning a long letter denouncing this and asking you to refrain from publishing such rubbish in SFM again.

Now however, my attitude has completely changed. I’m scared of reading books, newspapers and magazines which make it obvious to me that we’re half way there already! Looking more deeply into the problem it also becomes clear that modern science is the cause. It’s dragging morality through the gutter and spitting in its face. Sex and love have gained different meanings, marriage is old-fashioned. God is non-existent. Test-tube babies, birth control, artificial preservation of life, sex before marriage, artificial insemination, pathogenensis, transplants, transfections, sterilisation, mechanical organs, etc. etc. etc. etc. etc. If you believe that any of these are perfectly natural then it just shows how you’ve been conditioned by society to accept them.

I get annoyed when I listen to Arthur C Clarke, Carl Sagan and the rest of the futurologist group telling us how science is going to make the world a better place to live in. The universe will never be as they picture it, with man skipping daintly towards the golden age without a care in the world. It can’t be, human nature won’t allow it. The world is spiralling down all the time but people refuse to admit it.

You may not agree with what I say, but if you want proof, just look around you.

Ian Garbutt (Torbay, Stirling)

I have this month (October) cancelled my order for SFM for the following reasons:

(1) The magazine should be retitled Science Fantasy Monthly due to the fact that I like my science fiction to be reasonably toe of this. The recent fiction in the magazine would appear to be the product of disturbed imaginations.

(2) There are far too many articles on authors and books.

(3) The posters were excellent but with now they have deteriorated into pure rubbish.

(4) Who needs comic strips?

I know at least two other people in my area who have recently cancelled the magazine for the same reasons. However, you are not the only publisher to fall into the fantasy trap. I have been interested in science fiction practically since I was able to read and I have noticed this recent trend towards the ridiculous. Thank Heavens for Clarke, Asimov, Wyndham, Anderson and Doc’ Smith.

David Quinney (Clackmannanshire Central, Scotland)

From the date of your letter, I assume you made your decision to cancel SFM on the strength of Vol 2 No 9. I have looked back over the last four issues and I can see why you consider many of the stories fantasy-oriented, but surely this is because so much of SF is speculative and extrapolative and as so many people have said – it is a literature of ideas. Even the authors you mention, Clarke, Asimov, Wyndham, etc. simply work on images of the future based on our present times; I admit Clarke and Asimov are more credible than a lot of authors, but they are both trained scientists. Wyndham’s work is typical of the British sf disaster school, he envisaged nuclear disasters, invasions from outer space and so on; do you find that less credible than ‘The Antique Restorer’ (SFM Vol 2 No 8) which, incidentally, featured a quite incredible time machine – but so did H G Wells – Ed

As an annual subscriber to SFM I would like to make the following comments:

Painting Competition: In my humble opinion, the calibre of entries this time was infinitely inferior to the last competition. Your method last time of printing them all on a double page and then individually on full pages was absolutely ideal. Why not this time offer a prize (small suggestion, when you have another painting competition print, say, ten of the best and ask readers to vote for the winner).

Short Story Competition Please: I think we need another one. I missed the last one and I dearly would love to try my hand at writing a short story.

Thanks muchly for the magazine, it gives me and many other people such pleasure, it is an excellent publication well worth the annual subscription. I think (reminded me of a saying I read some editions back) that although your readership appeared to be quite young, most people of my age group (2A) didn’t have time to put pen to paper in order to show you that people of all ages and professions read SFM. For example, everyone I know who reads SFM is much older than myself, including my parents.

Christopher Hunt (Maidstone, Kent)
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