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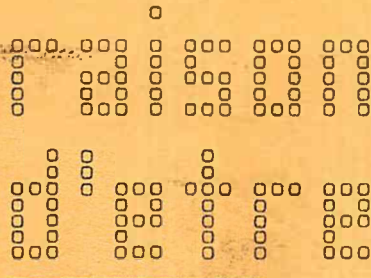
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'Tis now 8.30 pm (2030 hours, for those who care) on Saturday 4th April, 1970. This morning I accosted myself - a most difficult procedure, since I almost never look in mirrors - and said to myself: "Why don't you try to churn out two fanzines in five days?"

It's a sturdy bookcase, and miraculously my arm kept twirling 7500 or however many impossible times it takes to roll out this magazine. John Foyster's latest foysterfanzine hit the post office yesterday with that dull thump peculiar to Gestetner paper. S F COMMENTARY 10 .. ah, we remember it well. Wasn't that the magazine we ran off on March 1st in at the Melbourne Science Fiction Club? Well, John Foyster ran off some of it. The rest had to wait for the good graces of Gestetner Pty Ltd, a most mysterious group of philanthropists. They periodically let me raise a bill of \$100 or more, and yet they cannot afford to bribe the Railways to deliver my paper in under five weeks!

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FEBRUARY 1970

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S F COMMENTARY, No 9, February 1970, 44 pages plus front cover.
 is produced, directed and occasionally edited by
 BRUCE R GILLESPIE of P O BOX 245, ARARAT, VICTORIA 3377, AUSTRALIA.
 Hard work by Franz Rottensteiner (translation of Stanislaw Lem's
 articles), Stephen Campbell (production help) and Bruce Gillespie
 (turning the duplicator handle 7650 times).
 Art work: Dimitrii Razuvaev (front cover), Bill Rotsler (pages 1
 and 3) .

This issue has been dated February 1970 instead of January, in order
 to maintain some honesty about the dating, and to avoid the traditional
 pit of the "annish". If and when this magazine reaches its fifth
 anniversary, it might start a celebration or five. Meanwhile, wish us
 Happy Birthday in your next letter.

The next issue, which has already appeared, will feature the unrestrained
 brilliance of John Foyster's editorial talent. John promises a similar
 issue in 1971, so it cannot have hurt too badly. In the meantime,
 thanks, John, for the best S F COMMENTARY yet.

Issue No 11 and all subsequent issues will be shorter (24 pages each),
 more regular (every month on the month), and will cost both the
 subscribers and me much less (20c each; \$3 for 18). Subscribers who
 paid their money early in the piece gained two free issues (Numbers 1
 and 2), if you remember. That means that under the new scheme, your
 subscriptions run through to Number 12 instead of Number 11. Anybody
 who subscribed later than that can do all that strenuous arithmetic
 for themselves. Just count two issues for each issue over Number 10
 that you would have received under the old system. Or better still,
 if in doubt, send more money. Onward to February 1971!

months early, as I had hoped, and this issue rolls into production only two months late. What's the odds on S F COMMENTARY 11?

But to return to that difficult duo, I and myself. I said to myself, sloshed over yet another cup of coffee: "Look, mate" (this is how outback Australians usually address their worst enemies) "look mate, we've got this pretty cover, and we've run off all that jazzy stuff by Stanislaw Lem and George Turner - but what do we write for an editorial? I mean - two pages to write after a hard day at a hot duplicater!"

"It wasn't a hot duplicater," said myself, with all the firmness, doggedness and wrongness of a Geisian altar ego. "The temperature couldn't have topped 60°. And what an idiotic question anyway - we talk about The Convention, of course."

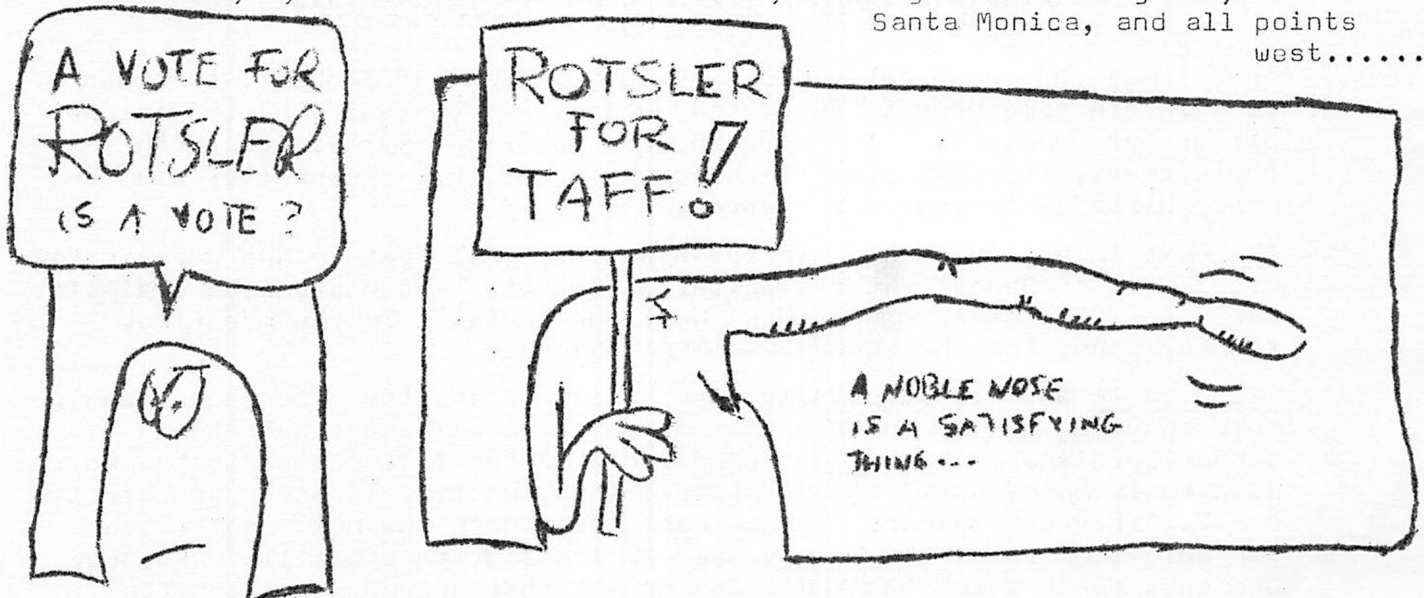
My face fell, which rather injured my jaw. "Don't talk about the Convention. One subscription sold! We'll all be ruined. They showed 2001 out of focus again. I missed seeing a film which Lee Harding said was like the middle of a Philip Dick novel. Jack Wodhams wasn't there. Stuart Leslie wasn't there. Ron Graham wasn't there....."

"What a piffling, hopeless attitude, Gillespie," said myself, and tried to kick me in the shins. He missed and kicked the book case, which means I can't depend on myself to finish off this magazine. "Just because there weren't 25 pros entertaining you every minute of the day, like in Sydney, and just because Mr and Mrs Darling didn't come down from Sydney to run endless parties for ratbags like you, you start complaining. Sydney's Sydney, ^{in Melbourne} Melbourne's Murrumbena. I mean, it rains all through Easter anyway. And just because Dick Jonssen was the only person in Australia who'd read the DITMAR winner.."

I retaliated. My leg missed myself, bounced off the side of the bookcase, and nearly ruined my DANGEROUS VISIONS. "You're giving away next issue's news, you great oaf. And you're wrong. I've just read COSMICOMICS, and JOE, and VISION OF TOMORROW, and DANCING GERONTIUS. But I'm keeping Convention details top secret til Number 11...."

At this, myself scrambled out the door, running towards Mulgrave,

Santa Monica, and all points west.....



doings - the almost obsessive concerns with the problem of identity - the protagonists pitting instinct against their death wish - the utter lack of any background to set the action in space and time (a few dates scattered here and there don't really help; all reality lies in the characters and they have precious little) - and, of course, the twists and turns of plot engineered by twists and turns in time and space.

The pattern is familiar, but still capable of elaboration, and not yet boring.

The problem of identity occurs and recurs throughout his books. It was there on a racial scale in MAN IN THE HIGH CASTLE, fouled up with illusion in PALMER ELDRITCH, prodded at in the players of the Perky Pat game in a number of novels, and in NOW WAIT given direct confrontation when the time traveller meets himself coming back. Alas, the confrontation gives rise only to complication, not to any hint of a possible solution. (Perhaps there isn't one. If the verb "to be" were removed from the language, the question could not be asked, and possibly not mentally formulated. A few such languages exist. Again, I suppose, the necessity of the question may cause the invention of the verb "to be".) I have sometimes wondered if the problem has any valid existence, if it is not in fact an evasion of other more pertinent questions - as when one asks "What should I do?" instead of "What should I do?" However this may be, the present interest is in the feeling that this is at the core of all Dick's work; not necessarily alone at the core, but omnipresent. Any examination in toto must take it into account. It might be noted in this connection that the central question in DO ANDROIDS DREAM OF ELECTRIC SHEEP is the closely related one, "What is a human being?"

So much for that. The other thing that strikes strongly is the way in which the later Dick goes to extreme lengths to produce situations where the identity obsession can be given expression. In PALMER ELDRITCH we had alternative realities complicated by alternate illusions - altogether mind-boggling unless the reader was prepared to really get down to it and spend time over every paragraph. In COUNTER CLOCK WORLD he produced a physically impossible set-up which just didn't gel. In NOW WAIT he does much the same.

Consider this: The drug JJ-180 induces physical time travel in its addicts. Let us accept this highly doubtful hypothesis at face value and look at the effects. Under its influence Mrs Sweetscent travels to the past only, while her husband travels only to the future. But Molinari travels sideways in time, hopping from alternate reality to alternate reality. And Dick makes it plain that the effects cannot be controlled. Dr Sweetscent in fact cannot get back to his own time, but has (in a manner of speaking) to wait for it to catch up with him, so that the two Sweetscents can again become one. But in fact these turn out to be alternate realities - somewhere he has skipped across the time tracks, or has he created a new line? The matter is unclear. And the complication is such that continuity of plot becomes unworkable save by ignoring some of the paradoxes involved.

This Dick does on the grand scale with Molinari. Molinari's gimmick is to anticipate the moment of death and always have an alternate Molinari from a parallel track literally on ice to take his place. The new Molinari takes over where the old one left off. In practical terms this won't work. The two are not the same man. They are different men with different backgrounds, different memories, and so

on. The probability is that they wouldn't even have the same beliefs. Yet towards the end of the book we are presented with a scene wherein Molinari 2 (or 6 or 10) takes over smoothly as if they had twinned it together all their lives.

Another problem lies in the uncontrollable nature of the drug - you cannot get back to where you started. Yet Molinari is always able to get back to his own time track. Unexplained. Considering these things one feels inclined to lay the book down and murmur, "Phil, old boy, you have outsmarted yourself." But one reads on because the style (bare and forceful) and the problems raised are compulsive as exercises in sheer ingenuity.

These and similar matters recur in book after book. One can't help concluding that Dick is driven by inner compulsions, but I wouldn't care to make any diagnosis. What comes out of the tap is not necessarily what forces the water down the pipe. And the artist very often does not know what he is doing. One is reminded of the story of Virginia Woolf (I think it was V W) and Henry James. She complimented him on his method of creating all his characters as though they existed in a vacuum, and noted that this allowed immense concentration on inner detail. The old boy, who considered himself very much a realist, recovered from the shock sufficiently to murmur, "My dear, I wasn't aware that I did".

Enough for now. Thanks for letting me have the book.

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billion human beings; an idios kosmos the support of only one. Now, a person - any given person, well or sick - cannot tell what part of that which he experiences is the idios kosmos and which the koinos - in fact virtually no one even asks, because this theory of plural worlds is not generally known (the idea parallels Jung's concept of projection, by the way, projection of unconscious archetypes onto the "real" outer world), and in all of my books, well, virtually all, the protagonist is suffering from a breakdown of his idios kosmos - at least we hope that's what's breaking down, not the koinos kosmos. As his idios kosmos breaks down, the objective shared universe, emerges more clearly... but it may be quite different from the idios kosmos which he is in the process of losing. Hence, strange transformations take shape (it must be obvious to you by this time that Kant's concept of the Dinge-an-sich has influenced me, too).

There is, too, another factor at work: entropy. This is the real and ultimate force which is destroying the protagonist's private world; it is called the anti-eidos, or "form destroyer". This is a principle which is universal, but I don't suppose I need to tell you that. Now, I personally conceive the form destroyer as personified, as an active evil - the evil - force. I also conceive of it winning, at least in the short run, although perhaps not ultimately. Yes, it is an anti-God, if by "God" you mean the "form creator", which is how I view Him. I am with Luther in his belief of an active Satan who is at work all the time ("His knowledge and his power/increase from hour to hour," as he put it). The Palmer Eldritch ^{novel} came out of an actual mystical experience, lasting almost a month, in which I saw the face of evil hovering over the landscape, and the three stigmata were aspects of him that I saw - I mean objectively, literally - in particular the slotted, empty eyes. It was a true trip, before I had seen any LSD, much less taken any. In an effort to help myself I became a convert to the Anglo-Catholic Church, but their teachings do not include that of a real, active, evil power who has control - or near control - of the earth we live on. I even took the rite of unction, but it didn't help, and I wandered away from the church. The point is this: if a person's idios kosmos begins to break down, he is exposed to the archetypal or transcendental forces of the koinos kosmos, and if the time comes that he lives only in the koinos kosmos he is exposed to powers too great for him to handle (this part of the theory is opposite to Jung's theory that each of us needs subjective constructs - such as space and time - as a framework structuring "reality"). In other words, we must have our idios kosmoses to stay sane; reality has to filter through, carefully controlled by the mechanisms by which our brains operate. We can't handle it directly, and I think that this was what was occurring when I saw Palmer Eldritch lingering, day after day, over the horizon. Something should have stood between me and it - and the Anglo-Catholic Church wasn't enough (neither was psychiatry, needless to say). My first LSD experience, by the way, confirmed my vision of Palmer Eldritch; I found myself in the hell-world, and it took almost two thousand (subjective) years for me to crawl up out of it.

At this point a quote from the Bible comes to mind (Book of Job?): "It is a terrible thing to fall into the hands of the living God." Draw your own conclusions, re what I've said above.

In summation, let's put it this way: in my novel the protagonist's comfortable private world is disintegrating and an awful, mystical, puzzling, enormous world is expanding - from elements already there - to fill the void.

I'm glad you liked ALL WE MARSMEN (also called MARIAN TIME-SLIP). Remember the part near the end when the man is reading the newspaper and the gubble-gubble words appear. It is entropy at work, decay of the meaningful (form) into the meaningless (entropic formlessness). This force, intruding itself, is objectively real; this is not the hallucination - and much of what in my books are regarded as hallucinations are actually aspects of the entropy-laden koinos world breaking through into the little warm living room with the dog sleeping before the fire, the wife sewing, the husband reading the newspaper - which begins to say, "Gubble, gubble", all at once. Kant's space-time-etc structuring mechanism of the psyche has begun to fail.

Actually what I'm proposing is a radically new theory as to what is "real" and what is not. Maybe H P Lovecraft affected me too much; I read his stories as they came out in WEIRD TALES years ago. On the other hand, I'm merely repeating Kant when he says that we - i.e. - our brains, organize incoming data in order to structure it in a way that we can control. I said earlier in the letter that the schizophrenic lives entirely in an idios kosmos. After working this out a little better, now, I would say the opposite; he's lost the protective shell of his idios kosmos and is faced with the Absolute - including absolute good and absolute evil - of the koinos kosmos. I'm thinking out loud now, so I'll conclude this ramble; thanks for sticking with me.



(A Bibliography for this article appears on the next page).

- Stanislaw Lem (J.O.E. No 3, Page 19)

* or novels (brq)

BOOKS DISCUSSED : by PHILIP K DICK : EDITIONS USED

- 1966 NOW WAIT FOR LAST YEAR
Doubleday & CO Inc :: 214 pages :: \$3.95
- 1968 DO ANDROIDS DREAM OF ELECTRIC SHEEP?
Doubleday & Co. Inc :: 210 pages :: \$3.95
- 1969 UBIK
Doubleday & Co Inc :: 202 pages :: \$4.50

I IN NOW WAIT FOR LAST YEAR Philip Dick describes the situation thus:

"What's the relationship between this man's angina and the Secretary's pains?"

"Relationship?" Is there one?"

...Eric bent over the cot on which the patient McNeil lay. So this was the man who had the ailment which Molinari imagined he had. Which came first? Eric wondered. McNeil or Gino Molinari? Which is cause and which effect - assuming that such a relationship exists... But it would be interesting to know, for instance, if anyone in the vicinity had cancer of the prostate gland when Gino had it.. and the other cancers, infarcts, hepatitis, and whatever else as well. (NWFLY, p 87)

In one of the scenes from UBIK the traveller Joe Chip faces this problem in his trip across a disappearing America:

... To Joe the official said, "Go out by hangar three and look for a red and white Curtiss biplane."

"Thanks," Joe said, and left the building; he strode rapidly

toward hanger three, already seeing what looked like a red and white Curtiss-Wright biplane. At least I won't be making the trip in a World War I N training plane, he said to himself.

A short fat man with red hair pattered with an oily rag at the wheels of his biplane; he glanced up as Joe approached.

"Are you Mr Jespersen?" Joe asked.

"That's right". The man surveyed him, obviously mystified by Joe's clothes, which had not reverted. "What can I do for you?" Joe told him. "You want to trade a LaSalle, a new LaSalle, for a one-way trip to Des Moines?"

Together they made their way to the parking lot.

"I don't see any '39 LaSalle," Jespersen said suspiciously. The man was right. The LaSalle had disappeared. In its place Joe saw a fabric-top Ford coupe, a tinny and small car, very old, 1929, he guessed.... Obviously, it was now hopeless. He would never get to Des Moines. (UBIK, pages 130-131)

The occurrences in Philip Dick's novels are impossible. In what future will you find (a) one man who may exhibit all the signs of an illness of a man in the next room, (b) a process where time devolves around a modern man without him going mad, or the whole chemistry of his body collapsing, or (c) a drug (JJ-180, the "star" of NOW WAIT FOR LAST YEAR) that literally, magically, turns back the tides of time, wipes out memory, or transfers people between different time zones - all in the space of one second? More importantly, how often would you find people who would know what was going on when these things happened? Just try to invent a science that will "explain" all the single elements in NOW WAIT FOR LAST YEAR, for instance.

In UBIK, Philip Dick invents a technology to "explain" magical happenings. One of Dick's characters says that "Defusing a psi operation has to be done on a systematic basis". Presumably Dick refers to all the rigorous "systems" of EE Smith stories and Campbell editorials. Telepathy does not make sense: in context, the statement is a joke. In UBIK, Hollis' psis disappear suddenly from view. Glen Runciter's inertials have been hired to track them and stop them from invading the population's mental privacy - Hollis has removed them from the telepathic "scene" and made Runciter's organization ineffective:

Runciter: "You're sure the teep was Melipone? Nobody seems to know what he looks like; he must use a different physiognomic template every month. What about his field?"

"We asked Joe Chip to go in there and run tests on the magnitude and minitude of the field being generated there at the Bonds of Erotic Polymorphic Experience Motel. Chip says it registered, at its height, 68.2 blr units of telepathic aura, which only Melipone, among all the known telepaths, can produce...."

(UBIK, p 2)

Does jargon extend to everything? Can it possibly extend to telepathy? We know it is one big laugh, but there could be a catch of puzzlement that mars the guffaw.

In UBIK, Dick talks about a different part of this telepathic

technology: the functions of Beloved Brethren Moratorium, owned by Herbert Schoenheit von Vogelsang. After you die, your "protophasons" of encephalic half-life glimmer within your body. Your "bereaved" may contact you at the Moratorium. There is one problem: as you natter away, your protophasons leak away. Each frame of life draws your mind to death.

The reader does not really believe in all this, especially as we learn little about the 1992 technology that might weld together such unlikely allies as Runciter and Assocs, and the Beloved Brethren Moratorium. Dick does not mention, for instance, what the government (if any) thinks about all this.

The chalk-marks against Dick score his card badly. Impossible and impossibler, as Dick's honourable predecessor, Lewis Carroll, might say. Mistakes in political science (or, should I say, political technology?) glare more obviously than mistakes about the shape of computers in 1992. Dick's governments, where he talks about them all, repel us. Not only are they usually fascist governments that would not allow the freedoms that Dick's characters presume, but their functions are laughably over-simplified.

Dick's "societies" look no more credible. In NOW WAIT FOR LAST YEAR, government officials amuse themselves by collecting Lucky Strike packages and lose their identities in Wash-35 (a miniaturized Washington of 1935). The war between Earth, Lili~~star~~ and the reegs proceeds, but makes no visible difference to the face of Earth. Molinari, the all-powerful U N General Secretary, who directs the War, was "elected into office". But who elected him, and why? Dick does not show us the population of Earth, only the small group of people who surround Molinari.

"Just head west," he told the cab. I've got to get back to Cheyenne, he realized. Somehow, by some route.

"Yes sir," the cab said. "And by the way, sir, you failed to show me your travel permit. May I see it now? Just a formality, of course."

"What travel permit?" But he knew; it would be an issue of the governing 'Star occupation agency, and without their permission Terrans could not come and go. This was a conquered planet and very much still at war. (NWFLY, Page 164)

Sure, cabs work in Saigon, but among bomb ruins and beggars' feet. Earth's war does not warrant all the worry that Molinari expends on it.

But the realities of national politics do not affect Molinari - like Hitler or Franklin D Roosevelt (with conscious irony, Dick combines elements of both), Molinari directs events from his well-protected bunker. But in NOW WAIT FOR LAST YEAR, we do not brush near the SS lackeys, and Molinari does not face the daily swarm of Marcos' sycophants. Molinari has it on a plate: LBJ might well envy his continuing success, but he would learn nothing from Molinari about how it is done. Late in the novel, Dick makes great play of the scene where

Trailed by Secret Service men, they... entered a guarded, locked room which Eric realized was a projection chamber; the far wall consisted of a permanent vidscreen installation on a grand scale.

"Me making a speech," Molinari explained....

Chuckling, Molinari said from the deep, foam-rubber chair in which he lounged beside Eric, "I look pretty good, don't I?"

"You do". The speech rolled on, sonorous, even containing, now and then, a trace of the awesome, the majestic. And it was precisely this which Molinari had lost: he had become pitiable. On the screen the mature, dignified man in military garb expressed himself clearly in a voice that snapped out its sentences without hesitancy; the UN Secretary, in the video tape, demanded and informed, did not beg, did not turn to the electorate of Terra for help.... But how had it been done? How did the pleading, hypochondriacal invalid, suffering from his eternal half-killing complaints, rise up and do this? Eric was mystified.

Beside him Molinari said, "It's a fake. That's not me". He grinned with delight as Eric stared first at him and then again at the screen.
(NWFLY, Pages 93-94)

The tv screen image (false) beckons to the millions (we don't meet any of them, except for the robot taxis) of Earth. Molinari Mark II whips up enthusiasm and directs the emotions of the crowd. We know the effects of television and the public meeting on twentieth century politics. But we also know of the ground swell of discontent housed in separate discontented minds that must receive the message. Without believable governed, Dick's governors continue to mystify us.

As I have hinted, the political-economic structures in UBIK and DO ANDROIDS DREAM OF ELECTRIC SHEEP?, if structures can be said to exist at all, look fascist. The only other people in Dick's novels besides the main characters are the members of the other fascists. In NOW WAIT FOR LAST YEAR, DO ANDROIDS DREAM OF ELECTRIC SHEEP, and UBIK, the all-important battles are two-dimensional: the Earthmen fight the aliens, the inertials are trapped by the telepaths, and the bounty-hunters track the androids. Dick's "bosses" Gino Molinari and Glen Runciter are accepted without question by their subjects, and accepted with great difficulty by the reader.

The Mole would have been their leader at any time; at any stage in human society. And - anywhere.

But is there any evidence that our political leaders have ever exhibited signs of superhumanity? Has there ever been less mediocrity at the top than in any other stratum of society, or at any other time than the present?

If you wanted to present a case against Dick's work, it would most profitably proceed along these lines. Dick's mind is wide-ranging and his interests far-reaching - but there are whole areas of experience that he does not think about. But how many other s f writers think more clearly about socio-political matters than does Philip Dick? Only one or two, perhaps, but it is a pity that Dick is not among them.

II But there are several explanations or excuses that might cover this "credibility gap". At least these are the excuses that people drag up for the faults of all the other s f authors:

(i) Many authors, within and without science fiction, have written "impossible" novels. Perhaps all novels feature some elements that would prove impossible if applied rigorously to the evidence from ordinary experience. The most common reason authors advance for the deliberate distortion of perceived reality, is that they wish to refine or provide analogies for particular areas of existence. We do the same thing with a microscope or a telescope. Are Philip Dick's novels allegorical of particular aspects of our world?

(ii) Could we say that Philip Dick is just another's f writer, dredging up all the old s f ideas, re-using them like flat soap suds? Are Dick's novels meaningless fantasies, like many works that superficially resemble them? Does Dick write about only two-dimensional distortions of misunderstood processes? (This is a false play, of course. If this were true, I would not have written this article.

(iii) Philip Dick likes to talk about politics, industrial warfare, and possible post-World War III worlds (DO ANDROIDS DREAM OF ELECTRIC SHEEP). But are these elements so much scenery, as Ted Pauls suggests in a review? Are these novels private games, like Nabokov's more obscure efforts? Perhaps Dick has escaped from the normal pigeon-holes that divide popular literature into such categories as Realistic, Expressionist, S F Writer. If this is the case, how do we judge Dick's work at all, let alone understand it?

III For the reasons that I have already outlined, the reader must admit that Number (i) is unlikely, for the same reasons that some readers might shrug off Dick's work with Number (ii). Dick features politics, inter-racial warfare, the society of an empty, radio-active world, etc. In NOW WAIT FOR LAST YEAR there are numerous parallels between the Earth-Lilistar-reegs conflict and the four-sided Vietnam war. Dick makes his war into an elaborate game where everybody gets hurt except the organizers; where huge numbers of civilians and cities are said to have disappeared, but Dick does not show us any signs of the process of disintegration. But, ultimately, these are asides: Molinari's comic ambiguity is nowhere near as comic or as ambiguous as, say, that of two Presidents facing different public reactions, a local yokel/who runs his state but lets everybody know how badly he is doing it, and a paternalistic Communist whose influence increases in inverse proportion to the organization of his troops and the strength of his supply-lines. There is nothing as remotely interesting or compelling in NOW WAIT FOR LAST YEAR's allusions as the situation behind those headlines we yawn at every day. As for science and sociology in general, Dick gets them wrong. Quite often this is done with comic intent (as in CRACK IN SPACE) but never with allegorical content.

Number (ii) is more likely. In Dick's writing there is a never-ending flow of original, grotesque or quaint s f gimmicks and variations on old "ideas". I had thought THREE STIGMATA OF PALMER ELDRITCH had exhausted all the novel aspects of drugs, but NOW WAIT FOR LAST YEAR tips over a whole new barrowful of tricks from the same source. We are sick to death of android stories and After-the-Bomb stories, but Dick manages to gloss over his Nexus-6 androids and his empathy boxes (DO ANDROIDS DREAM OF ELECTRIC SHEEP?) so that we think that nobody else had ever used these ideas.

And who could resist the ever present little can of Ubik that peeps from behind every doorway in the novel of that name? Every chapter begins with one of the virtues of Ubik, qualities presented by an advertising executive. The third chapter, for instance, carries the following cryptic message:

Instant Ubik has all the fresh flavor of just-brewed drip coffee. Your husband will say, Christ, Sally, I used to think your coffee was only so-so. But now, wow! Safe when taken as directed.

(UBIK, Page 17)

The last line of each blurb always gives the game away: the all-purpose aid to modern living must never exceed the limits, must be "taken as directed". Ubik is the saviour, but the novel that unrolls underneath these advertisements tells of a terror that is past saving.

But before the reader has time to consider the significance of Ubik, its magical qualities taunt his mind. It springs up like a poltergeist in every situation. As Joe Chip's world deteriorates around him:

A hard-eyed housewife with big teeth and horse's chin replaced the cartoon fairy; in a brassy voice she bellowed, "I came over to Ubik after trying weak, out-of-date reality supports. My pots and pans were turning into heaps of rust. The floors of my conapt were sagging. My husband Charley put his foot right through the bedroom door. But now I use economical new powerful today's Ubik, and with miraculous results. Look at this refrigerator." On the screen appeared an antique turret-top G E refrigerator. "Why, it's devolved back eighty years."

"Sixty-two years," Joe corrected reflexively.

"But now look at it," the housewife continued, squirting the old turret top with her spray can of Ubik. Sparkles of magic light lit up in a nimbus surrounding the old turret top and, in a flash, a modern six-door pay refrigerator replaced it in splendid glory.

(UBIK, page 118)

but finally even Ubik itself seems to degenerate under the pressures of the processes unleashed upon the novel's characters:

....Ubik, he thought. He opened the door of his Ford and got in. There, on the seat beside him, rested the bottle which he had received in the mail. He picked it up -

And discovered something which did not really surprise him. The bottle, like the car, had again regressed. Seamless and flat, with scratch marks on it, the kind of bottle made in a wooden mold. Very old indeed; the cap appeared to be handmade, a soft tin screw-type dating from the late nineteenth century. The label, too, had changed; holding the bottle up, he read the word printed on it.

ELIXIR OF UBIQUE.... A BENEFICENT AID TO MANKIND WHEN SEDULOUSLY EMPLOYED AS INDICATED.

(UBIK, page 131)

All this might have significance; but it certainly has a comic point. But are Dick's books nothing but highly entertaining conjuring tricks? Certainly the trickery is the reason why I find each book just as fascinating as its predecessor. Dick's pyrotechnics alone would assure him his place in the s f echelon. Some of Dick's earlier novels, such as DR BLOODMONEY (discussed in S F COMMENTARY 1) could best be described as energetic romps.

But in the three novels under discussion, there is much prose that does not "romp". Many passages of NOW WAIT FOR LAST YEAR are very funny, but the jokes are not those of Bob Hope's. As Harlan Ellison has noted, Dick's jokes read more like Harold Pinter's. When Eric Sweetscent (in NOW WAIT FOR LAST YEAR) moves forward in time ten years, he is rescued from death by his tens-year-older self:

As Eric stepped from the MP patrol ship the man sprinted up to him.

"Hey," the man panted. "It's me."

"Who are you?" Eric said; the man... was certainly familiar - Eric confronted a face which he had seen many times and yet it was distorted now, witnessed from a weird angle, as if inside out, pulled through infinity. The man's hair was parted on the wrong side so that his head seemed lopsided, wrong in all its lines. What amazed him was the physical unattractiveness of the man. He was too fat and a little too old. Unpleasantly gray. It was a shock to see himself like this, without preparation; do I really look like that? he asked himself morosely. (NWFLY, p 171)

A tremendous routine, you must agree, worthy of all the best Absurdist writing, and certainly a vast improvement on Robert Heinlein's BY HIS BOOTSTRAPS, and all those other time-paradox stories. At the same time the joke wrenches: how would your 50-years-old self like to see your 40-years-old self approaching you?

Many of the conversations in these three novels are ironically funny, but also feature agonized quibbling and wrangling. Two characters often cut away at each other, and the mental pain rivals that in ACCIDENT. National problems become personal battlegrounds. In DO ANDROIDS DREAM OF ELECTRIC BHEEP there is the brutal, yet ironically-pitched encounter between the two bounty-hunters. Rick Decard hopes to "retire" 6 Nexus-6 androids in a day, and Phil Resch, who has chased androids for years, now fears that he himself may be an android equipped with false memories.

"You're sure I'm an and oid? Is that really what Garland said?"

"That's what Garland said This is necessary. Remember: they killed humans in order to get away. And if I hadn't gotten you out of the Mission police station they would have killed you. That's what Garland wanted me for.... Didn't Polokov almost kill you? Didn't Luba Luft almost? We're acting defensively; they're here on our planet - they're murderous illegal aliens masquerading as - "

"As police," Rick said. "As bounty hunters".

"Okay; give me the Boneil test. Maybe Garland lied. I think he did - false memories just aren't that good. What about my squirrel?"

"Yes, your squirrel. I forgot about your squirrel."

"If I'm an andy," Phil Resch said, "and you kill me, you can have my squirrel."
(DADOES, p 117)

The horrifying joke is that Deckard is bent on destroying creatures that he cannot recognize except with the aid of a purely mechanical test. Luba Luft "posed" as an opera singer before the ambitious-boy-on-the-way-up, Rick Decard, shot her without a whimper from him. Several other androids "pose" as a typical American family - but their attitudes and actions do not differ at all from that of the "real" American family. And where have the "real" people gone? They have ruined Earth with atomic bombs, and now do little except save money to buy the few remaining specimens of live animals left on Earth. Few novels pose the question: "What is humanity?" quite as sharply as does DO ANDROIDS DREAM OF ELECTRIC SHEEP?

But one may have just missed the irony in this passage in the excitement of Deckard's chase. Only the blunt prose itself contains all the strands that make up the complex emotional response with which we should read this book. The androids appear as more human than the humans, and we have least sympathy for and most understanding of the boorish SS-like killer, Rick Decard.

Some of the conversations in NOW WAIT FOR LAST YEAR bite as deeply as those in the novel I have just looked at. Dick entertains us with the extraordinary effects of JJ-180, but the reader remembers just as clearly the bitter exchanges between Eric Sweetscent and his wife, their separation, and the private quest for security that leads Eric right back to home base. Dick sets the tone early in the novel:

(Jonas) broke off, seeing that both the Sweetscents had a grim, taciturn cast about them. "I interrupted?"

"Company business takes priority," Eric said, "over the creature pleasures." He was glad of the intervention.... "Please scram out of her, Kathy," he said to his wife, and did not trouble himself to make his tone jovial. "We'll talk at dinner. I've got too much to do to spend my time haggling over whether a robant bill collector is mechanically capable of telling lies or not." He escorted his wife to the office door; she moved passively, without resistance. Softly, Eric said, "Like everyone else in the world it's busy deriding you, isn't it? They're all talking." He shut the door after her.

Presently Jonas Ackerman shrugged and said, "Well, that's marriage these days. Legalized hate."
(NWFLY, P 15)

The tone is familiar. Soggy American melodramas talk this way. But few authors catch the interrelationship so well - Kathy appears passive, welcomes Eric back, and the old fights break out. Dick simply cuts deeper than many writers who attempt the same thing. This is ironic comedy that contains no laughter, and Dick sees possibilities that many other authors could not think of. If they did they would not be able to write scenes as cruel as this:

"I'll put you in the building's infirmary," he decided, rising to his feet. "For the time being. While I figure out what to do. I'd prefer not to give you any medication, though; it

might further potentiate the drug. With a new substance you never - "

Kathy broke in, "Want to know what I did, Eric, while you were off getting the Secret Service? I dropped a cap of JJ-180 into your coffee cup. Don't laugh; I'm serious. It's true, and you've drunk it. So you're addicted now. The effects should begin any time"..... Her voice was flat and drab.....

He managed to say, "I've heard that about addicts in general; they like to hook other people."

"Do you forgive me?" Kathy asked, also rising.

"No," he said.

(NWFLY, page 135)

Eric has transferred his attention from his wife to the all-consuming Molinari. He misjudges his wife, and suddenly he collapses, hit from the most unexpected quarter. His only immediate reaction is "'I've heard that about addicts in general'" - his emotions have been so dislocated that he cannot respond any more emotionally than that. The rest of the novel tells us of his rediscovery of these "necessary" emotions: it is a story of personal salvation in a world that, like all Dick's worlds, comes apart while you watch.

But even these sharp observations do not form the centre of Dick's work - very few of his novels centre upon these close human relationships. Judged in the light of NOW WAIT FOR LAST YEAR, all except a few of Dick's other novels are complete failures. But many of the other novels are not complete failures. We cannot explain Dick's works with chatter about the "ideas"; we cannot justify them with talk about Harold Pinter dialogue. What have I left out?

IV What I sought in the articles MAD MAD WORLDS and CONTRADICTIONS and did not find, was the centre of the wheel around which all of Dick's other ideas revolve. I've not read Kant, Zen Buddhism or theories about entropy, so I cannot spin a neat theory in terms of Philip Dick's self-acknowledged sources.

Instead, I want to go back to the passage from NOW WAIT FOR LAST YEAR with which I commenced this article. Molinari (as we find out) is the only character in the novel who can control the drug JJ-180. He alone owns the antidote and can control the time-alteration features of the drug at will. He can take the antidote at intervals to stave off immediate death. However, JJ-180 catches up with all its addicts - in Molinari's case, he takes on the symptoms of the terminal diseases "projected" by other persons in the same building as he is.

Now the question that we immediately ask ourselves is: how does the illness of one patient "cause" the illness of Molinari? Why do we accept this "miracle" as Dick relates it to us, and read on with scarcely a whimper of protest? What is it in Dick's writing that justifies his wholesale dislocation of events, and his evasion of the laws of evidence? Why do Dick's worlds work differently from ours, but still make sense to us?

Kant's philosophy I will leave: more elementary observations may serve just as well in discovering what Dick is up to.

In logic, there are two main types of statements: those that are

logically possible, and those that are only empirically possible. "I met a married bachelor" is a logically impossible statement - because of the terms of the definition of the word "bachelor", you could never expect to meet a "married bachelor". The statement is self-contradictory.

However, it is possible to imagine the situation: "The moon is made of green cheese" (or, "Molinari exhibits the symptoms of the diseases of the people in the same building".) There is nothing in the idea of "moon" that precludes the idea of "green cheese".

Our ordinary observations, and the laws of science, seem to indicate that there are certain states of existence that are altogether impossible, and certain laws of cause and effect that are necessary. But, in the classic case that questions this assumption, David Hume gives the illustration of the two billiardballs. You hit one billiard ball with the cue; billiard ball A travels towards billiard ball B and makes contact with it; Billiard ball B commences to move towards the opposite end of the table. We say that Billiard ball A "caused" billiard ball B to move. However, it is quite possible that, instead of moving towards the other end of the table, billiard ball B could have flown straight up in the air, stayed still, or disappeared altogether. In fact, we observe that in all cases billiard ball B moves in a particular direction when hit by billiard ball A.

It seems to me that Philip Dick uses this Occam's Razor in all his novels. He does not "explain" a large number of events in his novels, because he takes the philosophical view that many events in his novels do not have to be "explained", even though they contravene accepted scientific "laws". All is possible (at least, all physical events are possible) because all is logically possible. The web of scientific laws is part of the common reality through which Dick tries to penetrate.

In NOW WAIT FOR LAST YEAR, JJ-180 does not "cause" people to move about in time. This would require scientific explanation, and Dick would merely have exchanged one tedious structure for a more acceptable tedious structure. JJ-180 is an agent which removes from the characters' minds and bodies their previous misconceptions about cause and effect. The reader (and the characters in the book) expect that the only way in which Molinari could exhibit the signs of (say) malignant cancer would be if he suffers delusions. But the symptoms of cancer actually appear in Molinari.

In the same book, we can see the same process at work when Kathy Sweetscent takes her second dose of JJ-180: (i) Kathy climbs into the robant cab. (ii) The cut on her finger disappears... "No break. No scar. Her finger, exactly as before..." (iii) She notes down this occurrence on a scrap of paper, but even her writing disappears (iv) The cab "forgets" that Kathy ever had a cut hand (v) The cab and Kathy fade completely into the alternate future to which the drug has removed them.

But even with that last sentence I falsify Dick's writing. Philip Dick does not say that "the drug did this": Kathy, and the reader, think that the drug "causes" these events. The reader makes the intellectual connection between events, just as the observer sees the process of billiards in such a way that he thinks that the billiard player causes billiard ball B to move, via his cue and billiard ball A. Dick does not say that there are no, and should be no scientific laws. He just reminds us that we made them up, not the universe.

V So Philip Dick can do what he likes, and excuse all his mistakes with an airy wave of a philosophic hand? Not exactly. We would expect Dick to replace those thought-forms he rejects, with new thought-forms that control the structure of his novels. You cannot conceive of meaningful fiction without some structure.

Philip Dick's letter provides many clues to this structure. Dick posits that a deepened view of reality will see past the self-consistent physical universe that surrounds us, and may observe another self-consistent reality. If we can find some way to throw off the delusion of "normal" reality we may "dream dreams and see visions" as the New Testament puts it. Or, as Plato would have it, we would stop dreaming, and would turn from a world of shadows and look directly towards the "sun" which we had never seen before. As Philip Dick demonstrates in FAITH OF OUR FATHERS (DANGEROUS VISIONS) and in the afterword to that story, his quest is religious.

But Dick's novels are not religious, or at least, not in any conventional sense. Dick's novels do not melt into an undifferentiated sludge, as you might expect.

Philip Dick feels free to write about the revelation of reality, but it his reality. Dick's vision is entirely despotic - the reader either accepts things as they come or he does not read any further. At the same time Dick's purpose is not to promote a world ecstatic religious vision. Instead, he shows us the frailty of our reality, and lets us catch glimpses of other mysteries only when appropriate. THREE STIGMATA OF PALMER ELDRITCH remains the only novel in which Philip Dick has tried to detail a vision. More importantly, the drama of Philip Dick's novels flares out from the process of discovery, not that which is discovered. A blind man given sight looks at his surroundings with understanding before he tries to look at the sun.

And whatever Dick tries to do, the answering cry will be: "But he's making it up! Dick's worlds are entirely imaginary - they are entirely subjective."

But Dick can convince us that his quest is legitimate, and his discoveries are just as "real" as our own observations. How does Dick break down this dichotomy between "objective" and "subjective"?

UBIK is almost a textbook illustration of the process that the author describes in his letter. One fanzine reviewer sniffs that "Dick has this wonderful world, but doesn't really use it". But Dick's "world" of 1992 centres around that implausible telepathic technology that I looked at earlier in this article. It is a world that has some unusual features, but Dick's characters live in it no more easily than any inhabitant of our time lives in our world. Joe Chip cannot afford to pay the vending machines that supply all the elements of existence. Glen Runciter, his boss, keeps in contact with his "dead" wife, as they are still equal partners in the firm.

But the process of half-life is an analog for the process of decay that sucks out all life from that secure universe which we think is quite reliable. The Moratorium's half-alive patients lose more "life" with each conscious act. As they move toward the final experience they lose the power to experience. It is an archetypal tragic situation, where each affirmation of life contains an equal amount of negation.

But again, this is not an "explanation" of the processes set loose

in UBIK. Dick sets it all before us, and expects us to fall in line, or at least enjoy the superficial aspects of the story. Why do we do it?

In UBIK, the group of Inertials controlled by Glon Runciter travel to the moon to interview their "enemy" Hollis. The interview is a trap, and an explosion kills Runciter and leaves the others badly shaken. The group returns to Earth, attempts to pick up the pieces of the Runciter organization, but find that the physical aspects of their world decay around them as well as the social aspects:

Joe said, "Look at this cream." He held up the pitcher; in it the fluid plastered the sides in dense clots. "This is what you get for a poscred in one of the most modern, technologically advanced cities on Earth. I'm not leaving here until this place makes an adjustment, either returning my poscred or giving me a replacement pitcher of fresh cream so I can drink my coffee."

Putting his hand on Joe's shoulder, Al Hammond studied him. "What's the matter, Joe?"

"First my cigarette," Joe said. "Then the two-year-old obsolete phone book in the ship. And now they're serving me week-old sour cream. I don't get it, Al." (UBIK, pages 76-77)

The process cannot be stopped: this gives the feeling of despair that surrounds most of Dick's novels. The character becomes an observer in a world that peels away. Joe Chip protests, but the whole universe turns backwards. Joe tries to buy a tape-recorder; he opens the back to find all the components burnt out.

Joe picks up the phone - he wants to patch up the remains of the Runciter organization and cobble together some normality:

Joe hung up the phone and stood dizzily swaying, trying to clear his head. Runciter's voice. Beyond any doubt. He again picked up the phone, listened once more.

" - lawsuit by Mick, who can afford and is accustomed to litigation of that nature. Our own legal staff certainly should be consulted before we make a formal report to the Society. It would be libel if made public and grounds for a suit claiming false arrest if - "

"Runciter!" Joe said. He said it loudly.

" - unable to verify probably for at least - "

Joe hung up. I don't understand this, he said to himself. (UBIK, p 88)

The voice drones on. On this first occasion it makes no contact, but it breaks through numerous crevices of the world which Joe tries to readjust himself towards. Runciter reminds us of Palmer Eldritch, but Runciter is not the suffocating face of evil. He becomes a neutral figure, one of many in Dick's novels that try to send a feeble semaphore from another "reality".

Chip arranges a hotel-room rendezvous with another of the Inertials. She does not arrive, and in the morning Joe discovers:

On the floor of the closet a huddled heap, dehydrated, almost mummified, lay curled up. Decaying shreds of what seemingly had

once, beencloth covered most of it, as if it had, by degrees, over a long period of time, retracted into what remained of its garments. Bending, he turned it over. It weighed only a few pounds; at a push of his hand its limbs folded out into thin bony extensions that rustled like paper....

In a strangled voice von Vogelsang rasped, "That's old. Completely dried-out. Like it's been here for centuries. I'll go downstairs and tell the manager."

"It can't be an adult woman," Joe said. These could only be the remnants of a child; they were just too small. "It can't be either Pat or Wendy," he said, and lifted the cloudy hair away from its face. "It's like it was in a kiln," he said. "At a very high temperature, for a long time." (UBIK, Page 93)

You may see from this passage in particular why Dick carries his reader with him. On one level this is a mystery story - we want to know what happens next. The experienced Dick reader will know already that there is no neat explanation at the end of it all: he wants to discover the wide range of possibilities that Dick elucidates. But most importantly, every process is revealed clearly and precisely - there are no waste words. Chip exclaims in bewilderment, but each scrap of knowledge comes without exclamation. This is unimpaired sight - an experience transferred to the reader's nerve-ends through the main character. We cannot detach ourselves from the process and say "This is impossible". It is not impossible - it is happening to us.

Dick has a surface explanation for the novel: that Runciter did not die, but was the only person left alive after the explosion on the moon. The rest of the inertials lie in half-life, Joe Chip among them. Runciter succeeds in the projection of partial messages into the time-degenerating half-world, but he cannot reach through as he should be able to. Runciter appears on television in Chip's "reality", and wields Ubik:

"Yes," Runciter's dark voice resumed, "by making use of the most advanced techniques of present-day science, the reversion of matter to earlier forms can be reversed, and at a price any conapt owner can afford. Ubik is sold by leading home-art stores throughout Earth. Do not take internally. Keep away from open flame. Do not deviate from printed procedural approaches as expressed on label. So look for it, Joe. Don't just sit there; go out and buy a can of Ubik and spray it all around you night and day."

Standing up, Joe said loudly, "You know I'm here. Does that mean you can hear and see me?"

"Of course, I can't hear you and see you....This commercial message is on videotape...." (UBIK, page 119)

The image of Runciter continually reappears, but Joe's reality still holds some continuity - Runciter cannot speak directly to Joe, but finds himself on a videotape recording. The image manages to direct Chip to Des Moines, Iowa. He arrives there just before all pre-World War II motor traffic degenerates altogether. His post-World War II plane disappears into the form of an early model car.

There are no answers in this process - at the end of the novel the

"explanations" are there, but the tragedy of Joe Chip's new circumstances remains. The haunting desperation of THE ZAP GUN's "Enough is enough" remains in the last few chapters of UBIK.

The experience is total; the documentation complete. But this is a tour through Dick's experience, not a tour through our world, or the world over Philip Dick's back fence. This is a chute of metaphysical discovery, in which every one of our assumptions is tested. Sometimes the process is terrifying; at best it is also very funny.

Dick's fear of evil is there - but Dick does not run from it. He welcomes it as the only legitimate perception of a fully-awakened mind, even though he knows this perception can only burn out the perceiving mind. Dick's characters are parts of himself. On the one hand they do not understand proceedings; they "feel" fear, panic or horror. But they also see clearly: their fear does not blind them in any way, but only brings out the best in them. At the end of UBIK, Joe Chip watches himself deteriorate as he climbs the steps of the decrepit Des Moines hotel. There is no hysteria here - just direct, all-inclusive description that draws around us all the emotions that fit the situation:

He lay for a time, and then, as if called, summoned into motion, stirred. He lifted himself up onto his knees, placed his hands flat before him.... my hands, he thought; good god. Parchment hands, yellow and knobby, like the ass of a cooked, dry turkey. Bristly skin, not like human skin; pinfeathers, as if I've devolved back millions of years to something that flies and coasts, using its skin as a sail.

Opening his eyes, he searched for the bed; he strove to identify it. The fat far window, admitting gray light through its web of curtains. A vanity table, ugly, with lank legs. Then the bed, with brass knobs capping its railed sides, bent and irregular, as if years of use had twisted the railings, warped the varnished wooden headboards. I want to get on it even so, he said to himself; he reached toward it, slid and dragged himself farther into the room. (UBIK, page 168)

Action merges into perception; perception shows Joe his own alienness; this perception sets his mind and ours forever seeking the key to the pattern; action and perception settle into a kind of acceptance of the last resting-place. There is despair in the scene, but also the kind of intelligence that seeks to understand even when all understanding seems to have disappeared. How better could I sum up the whole of Philip Dick's enterprise?

- Bruce R Gillespie 1969

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Stanislaw Lem

[illegible]

(TRANSLATION from the German: Franz Rottensteiner.
This article first appeared in QUARTER MERKUR 20, August 1969:
it was not written by Lem in this form, but has been put together
from remarks addressed to the translator in several letters .

Reprinted from JOURNAL OF OMPHALISTIC EPISTEMOLOGY, Supplement No 1, August 1969, Pages 1 - 6).

A specialisation that would lead to the existence of publishers publishing only science fiction or predominantly science fiction has not taken place in Poland. Here almost nothing has appeared in the field: about half a dozen books by writers from Western countries, including two of the novels of Isaac Asimov, and somewhat more from the Soviet Union - surprisingly enough not the best of Soviet s f, but the mediocre average. When a translator could be found for a selection of American S F Novellas, the man also used to write an introduction form which one could gather that he had read about as much s f as he had had to translate. Some years ago, three stories by Borges were published in a literary periodical, but even then nobody wrote about that extremely interesting man.

As for s f clubs, s f authors and Polish s f: they simply don't exist. Fialkowski is a mathematician who is playing around with the stuff in his spare time to earn some extra money. Neither he nor any other of the people - very young people for the most part - who publish an occasional s f story in one of the technical or juvenile magazines is a member of the Writers' Organization. They don't try to mix in literary circles, and literature doesn't take any notice of them.

And there are no s f critics, because a critic who'll write about me knows nothing of science fiction save H G Wells. Therefore it is hardly surprising that I do not collect reviews, indeed, that I often do not even know of their existence. For they cannot help me and if I get praised, as does happen, I'm already grown up enough that I do not need praise that is nothing but praise. Anyway the only man living who really knows Lem at the moment is Lem himself, although one can hope that this state of affairs will change in course of time. By the way, some people who are especially interested in my work, such as the poet Grochowiak, have written intelligently enough on my books, but for understandable reasons they considered me to be a "mainstream" writer using the "camouflage" of science fiction. One of my closest friends, Jan Blonski, a leading critic and historian of our literature (he lives in a house just beside mine, at the rim of the city) has been wise enough to write about me only once, in connection with my SOLARIS. Even he saw there only a "normal" love story, clothed in an unusual form. For they all lack comparisons by which to judge me.

I myself have written only three times on s f and all that I wrote is to be found in a little volume entitled WEJSCIE NA ORBITE (GOING INTO ORBIT), in which I discuss Camus, Dostoyevsky, futurology and other subjects. But those essays were written in the fifties and my views on s f have changed since then. But I have just now finished a 500 page book on the S F of the West: there is already much interest in this book, and it will most probably also appear in Russian.

Just as there is little Polish s f now, so it was in the past. One exception is Jerzy Zulawski, who wrote at the turn of the century a trilogy that can be read even today.

I'll discuss it in my book on s f. Now I call the position of writers creating in a space that is "exotic" for the West a "linguistic trap". For, had the work of Zulawski become known in the West about fifty years ago, he would be known today as one of the fathers of s f.

NA SREBRNYM GLOBIE (ON THE SILVER GLOBE) was published in 1903 in Lwow by the TOWARZYSTWO WYDAWICZA; there were further editions in 1909 and 1912. It describes well the voyage to the moon of a group of people: under much hardship they slowly travel to the other side of the moon where they find air, water, and also "natives". The children of the space-travellers form a colony, and a quasi-religious faith based upon their exodus from Earth develops. The whole thing is told by the last surviving members of the Terran emigrants, the "Old Man".

In ZWYCIEZCA (THE VICTOR), the second volume, a single man to the moon again, after 150 years, where he is welcomed as an "avatar" and "saviour": this is very well thought-out and ingeniously constructed. When he starts for the moon he doesn't know what has happened in these 150 years, but he is quite willing to play the role of a saviour, for the humans on the moon are kept in captivity by lunar

monsters - "Scherneni" - who have fur, four eyes, and communicate via phosphorizing flashes generated by their foreheads. And they hate the Earth because she, as they like to believe, has robbed the side of the moon which faces the earth of its atmosphere. The ruins of their temples and cities (which have been found by the members of the first expedition) are still standing at the bottom of the lunar seas. The Scherneni have under their wings (they fly, though only badly) large white hand-like appendages which cause any being (including humans) touched by them to feel a momentary electrical shock - this renders the being quite helpless. Women get pregnant by such a touch, and give birth to a "mongrel". The pregnancy is in fact parthenogenetic (and thus something like this could happen, biologically-speaking). Among the lunar humans there are sceptics who don't believe that the humans live in the Terrestrial genesis of their species, preferring instead to believe that the humans live in sub-lunar cities in the deepest parts of the moon, and that everything that is said in the holy scriptures about the exodus is a lie. They also believe that they can fly to the other side of the moon with the ship of the "Victor" and they set off. Because of this the "Victor" is forced to stay on the moon. The war against the Scherneni ends without a final victory: the "Victor" intends to make great reforms of a social nature, but is taken prisoner by the ruling elite and dies a martyr's death. Appended are three different chronicles about his life and death, and he becomes a sort of Jesus Christ.

The style is very modern and the whole thing well-constructed, forming a coherent unity: now there is going to be a Russian edition in Moscow, but I believe that they intend to translate only the first volume.

Of course Zulawski has written an ironical and at the same time grotesque allegory on the rise of the belief in Jesus Christ, and yet Volume I contains a map of the moon drawn by him and the details of the journey to the moon are scientifically impeccable.

STARA ZIEMA (THE OLD EARTH), the third volume, which takes place on Earth, is weaker.

Zulawski had no successors: he was a dramaturgist, critic and essayist, and the trilogy mentioned above was his only transgression into the s f world.

Antoni Slonimski, another pioneer of Polish s f, is still living, now 70 years old. He was one of the leading poets of the older generation. At the age of twenty he wrote a utopian novel, TORPEDA CZASU (THE TORPEDO OF TIME, 1923), and when the thing was reprinted three years ago I wrote an introduction to it. The novel is weak, being very dated in style and construction, but the principle idea is clever: to circumvent all the misery brought on Europe by the Napoleonic wars, a journey into time is made. Those things that happened in history as we know it don't happen - but there is an avalanche of other wars, and the result is another kind of misery and desolation, but nothing has changed for the better.

As for other forms of fantasy or science fiction, we had an Antoni Lange who wrote about 3 or 4 short s f stories, and Stefan Grabinski, who wrote in the twenties and thirties. His stories were weird and horror fiction rather than s f, but he was, to a point, a good writer in that he "democratized" the spiritual world. The macabre happenings of his stories take place in railways (that's especially

well-done in his stories), among chimney-sweeps, and so on. He also liked to write about those areas in which sex, mysticism and devilry meet: about old monasteries, where the skeletons of small children are found to have been walled in. Unluckily, he wrote in a very mannered fashion, but he has been published in two small collections since the war.

And that was all: it isn't that I want to hide my ancestors, but there were only occasional trickles which couldn't lead to the development of a literary stream - no, there were too few of them for that. In Czechoslovakia something similar has happened, for they have virtually no one besides Capek. Of course Capek himself is a talent of an order very different from our Zulawski or Grabinski: Capek already belongs to world literature, and I know nothing more original than his THE ABSOLUTE AT LARGE.

But let's speak about me. Some days ago two Russians visited me (editors of a periodical that is interested in s f) and one of them told me that around 1930 there lived, somewhere in Siberia, a brilliant man named Tschuktsche, in a village that wasn't aware of the rest of the world, and this genius invented writing, as a system of hieroglyphs. That impressive edifice broke down when an expedition found the village and the man learned that there exists something better in the field of writing. Now I am, as it were, mutatis mutandis, such a Tschuktsche, because I have read almost no s f since 1961 - with a few exceptions, it is true, such as some stories by J G Ballard. I've also read a little French s f, but that's all. Of the criticism of the field I have read nothing but the book by Kingsley Amis. And such a man intends to write a book about the whole of s f? Nonsense, yes, even impudence perhaps, isn't it?

Indeed. But on the other hand, being "the man in the moon", my position somewhat resembles that of an extraterrestrial, and I can look at s f with a fresh eye.

In such an isolated position one must either speak openly without reservations or keep one's silence: and if I break my silence I might as well offer my intimate thoughts.

I have been a writer since 1949, and have published 23 books: among them one contemporary novel, an autobiographical sketch (about a year ago - this one was so well liked by the literateurs that one of our organizations of emigrants in London awarded me a prize. However this was something of an ideal object, for material rewards weren't attached to the prize. And I assume that those people, old literateurs for the most part, would have been ashamed to give me the prize for an s f story), three non-fiction books (a philosophical essay on cybernetics, a thick volume on the future of mankind and a theory of literature combined with a theory of culture - my last book, 611 pages long) and aside from this nothing but science fiction: THE ASTRONAUTS, THE MAGELLAN NEBULA, EDEN, THE INVINCIBLE, THE INTERROGATION (a pseudo-mystery), RETURN FROM THE STARS, SOLARIS, MEMOIRS FOUND IN A BATH-TUB and BOOK OF ROBOTS, ROBOT FAIRY TALES, SEZAM, INVASION FROM ALDEBARAN, THE STAR DIARIES OF IJON TICHY, MOON NIGHT (which includes also TV plays), CYBERIAD, THE CHASE, and TALES OF THE PILOT PIRX.

Given this, and taking account of the 40 or more translations and the total circulation of over 5 million (included there is the big help of the USSR, with almost 2.7 million copies) it seems impossible

that there have not appeared interesting reviews of my books in Japan, Italy, Hungary, Yugoslavia, Rumania, Bulgaria, Czechoslovakia, Armenia, France, the USSR, etc. But to get hold of such reviews would pose a serious problem: I do not know them, I have never seen them, and even if I could get them there would still be the problem of translation - I know five languages (Russian, English, German, French and Polish of course) but in Czech, for instance, I can read only the menu. And then there's the matter of whether the effort would be worthwhile. I don't think so. Of course, at first the situation annoyed me, but now I have accepted it and have tried to make the best of it.

In all of those years I have also had some connection with the s f of the West, and so I know something of people like Knight, Bradbury, Brown, Bester, Pohl, Blish, Kuttner, Russell, Asimov, Clarke, Dick, Campbell, Heinlein and others. I know GALAXY, but haven't read it for eight years. I did read the French edition of it until two years ago. That's about all. In itself that wouldn't be so bad: far worse was that I intended to write a book on futurology and did write it. The first edition appeared in 1963 and a year later there was a revised and expanded version: and I didn't have on hand anything of the specialist literature on futurology. But although the book remained without a review for almost a year (and who would have reviewed it? the literatours didn't understand anything of the matter, and the scholars wouldn't mix in the affair, for I had written as an s f author) it did at last become known, somehow, and now it has also appeared in Moscow. Thus, as you can see, it is possible to create and exert an influence even though I am the man in the moon, and the situation even has some positive aspects: just a few days ago, when I read Kahn's symposium on the year 2000, I learned that whole institutions, collectives and teams of specialists had played around with the material, long before they gave birth to it viribus unitis. Had I been aware of the amount of effort they had put into their work I most probably would have despaired: but now I see that I have created, without those institutes and helpers, a wholly original work, and should it come to pass that a translation appears in our lifetimes, the reader can see for himself whether or not my audacious statement is true.

Perhaps the reader recalls what Thomas Mann once said about the honorary Ph D: that it is just a problem of biological endurance. And really, if you just happen to live long enough, and create long enough, even if you only do things that nobody understands (in art, I mean), then after some years people will get used to you - you don't annoy them anymore. Indeed, you'll become a known fragment of the cultural landscape, and finally you can become a rarity, an original exhibition piece. That's what happened with me. For I, who know several cosmonauts, to whom well-known Russian academicians write letters, and who publish pocket books in editions of 100,000 copies (and then again writes for Philosophic Studies and Annals with an edition of 1800 copies), I have become an unknown, but an admitted factor.

That has got nothing to do with the reading public. That public learned of the existence of science fiction by reading, 17 years ago, my first naive optimistic novels. When I began experimenting in the field, the circulation of my books began to fluctuate and for a time I thought my readers would desert me. But they have followed me. Therefore I cannot say a single bad word about my

Polish readers, although the regime - I see it, I'm a realist - quite inadvertently has helped me by not publishing any s f here. There was no good s f in Poland, but also no trash, and even those who'd rather read BARBARELLA and comic strips instead of sweating over my texts were forced to read me and this somehow - what do I know? - became a habit with them.

What I have said above can serve, I believe, as a sociological introduction to the background against which my books were created. As an s f "great" I was celebrated in the Soviet Union first, because there the intellectual vacuum was harder there than here (for since 1956 we have had Kafka, Ionesco, Butor, Robbe-Grillet, Camus, Sartre, etc; hardly any of that for them) and second, because that country is very big and therefore has a big and developed science: this science has bred a class of young and starved intellectuals. The scientists have always found it easier to get hold of American paperbacks, and by knowing them they already have a standard by which to measure my work. This (in the final analysis) quite simple mechanism of my Russian fame has never been understood in our literary circles (where a mixture of a feeling of inferiority towards the West/Paris and unconscious feelings of contempt towards Russia predominates: this contempt stems from the old stereotype of the 19th century, but such stereotypes have a long life). That's the reason I was both envied for my large editions and not read by my colleagues.

In view of this one would naturally ask where it is that I get the information that I have put into my literary and futurological books, since ex vacuo nihil fit? Why, from scientific sources of course. There the second-hand of scientific popularisation is of no help. I have always tried to read only the best: in physics, for instance, those who shaped it, not those who only teach it. The same applies in other fields - for example, information theory from Shannon, cybernetics from Wiener, and so on. Twenty years old Niels Abel answered, after he had found his elliptic functions, the question about his sources: "I read only the masters, never their pupils". I have remembered this well. If I do not know something I just sit down and begin to learn. So I started, one and a half years ago, studying structural linguistics since all that talk about structures in humanist disciplines was Chinese to me. Having learned what mathematics, anthropology (Levi-Strauss, for instance) had to say on the subject I felt at ease for I had, as it were, laid the foundations well. And, since I know that the Campbells and the Heinleins are studying Dianetics and Korzybski diligentissime, I know that they are filling their heads with the most stupid stuff. Perhaps the reader will have read Martin Gardner's book on pseudoscience: he shows the intellectual standards of the material with which some science fictioneers are concerning themselves when they happen not to write novels. Existence determines the view of the world. If you know all what Feynman has to say in rebus physics, you'll never believe a crank though he might talk as sweetly as an angel.

As for a representative of the New Wave: Ballard is writing very well and beautifully epistemological and anthropological nonsense; we can become one with nature only by dying and thus returning katabolically into the womb of nature: there just isn't any other way and this isn't a matter of some voluntarism. He is just badly informed or intends to remain uninformed, for in evolution there exist, for all practical purposes, only irreversible processes,

and our species has been created in such a way that we have developed civilisation instead of horns and claws. No change is possible there, either for better or for worse: it just isn't possible, save for the help of chromosome engineers who may turn man into a four-legged animal (and correspondingly dumb). Nevertheless it is possible to write anti-rational and at the same time beautiful, indeed exciting, books: it's just that the reader must not think too much about the implications of the subject matter, for then the contradiction of the thing will become apparent to him. But an anti-rational (i.e. an s f opposing scientific results, and directly opposing them) is already a pure contradiction in adiecto, just like atheistic theology, the squaring of the circle in mathematics or the perpetual mobile in mechanics.

That's bad, because the world gets more and more complex. You can either try to visualize the consequences of this process or negate the existence of such a process, just as if somebody were to say that there were no nights and days, and no flowers. But then he begins to think magically, and magic s f is good only as fable.

At least, that's my credo.

- Stanislaw Lem : 1969

INTRODUCTION TO
A STRUCTURAL ANALYSIS OF S F

Stanislaw Lem

ORIGINAL PUBLICATION: QUARBER MERKUR 23, some time in 1970

TRANSLATION: Franz Rottensteiner

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What have I theoretically made of science fiction?

An extract from my thousand page book on s f (FANTASTYKA I FUTUROLOGIA, to be published in 1970 by Wydawnictwo Literackie, Krakow) would be unreadable. I doubt whether I could even convey an idea of it, with the exception of the most central things. Especially so, since I haven't devoted the utmost attention to aesthetic problems, even though I have also talked about them. I think that rather I will give you the general shape of my line of thought, as a preparatory stage for my book.

Literature is a play whose rules for all the reader's purposes remain unstated. We learn to play it just as a child learns to speak: by watching a variety of games. A child learns to speak by paying attention to talking people. You become a reader of literature by reading different kinds of literary works. Although not explicitly stated, the rules of any literary play, whether novel, tragedy, poetry or fantasy, have their specific characteristics.

In historically early stages of literary development, the different branches of literature (or, geneological types) are distinguished unmistakably and clearly. Only in more advanced stages of cultural

development do we find cross-fertilization, but there are always cross-breedings of rules which are forbidden. Therefore there exists a main law of literature called "incest prohibition"; that is, a taboo on geneological incest. A literary work, considered as a game, must be finished and played out by the same rules with which it was begun. Except, when the change of rules that occurs during the play (the plot) has an unrestricted meaning: the changes are in themselves the consequences of a separate rule. They are justified by semantics, not chance.

According to the theory, there exist two different kinds of plays (and this is true for all plays, not just for the literary play): the empty, and the meaningful, play.

An empty play has only its inner word structure. It is the result of relationships which occur between the objects with which we play (such as on a chess board). In chess, the king has its specific meaning within the rules of the play. Outside of them it has no reference. This kind of semantic vacuum can never be attained by a literary play, for it is played with language, and language always has meanings which are oriented towards the universe of real things. Only with a specially constructed language which hasn't an outward-oriented semantics (that is, with the language of mathematics) does it become possible to play empty games even with language.

In any literary play, there are rules which, during the play, bring into focus outer semantic functions. There are others which only make possible the proceeding of the play. Even when the latter are totally "fantastic", in the sense that they imply occurrences which could never happen in the real world, they nevertheless are not recognized as "fantastic". So it is impossible, therefore "fantastic", to read the thoughts of a dying man from his brain and to reproduce them in language. But something like this quite often does happen in "realistic" works of literature.

In such cases, we simply have a convention, a tacit agreement between reader and author. This is a specific rule of the literary play which permits the presentation of happenings which are realistic, and this happens even though the method of presentation itself does use anti-realistic means (such as, thoughtreading). Any art has such conventional rules as means of expression, so that, for instance, a stage decoration is not "fantastic" just because it is made of cardboard, even though there exist no trees and no palaces of cardboard.

The literary play is complicated especially because its rules can be oriented semantically in several directions. The main types of literary creation imply different "ontologies" - different types of existence.

But you would be mistaken if you believed that, for instance, the classical fairy tale has only its inner, autonomous meanings, but has no relationship with the real world. If this real world did not exist, then fairy-tales would have no meaning. The main difference between the real world and the world of the fairy-tale is of a totalitarian nature. The occurrences in the world of the myth and fairy-tale are always semantically connected with the fate of the inhabitants of such worlds. They are worlds that are either "friendly" or "inimical" towards their "inhabitants", or

they are worlds that wish them harm. The laws governing such worlds can appear anthropomorphized, animated or not. They can crystallize into "marvels".

But this is just the outer phenomenology of the development of the story. Central in the ontological sense is always that these worlds are never neutral towards their heroes, and because they are not neutral, they have a different type of existence from the real world.

For we consider the "real world" to be a variety of objects and processes which lack any intention. They have no meaning, and no message. They wish us neither good nor ill - they are just there. The fundamental structure of myths and fairy-tales is addressed to human beings: secretly, yes; sometimes maliciously. They are worlds that have been built either as traps or else as "happiness giving universes". They are therefore, in their relationship with humans, something which can arise only by the premeditation of a universe maker. But if a world without intention, i.e. the real world, did not exist, then it would be impossible for us to perceive the differentia specifica - the uniqueness of the world of myth and the fairy tale.

Literary works can have several semantic relationships at the same time. The fairy-tale has its inner meaning, which is derived from the contrast between it and the ontological properties of the real world.

But it happens only in the classical fairy-tale that good is always victorious over evil. Mark Twain has written "anti-fairy-tales" in which the worst children live happily ever after and the good and well-bred end fatally. The meaning of such fairy-tales is arrived at by the reference to the paradigm of the classical fairy-tale. You achieve it just by standing on end the rules which govern the "normal" fairy-tale. Therefore the first instance of a "semantic appellation" need not necessarily be the real world: this instance can also be the already existing and well-known category of literary plays. The rules of "basal" plays are inverted - as they are by Mark Twain - and by this a new kind of literary rules is created, and a new kind of literary work at the same time.

The evolution of literary rules in the 20th century mainstream of literature has been such that the writer was simultaneously allowed new degrees of liberty, and that new restrictions were placed on him. This evolution is contradictory, as it were.

Earlier the author was permitted to claim all the attributes of godhood for himself. He knew everything and he could make anything of his hero. These rules have lost their validity, even since Dostoyevsky. The author is now forbidden the god-like vision of the world that has been created by him, and thus new restrictions have been imposed upon him which were unknown at an earlier date. They are of an ontological kind: as human beings, we really act only on the basis of some existent, but always incomplete information in all possible situations of life. The writer has become one of us. He has no right to play god.

But at the same time he is allowed to create the inner world of his works so that it need not necessarily be similar to the real world. It can show different degrees of deviation from this world.

Now, these deviations are very important for us! The world of the myth and the fairy-tale also deviates from the real world, but the kind of this deviation is not caused by any individual inventions. If you want to write fairy-tales, you have to accept certain axioms that have not been invented by you, or you will not produce a fairy-tale.

But now you are allowed, in literature, to attribute pseudo-ontological qualities to the world described, which are the results of your personal, private invention. The deviation of the world of a work from the shape of the real world should always carry a meaning. The sum of all the differences between the real and the depicted world therefore has, or should have, the character of a coherent strategy: the world in the fiction is not similar to the real world, but it has a semantic intention.

Therefore there exist two kinds of fantasy: the "passing" fantasy, such as in the case of Kafka; and the "final" fantasy as in the fairy-tale or in s f. The first kind of fantasy is not permanently accepted as a convention by the readers.

We are supposed to accept the metamorphosis of human being into bug in Kafka's story METAMORPHOSIS not simply as a fantastic marvel, but also as a socio-psychological situation about objects and their deformations. The strange phenomena therefore form only the outer shell of this world. It has an inner core which has a good, non-fantastic meaning. The objects are therefore used as semantically pointing signs.

However, in a work of s f there may be intelligent dinosaurs, which often doesn't indicate hidden semantic meanings that must be found out. The dinosaurs are meant to be admired as we admire a giraffe in a zoo. They are not intended to be part of semantic systems of expression, but only as parts of the empirical world. Thus, a literary work may describe the world as it is, but it can also interpret it (or attribute values to it, judge it, give it names, laugh about it, etc.). In most cases, however, a work can do both things at the same time.

My schematic division of literary main types is like this: either the world, as the dwelling-place of humans, is intentionally addressed to them (i.e. it deals with them in such a way as only a being with personality can do it), or the world is completely neutral towards human beings. (This does not mean that it cannot hurt or help them. It only means that the world has no similarity with a person. If it does kill its inhabitants, it does so without intention. If it makes them happy, it also does so without an idea that such is happening. Where there are no thoughts and no motives, there is no psyche, and so there is no intention.)

- 1 If the world is addressed positively to man, it is the world of the classical fairy-tale, whose morality is superimposed over its physics. In the fairy-tale there can never be such unlucky, physical chances that would result in someone's death. In the fairy tale there is no irreparable damage done to the positive hero.
- 2 If the world is addressed negatively in the same way, we have to deal with the world of myth. ("Do what you will, and you will nevertheless become the killer of your father and commit incest.")

- 3 If the world is neutral in the sense above, we have the real world, which is described by realism in its contemporary form, and s f tries to describe the same world world at other points of the space-time continuum.

For that is the premise of s f: anything that is shown must principally be interpretable empirically and rationally. In s f there must not appear marvels, transcendence, devils, demons, and also no unlikely patterns of occurrences.

II

And now we come near the place where the dog lies buried. What does "probabl: patterns of occurrences" mean?

S f authors try to blackmail us by calling upon the omnipotence of science and the infinity of the cosmos as a continuum. "nything can happen", they say, and therefore "nything that may happen to occur to us" can be presented in s f.

That is not true even in the purely mathematical sense, for there exist infinities of quite different powers. But let's leave mathematics alone. S f can either be a "real s f" or a "pseudo s f". When it produces fantasy of the kind of Kafka it is only pseudo-s f, for then it concentrates upon the content that has to be communicated. What meaningful and total relationship exists between the telegram "Mother died funeral Monday" and the structure as well as the function of the telegraphic apparatus? None. This apparatus only enables us to transmit the message. Similarly all somantically "heavy" objects which may be of a fantastic nature, such as the metamorphosis of man into bug, may nevertheless transmit a meaningful and realistic communication.

If we were to change railway signals in such a way that we would order the stopping of trains in moments of danger, not with a red light, but by signalling with stuffed dragons, we would order the use of "fantastic" objects as signals, but they will have a real, non-fantastic function. The fact that "there are no dragons" has no relationship with the real purpose of stopping trains.

And, just as we can solve real tasks in life with the help of images of non-existent beings (dragons), we can signal in a literary work the existence of real problems with the help of prima facie impossible occurrences or objects. Even when a work of s f describes happenings that are surely, with a certainty of 100%, existentially impossible, such a work may nevertheless have the function of pointing out meaningful, indeed rational, problems.

In this case a certain contradiction is the result, for with "the fantastic" (in the sense of "the impossible") is being signalled "the possible". The technological parameters of a space ship in s f may be quite fantastic in the sense that it will be impossible during all time to construct a space-ship with the specified technical parameters. But nevertheless social, psychological, political and economical problems of space travel may be depicted quite realistically, with the help of fantastic objects.

But what happens when everything in an s f story is fantastic in the sense described above? What can we say when the objects as

well as the problems which are pointed out by them have no chance of ever being realized? (For instance, when impossible time-travel machines are used to point out impossible time-travel paradoxes). Then s f is playing an empty game.

The only quality which we can judge then is the characteristics of this play. It has no hidden meaning. It does not reproduce anything. It doesn't predict anything. It has no relationship at all with the real world. It can only please us as a logical puzzle, as a paradox, as intellectual acrobatics. The value of such plays is autonomous - they lack all semantic references, and therefore, they are either "good" or worthless plays.

But how do we recognize the quality of such empty plays? Only from their formal qualities. They must contain a multitude of rules. They must be elegant, witty, precise, original, strictly played out. Therefore they must show a minimum of complexity, and an inner coherence, in that it is forbidden to change the rules during the play in order to simplify it.

But the empty plays of s f are about 80-90% very primitive, naive, "one-parameter" processes. For they are based almost always on only one or at the utmost on two rules, and the rule of inversion becomes their universal method of creation in most cases. To write such an s f story, you invert a pair of diametrically opposed ideas, so that we have such things as: the body of a human being is quite beautiful, but in the eye of the extraterrestrial we are all monsters; in ALL THE THINGS YOU ARE, by Sheckley, the odour of human beings is poisonous for extraterrestrials, and when they touch the skin of humans, they get blisters - and so on. What appears normal to us is considered to be abnormal by others. About half of all Sheckley's stories are built on this principle.

The only interesting case of an inversion is a change in a basic property of the world. Time travel stories have originated in this way - that which is irreversible, time, has acquired the character of the reversible. Primitive, however, are all inversions of a local character (on Earth humans are the highest biological species, but on another planet man is but the cattle of intelligent dinosaurs; we consist of albumen, therefore the aliens are made of silicon etc.)

Only a non-local inversion can have interesting consequences. For instance, we use language as an instrument of communication; any instrument can principally be used for the good or the bad of its inventor; so language can be used as an instrument of enslavement, as for instance in BABEL 17, and - this is interesting - as a generalizing hypothesis on the interdependence between worldview and the apparatus of conception. This situation is also interesting because of the ontological qualities of this inversion, where the relationship between man and language is reversed by 180 degrees.

III

The pregnancy of a virgo immaculata; the running of 100 metres in 0.1 seconds; the equation $2 \times 2 = 7$; the pan-psychism of all cosmic phenomena postulated by Stapledon - these are four kinds of fantastic conditions.

- 1 A reverent Christian believes in virginal conception, therefore for him this is no fantasy. At the same time it is principally impossible, even empirically possible, to start the embryogenesis of the egg in the virgo. What is today empirically improbable may acquire an empiric character in the future.
- 2 It will always remain impossible that a man will run 100 metres in 0.1 seconds. In order to enable him to accomplish such feats, his body would have to be re-constructed so totally, that he couldn't be a man of flesh or blood anymore. Either he will be no human being any more, or - as a human being - nobody will be able to get that quickly across the distance. Therefore, if a work of s f were based on the premise that somebody could run that quickly, it would be a work of fantasy, not s f.
- 3 2 times 2 can never become 7. It is also, consequentially, impossible to realize any kind of logical impossibility. It is, for instance, logically impossible to give a logical proof for the existence or non-existence of a god, and because of this any imaginative literature which is based on such postulates must be fantasy, never s f.
- 4 The pan-psychism of Stapledon is an ontological hypothesis. It can never be proved in the scientific sense, for any transcendence that can be proved experimentally ceases to be a transcendence, for by definition, transcendence means "empirically unprovable". The god reduced to empiricism is no longer a god; so the frontier between belief and knowledge can therefore never be annulled.

But when any of the conditions mentioned above (or something of the same order) is described in a work of s f not in order to postulate in earnest their real existence, but only to interpret with them as signal-objects some content of a semantic character, all these classificatory arguments lose their power.

What therefore is basically foul in s f is the demolition of differences which have a categorical character. Fairy-tales and myths are passed off for quasi-scientific hypotheses and their consequences, the incommensurable is postulated as commensurable; the wishful dream or the horror story are passed off for prediction; tasks which can be solved are solved with means that have no empirical character; insoluble tasks (such as No 3 above) are claimed as soluble.

But why is such a proceeding foul when there was a time when myths, fairy-tales, sagas, fables etc were highly esteemed keys to all cosmic locks?

It is the spirit of the times which has caused this revaluation. When there was no cure for cancer, the practice of magic had the same value as a chemical substance, for both were wholly equal as wholly worthless. But when a hope has been formed that some way may have been found to cure cancer, in that moment the equality mentioned ceases to exist. For then you have to make decisions which will separate the possible and workable from the impossible and at the same time unworkable. Therefore, only then, when there exists a rational science which permits us to rule the

phenomena, can we differentiate between wishful thinking and reality. If no sources of such knowledge exist, all hypotheses, myths, dreams, are equal. When scientific knowledge begins to arise, it cannot be exchanged for anything else.

This greater knowledge concerns, as has been said, not just isolated phenomena, but the whole structure of reality. If you can only dream of space-travel, it makes no difference whether you use as "techniques" sailing ships, balloons, flying carpets or flying saucers. But when space travel becomes fact, you can no longer select what pleases you in preference to real methods. The appearance of such a necessity and of all these restrictions, often is not noticed by s f.

Scientific facts are simplified in s f until there is only their total deformation. But even genuine scientific facts are usually put into a world which is categorically and ontologically different from the real world. The difference between the real and fantastic world (in the pejorative sense - too much simplifying) world is stochastic - it arises gradually step by step. It is of the same type of difference as that between a head full of hairs and a bald head. If you loose a hundred, even a thousand hairs, you won't have a bald head, but when does it begin? When you take away 10,000 hairs or 10,950 hairs?

The world of s f deviates from the real world and it has to deviate from it insofar as s f portrays pictures of a future or an extraterrestrial place. These deviations have to be accepted positively, of course, for they constitute the core and the meaning of the s f creation. But this type of deviation is gradually exchanged for another. That which is for-ever-impossible is substituted for that which may be possible tomorrow, the simple takes the place of the complex, the fairy-tale is passed off as real. For it is often very difficult, indeed almost impossible, to show the passages of a work where such an exchange can be clearly isolated. In s f it is not singular deviations but the whole result that is clearly recognizable - and it spells total disappointment.

Just in passing let me note that the paradox of the bald head exists also in realistic literature. There are no humans who are the type of the total, ideal average; any human being is an individual and as such has certain properties which exist in exactly that combination, and in no other human being.

And furthermore, there exist deviations from the average. For instance, there are children of kings, and beings who are six feet tall. There are stutterers and hermaphrodites, and Indians and albinos, and foot fetishists, and philosophers. But to postulate, in a work which belongs to realistic literature, that there exists the son of a king, who is also an Indian, an albino, six feet tall, a philosopher, an hermaphrodite, a stutterer, and, to top it all, a foot fetishist - that is a bit too much of a good thing. There is such an all-dimensional deviation from the average that the whole character is completely unlikely. Any of these deviations may appear in a human being as an isolated property, but that their sum can be personified in a human being appears totally impossible to us. But it is principally impossible to show the dividing-line where such a sum acquires the character of the anti-realistic.

But when we have at least a guide, an apparatus in our heads which permits us to separate the likely from the unlikely, we lose this talent where portrayals of the future or galactic empires are concerned. From this paralysis of our critical semantic apparatus s f profits. For it simplifies all occurrences, be they of a physical, psychological, social, economic or anthropological nature, and because of this its products are a falsification which, however, is not instantly, unmistakably recognizable as such. You feel during the reading rather a general disturbance - you are not satisfied, but because you don't know "how it should have been made", there is a lack of ability to utter just criticism clearly and pointedly. For s f is, and should be, more than "just fairytales".

If we confirm this, we also give s f the right to neglect the fairy-tale world and its rules. It also is not "realism", and therefore it is granted the right to neglect the methods of realistic description. Its geneological vagueness keeps it in existence, because supposedly it is no longer subject to the whole power of the criteria that normally apply to a literary product. It isn't allegorical - but then it says that this isn't its task. S f and Kafka, these are two quite different fields of creation! It isn't realistic - but it isn't realistic literature!

Therefore s f is elastic and escapes if you intend to put it to the test of the criteria of any concrete type of investigation. The future? How often s f authors have claimed that they don't intend to make predictions!

Finally, s f is called the "myth of the 20th century". But myth has, as has been said, an anti-empirical, ontological quality, and technological civilisation may very well have its myths, but itself cannot embody a myth. For myth is an interpretation, a comparatio, an explication, and first you must have the object that can be explicated. In this contradictory state of existence s f lives and strives.

SOME GENERAL REMARKS

- 1 The set of the theory of games is better suited for the generalizing analysis of literary works than for the evaluation of individual works. But it isn't necessarily connected with the specific genre of s f. All typical s f problems can also be considered in the language of descriptive semantics, for instance. If you exchange one kind of descriptive mode of expression for another, you do the same as you do in medicine when you express a sickness in its totality of symptoms in the languages of different branches of biology. For instance, you can describe diabetes as a "biochemical process", or as "an aberrative regulation process". It is always the same phenomenon, but in any single case summed up at differing levels.

The theory of games has the advantage of being very general, i.e. it can be applied universally and this is so because it concerns all sorts of processes which may hide in their structure a collision of conflicting tendencies. For a war, whether between two ant hills or two galactic civilizations,

a staged play, a love affair, an invention, a revolution, a scientific discovery, are all different kinds of conflict situations, and therefore they can be described with the same set of terms.

- 2 There exists no literary theory that leaves out basic value judgments. Logical and empirical mistakes in the construction of a work of art can be strictly proved, but nevertheless any kind of such blunders may gain a positive value in the eyes of the reader. For it isn't necessary to accept logical-empirical criteria as guiding principles. The difference between poisonous and edible foods can be proved empirically, but the difference between good and bad literature isn't an objective datum of the same order. You die if you eat poisonous food, but you can "eat" with the greatest delight s f that is the worst trash for somebody else, and there will be no provable symptoms of "psychic poisoning".
- 3 Occurrences in real life always show a very high degree of complexity, which means that they are structurally plays which consist of a large number of inter-connected singular plays. For nobody can be only a physician, a cosmonaut, or a lover - in this sense any human being has to play a large variety of different roles. The simplicity of the structure of a literary work therefore commonly points out that only a miniscule part of real processes has been reproduced in the work. Such symptoms as the "fantastic escalation" or the "inflation of expression" are not causes of the s f weakness, but only accompanying symptoms of the degradation. They are correlated with the degradation, but they don't cause it. They are the same as the presence of sugar in the urine of the diabetic - they signalize the existence of a sickness, but they don't explain the mechanism.
- 4 The evaluation of s f can be objective to such a degree that it can be found out how far s f deviates from the norms and methods of creations of typical analogous situations in the realm of the "normal" literature of the same time. You then compare s f, as it were, with other geneological types, much as a biologist would compare various parasites with independently living organisms (mammals, for instance). The fact that similarities between the mystery novel, adventure fiction and s f can be stated definitively, is the pejorative evaluation of s f in the sense above. The important thing about this is that this technique of comparison does abstract from the content the themes. Only the inner and outer semantic relations of any work are considered. This guarantees us that no work may be automatically damned for its thematic pigeon-hole.
- 5 Even the best s f novels, BABEL 17, for instance, show during the development of the ^{Plot} variations of credibility that cannot be found even in a quite ordinary non-fantasy novel. You don't read in a non-fantastic work of a man who springs over a wall 7 metres high, or who has such visionary powers that he can count single atoms, or that a woman gives birth to a child after 2, instead of 9 months of conception.

But from the empirical-objective standpoint these happenings are as impossible as some descriptions in s f stories. The painful thing about this is that those incredible things, such as the end play of CAMP CONCENTRATION, have not been necessary. For it is a simple matter to separate the likely from the unlikely when you compare everyday happenings, such as finding a diamond the size of a fist on the street, or the finding of a hat lost by someone, but it is difficult to assess the degree of probability when the consequences of fictitious hypotheses are compared.

The difficult can often be mastered, though. This art can be taught and learned, but where there is a lack of selective filters and corresponding evaluations on the side of the reader, there is no pressure to select that which would lead to an improvement of s f standards.

- 6 I believe that the continuing existence and procedure of radical changes in all fields of life, caused by technological progress, will lead s f into a crisis which perhaps is already beginning now. It becomes more and more apparent that the narrative structures of s f deviate more and more from all real processes, just because they are frozen, fossilized paradigms that were once introduced and have been used ever after. There we have to deal with the art of putting hypothetical premises into the very complicated stream of socio-psychological happenings. This is an art which had its master, for instance, in the person of H G Wells. This art has been forgotten and is lost. It may be gained again; this could be demonstrated.
- 7 A quite general symptom of the s f sickness can be found when you compare the spirit in "mainstream literary" and in s f circles. In the literature of our day there is uncertainty, and distrust towards all traditional narrative techniques, dissatisfaction with newly created work, and general unrest which finds expression in ever new attempts and experiments.

In s f, on the other hand, there is general satisfaction, contentness, pride - and the result of such comparisons must give us food for thought. The quarrel between the orthodox and the heterodox part of the s f fraternity regrettably is sterile, and it is to be feared that it will remain so, for the readers who could be gained for a new, better, more complex s f, could only be won from the ranks of the readers of "mainstream" literature, but not from the ranks of the fans. For I do not believe that it is possible to read only the non-existent, phenomenal s f, if you haven't first read all the best and most complex works of world literature with joy (that is, without having been forced to read them). The revolutionary improvement of s f therefore is always endangered by the desertion of large masses of readers. And when neither authors nor readers wish for such an event, then the likelihood of a positive change in the field during the coming years must indeed be considered as extraordinary small; indeed, almost zero. For it then would be a phenomenon which is called "the changing of a complex trend" in futurology, and this can never happen unless there are powerful factors which arise out of the environment. The will and the determinations of a few individuals can never become such a factor, unless they become world tyrants, which isn't likely. * Stanislaw Lem *