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# THE JET PROPELLED A Spoech by FRITZLEIBER

I have the general impression that this convention is a proview of the first System Science Fiction Convention on the hot side of Mercury. But I want to thank Harry and the rest of the New Owleans committee for providing us with this fine airconditioned living dome of the St. Charles Hotel. The barman downstairs has a slightly different explanation of the temperature. He says it's because the gates of hell have been left open a little as a warning to us all of the atomic warfare and what-not that may be just over the horizon.

And now to get on to the main point that I want to make. The biggest thing that science fiction gives its readers, and its writers, is a preview of the average man of the future. Not the superman, but the average man of the year 2000 plus. Not Johnny Cross, but Johnny Doe. A practical preview that will aid the average man of today in transforming himself into the average man of the future. Just an average man, but smart enough to have avoided the jet-propelled epocalypse of atomic warfare and robotized personality that looms up so fearfully today.

The average man of the future won't be any Einstein, but he'll use robot calculating machines, microfilm, sound tape for memoranda, and - say - anti-tap telephone codes as easily as we use the telephone book and the scratch pad. and as easily as AB the caveman counted to three on his fingers while biting his tongue very herd. This average man of the future will talk three or four languages. I won't say whether that includes Esperanto. He'll talk them as readily as AB the caveman said "Ugh". He'll select the sex of his children, pick the weather for his vacations, and buy and fly the style of light plane his wife likes best. He'll control his emotions as readily as we control our features. He'll spend at least 15 minutes a day in useful thinking, where we spend perhaps five seconds. He'll be paralyzed by moods and frustrations half the time, instead of seven-eighths. He'll recognize a fishy proposition in 2 hours, rather than two days, and a major political blunder in 2 months, rather than 20 years.

And he'll have his own private bag of tricks for showing up the holes in the cleverest propaganda tomorrow can invent. He'll have a great big bump of futurian horse-aense, and he'll use it in out-thinking all of tomorrow's power-grabbers, rabble-rousers, fanatics, tract distributors, and patent-medecine salesmen, including himself. He'll have to. For it's this same average man of the future who will be paying for the atomic rockets to Mars, for the ribbon cities and forest cities, for the food yeast and food algae plants in the tropics, for the robot factories and automatic libraries, for the institutions for the dissemination of friendship and the extirpation of prejudice.

# APOCAL VPSE 1951 GUEST OF HONOR \*

Incidentally, this average man has already started paying for most of these things, and for a lot of other futurian items, both good and bad. This average man of the future will be electing the Coordinator of the 250th story of his neighborhood skyscraper. He'll be voting for his local Conservation Director, for the Colonial Administrator for Antartica, and for the President of the Inner Planets. In the long run, his dinner table conversations will decide whether Asia and the Western World are friently, whether we declare war on Mars. Whether the news disseminating machines turn out truth or bunkum, and whether or not there will be enough food to go around in the year 2051.

Now if the average man of the future is able to do these jobs right, one of the reasons will be that science fiction helped him to. Because science fiction has set up mirrors in time, a hundred, a thousand, a million years ahead, in which the man of today can dimly glimpse himself as he may be.

Now at this point the objection may be raised that....ssshhh....I'm getting longhair. That - please whisper this I'm a do-gooder. That - don't repeat this one, even to my family - that I've got a purpose or two in life I'm trying to promote. Whereas science fiction, it may be argued, ought always to be shear entertainment, escape literature, atomic high jinks, nuclear nonsense, good clean interplanetary fun, without a serious idea in it. But - let's face it, ladies and gontlemen - there does happen to be a serious side to science fiction, and to life. However, that's no reason to get solemn about it. I always say that the more fun you have running the serious side of your life, the better. You can't go wrong if you run the serious side of your life like a wild party without the alcohol, with your brain blasting on all seven jets, and computing on all ten billion rolays. Yes, run the serious side of your life so that you're constantly in danger of having the cops pick you up for disturbing the peace. That's the only satisfactory way I know of avoiding idiocy and keeping away from too many double scotches.

Of course, that's exactly what science fiction is, a disturber of the peace of the average man - gay, giddy, irreverent, and as serious as they come. Science fiction is a ray gun, mild-blast, directed at the seat of the pants of complacency. It's zero friction powder, scattered under the highly-polished boots of stubborn traditionalism. It's an eight-fingered Martian hand thumbing a three-noistriled Martian nose at taboo and prejudice. It's a Venusian raspberry for the willful ignorance of the guy who thinks he can just watch TW and take Hadacol, and everything will come out right in the worldwide. /Applause/

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\*Presented at the Nolacon, the 9th World Science Fiction Convention, held in New Orleans, La. over the Labor Day weekend, 1951. Now the modern science fiction hero may still carry a blaster and wear a plastic helmet, red tights, and a trademarked blue sweater. But this costume has become like the motley of a medieval fool or jester, whose inanest jokes often carry more wisdom than other men's soberest opinions. And no matter how tempting his heroine's space brassiere, no matter how charmingly her feet are shod in dude ranch style space boots, or space wedgies, both he and she have time for a few other thoughts. It's been a long while since science fiction could be laughed off or at, rather than with.

I don't have to remind you just who the people were twenty or thirty years ago who were worrying intelligently about the possible consequences of the discovery of atomic energy, radar, robots, video, esp, biological warfare, space ships, or the various applications of the talkies, the hearies, the smellies, the tasties. the feelies, the kinestheticies, and all the other sensory "ies."

Let's jump back a moment to that phrase - possible consequences. It's the core of science fiction, and also of the sort of thinking that the average man of the future will need. Intelligent prediction, planning, flexible planning instead of precedent and laissez faire -- or is it lazy fare? The best possible on-guard position for any foul blows the future may deal. And I imagine we're in agreement that there will be some jimdandys of those. Science fiction has imaginatively examined possible consequences point by point, field by field. First, the mechanical. One example: Jules Verne. Next, the biological. An example: H. G. wells. The electronic: Hugo Gernsback. The astronomic and galactic: E. E. Smith. The psychological - these are just single examples: Van Vog's. The parapsychological: Williamson. Social and political: Stapledon. Anthropological: de Uamp. Aesthetic and ethical: Bradbury. All fields taken together - I could give many examples, including most of the foregoing, but I'll just say: Heinlein.

This business of taking all fields together is very important. The best science fiction is always backtracking. In the excitement of some new development it never wholly forgets the territory pioneered by the veterans. It keeps its balance, and balance, a sense of the complexity of existence, is one of the things the average man of the future is going to need very much. For instance, even when science fiction is at its most extrasensory, it never completely looses sight of electronics. For another instance, if Bradbury wears us down too much, reminding us of the evil of the machine, we can always turn to Asimov to find out that the machine is man's best friend. Or to Kuttner, to discover that the machine is a perfect zany, and can be reasoned with only by a man as drunk as Gallagher.

Yes, the best science fiction never looses sight, however blurred, of all the angles, any more than the best average man of the future will. He won't be a fanatic, and neither is science fiction. Science fiction isn't identified with any theory, discipline, or cult, no matter how much interest it may show in any one of them. Science fiction isn't technocracy, general semantics, or organic farming. It isn't parapsychology, psychoanalysis, cybernetics, dianetics, hypnoanalysis, or non-directive therapy. It isn't velikovskyism, cousism, lawsonomy, saucerism, dowsingism, leftism, rightism, riftism, rum, romanism or rebellion.

More important, science fiction isn't science. It knows the difference between intelligent imagination and intelligent experiment. It never confuses well-researched fantasy with well-documented evidence. This type of realism, realism combined with unfettered imagination, is something that the average man of the future is going to find very precious. For remember - I hate to mention these sad things, ladies and gentlemen, but something makes me - the average man of the future is always going to be something less than perfect. He'll never be quite what he considers a superman. He'll probably always have a few uncleared engrams. His cardiothalamic coordination will probably be always something less than perfect. He'll eternally trail behind him the faint ghost of an Oedipus complex. Or its equivalent in some perhaps more complex form of family life. He'll never be able to turn all his problems over to an electronic brain, or cry his eyes out satisfactorily on the wide shiny bosom of dear old mama robot. He'll never be able to have an electronic integrator repair or remake his personality. For as soon as a robot is delicate enough to fathom fully a human personality, then it's time human personality called it guits, for the robots will be better able to tackle the adventure of exploring and understanding the universe.

Nevertheless, the average man of the future is going to be smart. He's going to be smart enough in his dumb, everyday, average sort of way to outsmart all the thinking machines, all the superbureaucracies, all the hyperhypnotizers, all the flawless propagandas devised by - well, I'll borrow a phrase from Norbert Wiener - devised by the lords of things as they are.

Let's have a look at this opposition which the average man faces, and will face increasingly. I guote Wiener's book Cybernetics: "The psychology of the fool has become a subject well worth the serious attention of the knaves. Instead of looking out for his own ultimate interest, the fool operates in a manner which, by and large, is as predictable as the struggles of a rat in a maze. This policy of lies, or rather of statements irrelevant to the truth, will make him buy a particular brand of cigarettes. or vote for a particular candidate - any candidate - or join a political witch-hunt. A cortain precise mixture of religion, pornography, and pseudoscience will sell an illustrated newspaper. A certain blend of wheedling, bribery and intimidation will induce a young scientist to work on guided missiles, or the atomic bomb. To determine these we have our machinery of fan ratings, straw votes, opinion samplings, and other psychological investigations, with the common men as their object. And there are always the statisticians, sociologists, and economists available to sell their services to these undertakings. Luckily for us these merchants of lies, these exploiters of gullibility, have not yet arrived at such a pitch of perfection as to have things all their own way. It is only in the large community, where the lords of things as they are protect themselves from hunger by wealth, from public opinion by privacy and anonymity, from private criticism by the laws of libel and the possession of the means of communication, that ruthlessness can reach its most sublime levels."

That's a notion of what the average man of the future will have to face increasingly. Clearly, the opposition is tough, and the average man's job is titanic. Just think, each single man or woman, all by himself, or herself, must somehow be as cunning as the slickest predatory minds, and their smoothest technical assistants; must somehow be as clever as the massed collective power of some two or three billion individuals. That, I'd say, is rugged individualism at its ruggedest.

And yet, without any exaggeration, that's precisely what we ask of democracy, the ability of the average individual to criticize intelligently the actions of the whole. A one-man trouble-shooting job to end all one-man trouble-shooting jobs for each of some two or three billion men and women.

Let's look, very briefly, at some of the means by which the average man of the future will be able to do this job. I say briefly, partly because science fiction isn't exhaustive, but sketchy; isn't dogmatic. but suggestive; isn't definitive, but stimulating. First of the means that the average man of the future will be able to use: simple individuality. Each person born into this world has unique qualities, inshared by any other persons, past, present, or future. These unique qualities form a kind of snoke screen; any person can perhaps make them the basis for unbeatable systems of criticizing the whole human race. Second of these means: specialized training to speed up and to render more efficien and reliable the functioning of sensation and thought. I refer to devices for increasing reading speed, attention span, and swiftness of vision. Also devices such as the automatic library, which would permit a person to consult any book in any library, by a combination of microfilm and television.

Third: general education. The average man of the future will keep up adequately for intelligent voting with such fields of knowledge as nucleonics, psychiatry, semantics, mass psychology, industrial chemistry, and so on. There's been a notion going around the world for a long time that Aristotle or Dante, or sometody at least that far back, was the last man to have a good general knowledge of the world and its culture. There is also that crack about only 12 men in the world understanding Einstein. This notion, that only the specialist can understand his specialty, is, I believe, nonsense. If any specialist is worth his salt, he can explain his specialty in broad sound terms to any reasonably intelligent person. This kind of general education will have to be achieved in spite of atomic secrecy, academic stuffiness, and the natural tendency of any witch doctor to surround his trade or profession with mystery,

Fourth: Practical techniques, by means of which an individual can stay same and realistic. I don't care whether these techniques are called philosophy, semantics, self-analysis, diametics, common sense, yoga, mystical contemplation, or which combination of them is used. The important point is that they be widely applicable and capable of doing a reasonably good job.

Fifth. and last: communication. The average man of the future will be closely in touch with some two dozen true friends, in some dozen countries and localities, in London, Leningrad, Luzon, Lisbon, and Elizabethville, and on Mars and the Moon. This will give him a check on what's going on in the world, and what people actually feel about it. The loneliness of the apartment dwelling, radio-nurtured mass man will be troken.

By means such as these five, the average man of the future will avoid becoming robotized. He'll be unpredictable, even by the cleverest studies. He'll be an honestto-goodness check on the actions of all society. He'll be a voter whose vote means something, a citizen whose opinions count. Science fiction Won't discover these means, because that isn't science fiction's business. But science fiction will stimulate the average men to investigate and use them.

So let's greet him across the centuries, let's greet the man of the future, with his big bald head, and his two hearts, and his tele....

"I beg your pardon! I thought you were talking about me."

Talking about you? What do you mean?

"Certainly, And rather patronizingly. Don't you understand?"

No. What is this. Who are you?

"I thought you'd guess, I'm simply the man of the future."

Ch, don't be ridiculous. Ladies and gentlemen, this is just some joke. Honest and truly it is.

"Ujoke! Why you amusing little moron."

#### It's really just a recorder. Somebody's hocused it for a trick.

"Just a recorder. Listen, great, great grandpaw, if 1'm able to reach back across time, do you suppose 1'd find it difficult to hocus a primitive sound tape? In fact, it's the easiest way for me to communicate with you. Much simpler to send back a series of electrical impulses than a whole body."

Oh. please don't pay any attention ..... You really are talking from the future, honestly?

"I thought you'd catch on after a while."

You're the average man of the future ..... ?

"Oh, i'd hardly say that. You were mostly wrong, you see. We have far more effective defenses against the state, far better thinking devices, than any you mention. You did hit it right in one or two places. But you didn't mention skrenning for instance, or anything about....." [At this point the voice became unintelligible.]

Can you tell us something about those devices and defenses?

"Sorry, it's against the rules. I've got to break off now. I've only time for one more question."

All right, here it is. How are we to become the man of the future? What's the most important thing for us to do?

"That, my primitive friend, is something each one of you is going to have to work out for himself. So long now, but enjoy the convention." [The voice here was only barely distinguishable.]

Well, interpreting for the man of the future here, his last words were that each one of us is going to have to work out for himself the way of turning himself or herself into the man and the woman of the future. In other words, the man of the future is always going to have to have the last word. Thank you. [Applanse]

### RECOMMENDED

Science fiction record enthusiasts who missed the Chicon will be interested in a 12" IP disc introduced at that convention: "Music For Robots". It features an illustrated narrative, The Tin Age Story, in which Forrest J Ackerman relates the story of robots past and present, on side one, and electronic music (à la Forbidden Planet) by Frank Coe fills out side two.

Available only by mail (and perhaps at the Discon), its price is \$3.98. plus 25 mailing costs, from: Eusic For Robots, P. O. Box 3214, Hollywood 25, California.

# STATION IL UNA SPEAKING

I know there are many who question the irregularity of publication for UNA, particularly considering the professed quarterly schedule listed on the contents page. This is an unavoidable result of the problems involved in preparing material for UNA, as well as those of actual publication. Consequently, I think it appropriate to give you some idea of the problems involved.

We start with a library of tapes, covering over ten years of conventions and conferences, from which selections have to be made - some conventions involving as much as 15 hours of recorded program. New recordings are added at frequent intervals. It's a problem even deciding where to start.

First a selected tape must be played, memory is of no value in determining which speeches will be suitable for publication. Then it's necessary to contact the speakers regarding the publication of the items in LUNA. While all these programs were presented to a public audience, and therefore are in the public domain, if nothing else it is only courteous to obtain permission of the speaker prior to publishing a speech.

Then it takes time to transcribe the speech from tape. How easily this is accomplished depends on the speaker's enunciation, andibility, etc., and frequently the quality of the recording itself. This transcript is then sent to the speaker, for his (Concluded on Page 20)



## witchcraft IN SCIENCE FICTION

## LESTER DEL REY and RANDALL GARRETT

#### RANDALL GARRETT:

I am supposed to be defending dowsing rods. I wrote an article which some of you may have read which appeared in the December 1951 <u>Analog</u> on dowsing rods the six-gun type. I can make my statement quickly and briefly. There is an engineer who runs the Milford Waterworks in Milford. Conn., who has for 15 years used these gadgets successfully. He has made his living using the damn things. He goes out and finds pipes with them. He went out and found a pipe for me. So he gave them to me and I found the same pipe. He believes in them. I tried them, and they swing. There's a pipe there. I think it's worth investigating, which is all I said in the article.

I did not say that I would stand up on a stack of bibles, or even a stack of old <u>Astoundings</u>, and swear that they worked. I do think that they are worth investigating. I don't think anybody ever has bothered to look at them twice, unless it was John Campbell So there's my statement. I have seen the things work. I do know that one man has given me practically his oath that he has used them for 15 years, and used them successfully. His assistant did the same thing, he has used them too. I see no reason for either of these men to lie. I think there's something there. I think it is something that needs looking into. I don't know what Legter thinks.

#### LESTER DEL REY:

I didn't come here to attack dowsing rods, just as I find Randy didn't come here to defend them. But I would like to say this: As to the need of investigating these alleged phenomena, there have been approximately 6,000 years of investigation of all forms of magic. You will notice that even John Campbell refers to this as magic. For 6,000 years the field of magic - not stage magic, but so-called real magic - has been investigated. During that time the amount of data, statistics, information, theory, and other workable and useable material represents approximately zero. For approximately 600 years as a whole the legitimate fields of science have been accumulating data of another kind, much of which would indicate that magic does not work. During that 600 years, and I might even say during a much shorter period, the materialistic occident has developed a non-material theory of the universe far transcendent to all that was done by the non-material orient which first went in for magic.

On the basis of the weighting of the scales at this time that we can measure, I would say that having had 6,000 years of investigation and producing nothing, the fields of magic should turn themselves off until they can produce something. If you want a theory as to why dowsing rods work, I am perfectly capable of giving you a material occidental theory. Of course it isn't probable. It does not say they do not work - so long as the man knows what he is looking for he will find it.

> "Presented at the Lunacon 1962, held on April 29, 1962 in New York City, sponsored by The Lunarians, under the original title of "A Debate On Dowsing".

But I want to talk on something which has to do with science fiction. because I think this whole damn field on nonsense. particularly as put forth in Analog. has nothing whatsoever to do with science fiction. My subject, therefore, which Randy can either accept or reject, as he chooses, is witchcraft in science fiction. I am interested, and I am very profoundly interested, as much as I can be, in the subject of science fiction, which is after all only a medium of entertainment, God bless it - in science fiction as a successful means of entertainment.

My objection to witchcraft in science fiction, the whole field of witchcraft; and by that I include esp. at one time having some apparent validity as a science until Rhine's work was adequately investigated, which it was; psionics, which is as far as I can find a way of saying. "Well, we can't make the mind do it, so let's find machines that will do it"; the whole field of paranormal pnenomena, which so far are neither newmena or phenomena. This whole thing has taken over certain sections of science fiction; and has gotten baoly out of hand. Not because it's intrinsically a bad subject for science fiction investigation - it is not. We have used it as a very useful tool in science fiction since science fiction first started. No writer, who is lazy, as all of us are, and who places an alien and a human together in first contact can fail to take advantage of the lovely chance to use esp, or telepathy, or redundantly, mental telepathy. Of course this is a handy gimmick. Cnce in a while a particularly good writer, such as Hal Clement, has investigated the possibilities thoroughly. Usually it's just used as a gimmick.

We have had science fiction using the paranormal phenomena as useful tools. off and on, since I first began reading it. However, the modern psionics version, which I refer to as witchcraft, has had a very unpleasant effect on acience fiction for this reason: it is used not to abet and enable the plot. but as a substitute for the plot. Now in fantasy, and as soon as you go into the paranormal you are in fantasy and not in science fiction, in fantasy today there are certain rules which were pretty carefully worked out in the better <u>Weird Tales</u> stories. in <u>Unknown</u> certainly at its peak, and that is this: you can use any form of witchcraft, magic, demon worship, gnome belief, or anything else you choose, providing you do one of two things - you can investigate it in a new light, and give it a reason for existence, justifying it carefully against the field of modern knowledge, or modern experience, showing how it fits in, as Kuttner did on occasion, as certainly Fritz Leiber did in his very lovely story where all women are witches, <u>Conjure Wife</u>, an excellent example of that; or you can take the basic old superstitions and see how they would work in a modern world.

This is a logical extention of 'if' thinking behind science fiction and fantasy. Or you can do an entirely new twist on an old belief. That is, you can take the theory that vampires do exist, and figure out what they would do now. Such as running a blood bank, to save themselves the difficulty. Such as the fact that - now I'm going back to some of Campbell's speculations - such as the fact that perhaps they were allergic to silver, and a number of other things. Jim Blish did this in one of his stories about werevolves and witches. Jim Blish also incidentally investigated the possibilities of paranormal psychology in a story called Jack Of Eagles, which was again a thorough investigation. This is permissible.

But this is not what science fiction has done with psionics. Unfortunately there have been two types of writers in science fiction. One type of writer, who has always used a little of the paranormal when he felt he had a good plot, has gone ahead and paid very little attention to this whole new field of psionics. The other one has said, "Ah ha, here's eating money. I will write for ...r. Campbell what Mr. Campbell's buttons currently suggest. I will have my machinery work as machinery by magic. I will combine the material immaterial." This would be a perfectly valid field of fiction had it not produced the worse fiction I have ever read in my life, whether it be in science fiction, in fantasy, or anything else. The type of fiction which is the equivalent of the dream fiction all of us have rejected. You know the old dream story, which goes as follows: At the end it was all a dream. He didn't even wake up with a red in his hand. It was just a dream. The magic rod one is at least a variation which says: Was it a dream or not?

The psionics story usually starts out with a situation in which there's no particular gimmick to the story except: Did it or didn't it work? And then in the end we find that it worked, which we knew all along, because this was <u>Analog</u>. For one thing, the psionics machines have been used to do things that are already done. The psionics things have been used to give us communication. My God, we can communicate in a thousand different ways already. The psionics machines have been used to get us to the planets. This is the easy way out when you can't figure. Notody has explained how psionics works. Campbell hasn't either. He said: "Let's call it magic." There is no theoretical basis of it, therefore there are no limitations on it.

You can have anything at all happen to suit yourself in witchcraft, if you believe thoroughly in witchcraft, or in modern witchcraft which is psionics. One of the rules of fantasy is that, having taken your basic postulates, you work strictly within them, and not introduce new things later on. Because if you do, you have a story where anything can happen. And in a story where anything can happen there cannot possibly be suspense. If you know that your here is going to get out of the moss that he got himself into by witchcraft, then it doesn't really matter what happens to him. Where the here can do anything, plotwise the here can do nothing. This has produced very bad stories because it has removed all of the discipline, all of the suspense, all of the magic of writing, rather than the magic of psionics, from fiction.

Dowsing, for instance, is a perfectly respectable idea for a story, and I will not oppose it as such - if the writer will do the following things: First, propose a theory to account for the action of dowsing, whether it be adequately psychological in terms of modern knowledge, whether it be adequately mechanistic in terms of the rods themselves, or provided he can do as Heinlein once did in a story called Waldo provided he can give us a theory for magic as a whole. If he can do that, then at least he has a background. Now he can take dowsing. How in the devil he is going to get a plot out of it I haven't quite figured out, because what the problem is is completely insoluable to me. Perhaps it is possible. But the fact that dowsing works is not itself a plot. It may be a polemic, but not a plot. And so far even <u>Analog</u> does not refer to itself as <u>Analog Polemics</u>. It should, But it calls itself <u>Analog</u> <u>Science Fact and Science Fiction</u>. It's a little hard to tell which is which.

The basic thing is that since this movement came in - this was shortly after Dianetics, which I am happy to say produced, so far as I can remember, only stories by Raymond F. Jones, who was competent enough a writer even before Dianetics to make even Dianetics acceptable in a story - since that time psionics has produced, with a rare exception of a Jack Williamson story, where it was only local color in the background and didn't really matter anyway, characters who are totally uninteresting to the reader because they have no characteristics except the ability to make magic work. Plots which have no interest to the reader because the basic problem of the plot, the solution to the plot, comes first: the fact that psionics works. And you have nothing but endless, repetitious words to fill in afterwards. And stories in

which the scientific interest of the fiction was absolutely nothing since it had neither a practice or theory to offer us, nor a contravention of accepted things in terms which are understandable to the reader.

Therefore I oppose all witchcraft, including witchcraft articles, in science fiction megazines. /Applause/

#### RANDALL GARRETT:

Basically I can't really argue with what Lester said. I personally look upon psionics as a ginmick, a gadget. It can be investigated. As Lester pointed out, James Blish did it in Jack Of Eagles. Larry Harris and I sat down and decided the hell with it, we'll make fun of it. And even that ran it into the ground, the three Mark Phillips novels. The Queen's Own F.B.I. was funny the first time. It was enjoyable the second time. It died the third time, because by the third time around it had simply become what Lester was talking about, a ginmick. Everybody knew that Kenneth J. Malone (who, by the way, is John J. Malone's bastard son) by this time had developed into the idiot superman. I grant that. I will not try to defend one barb that Lester threw: Well, I gotta eat. writers do eat. More than that, they drink. And that runs into even more money.

But I can't quite go along with Lester saying that you have to throw out all witchcraft. If it is used simply as a gimmick - I've been guilty of it - it doesn't make a good story. Now this was supposed to be a debate. I'm afraid that basically I can't argue with what Lester said. I'm in the position of a man who says: "Your honor, I'm guilty." I'll probably be guilty of it again. But it's not because I am purposely trying to write a bad story and saying: "The hell with it." I don't think any writer sits down and says: "well, I guess I'll write a bad story today."

I have run across one thing in the psionics stories that have been printed and, by the way. I do not write all of them - an index to the science fiction magazines came out, in which I seem to have inherited the mantle of the Kuttner Syndrome. Do you remember the Kuttner Syndrome? Well, it turns out I'm not only Randall Garrett, who I am, and David Gordon, who I am, but I am also Wally Bupp, Darrel T. Langart. Joseph Tinker, and Donald E. Westlake. And when Don Westlake finds that out, he's going to kill me.

There have been very bad stories. I think much worse than some of the ones I have written. I won't point them out. I remember one - I'll try to switch it around a little bit so you won't even recognize which story I'm talking about - a man was suspected of having paionic power A, he could levitate. Everybody suspected that this man could float in the air, and he could float from one place to another. And it suddenly turned out that that wasn't true at all. You know what he really had? Teleportation! One almost wants to go back on the Anglo-Saxon to describe this.

I don't think I've been guilty of anything that bad. I have tried to do with witchcraft what was done in the old <u>Unknown</u>. Take a set of basic postulates and make a science of them. Whether I've succeeded or not, that's up to you. Whether anyone has succeeded or not, or whether it can actually be done, and be done convincingly, is up to the reader. I don't believe that they should be used as gimmicks. I would not write a story, for instance, about dowsing rods. There are several electronic methods of finding water. There are several ways that a competent geologist can simply look over the terrain and say: "Drill there." In searching for pipes, which is what this guy did with the use of dowsing rods, he usually knew about where the pipe was to begin with. I see no plot there. I see no story. This is simply a gimmick for finding pipes. Gee, what adventure! Let's go out and find a pipe! One of the things that has plagued science fiction for almost ever since it started is that we have nowhere left to go, there's nothing left to do. Within the first 10 years of magazine science fiction we had gone everywhere, as far as you could go. The entire sidereal universe had been circumnavigated. How far can you go? It had been done instantaneously. How fast can you go? Name any magic wish that has been thunk up in the past 6,000 years - the seven-league boots, invisibility - all of the magic gimmicks that man has thought up - have been dealt with in science fiction.

Now, as far as we know, there is no method of making a human being invisible, in the way we usually think of as invisibility. Sure, you can turn out all the lights he's invisible. But that's not what we mean. What has happened is that we have suddenly seen that there are limitations in science. All right -- we want to write a story about Oswald Glutch, super-spaceman, who lands on a planet, and this planet has certain characteristics that the writer wants to use. Fifty or sixty years ago he could put him on Mars or the Moon. Today not a single one of you out there would stand for that. We all read Edgar Rice Burroughs and say: "Well, that's great!" But we know that's not Mars. So, in order to find a planet with the characteristics that we want to use, we have to find a planet umpteen squillion light years away, going around (at the nearest) alpha Centauri, and preferrably further than that. We usually even have to pick a science fiction name out of the hat, and we call it Squigelwix IV. In order to get there, unless we are writing another Universe story - and I have seen it written so many times; Heinlein wrote it once. That plot is pretty limited, it's burned out as far as I can see. If I come up with a new idea I'll write it, you'll hear about it. But right now I don't.

We don't want to spend all that time getting to this Squigelwix IV, so we use a superlight drive. Heh, heh - witchcraft: And it is used as a ginnick. Nothing else. Let me quote one of my own stories: "He aimed his ship toward the constellation of Segittarius, and eased in the space-time clutch. Outside, the stars began to move." Now don't ask me what a space-time clutch is; it's magic. And it's damn useful magic. I did not sit down and work the whole thing out as Doc Smith did with the inertialess drive. And I have damned Doc Smith from here to hell and back because nobody else can use that inertialess drive. And it's wonderful.

Isaac Asimov used the Jump. You know, you get into your space ship and say: "I want to go thar." Pssst! And you're thar. Magic. Witchcraft. And. as I said. dann useful witchcraft. We need it. There is no other way we can get people on those other planets. We can't even use a rocket. I think John Campbell adequately outlined why we cannot use a rocket. A rocket just won't work. We know what the limitations of the rocket are, and we're never going to be able to use it. Oh, we'll get to Mars with a rocket, we'll get to Venus. But we're not going to have these monstrous space ships zooming back and forth. You can't have any fun by putting a tunch of guys in a Lunar orbit, or a Martian orbit, or a Vemus orbit, and they sit there, because you're writing Universe all over again.

Magic is necessary in science fiction. And it is not necessary to sit down and work out all the implications of the magic you're using. On the other hand, it should not be the basis of the plot. The man who is travelling from here to Squigelwix IV just gets there. Forget about the space ship. Don't sit down and explain how the space ship works. Nobody wants to hear it. It's as dull as the first man going to the Moon. We have been there before. We've seen it. We have all been to the Moon, we have travelled over every inch of that dusty, airless, arid, hot, cold, bright, dark surface. We have been there! Mars - we have been there. Venus - we have been on 6 or 7 of them.



Jupiter you can still have fun with. James Blish wrote that series of stories remember they were building that bridge on Jupiter, a bridge that went nowhere? They were just building this bridge to find out about things. They were good stories. Now it appears that Jupiter is not as cold as we've been thinking it is. Temperature might be a little warmer than that, there might not be any ice on Jupiter. There might be a nice big plot of ocean that has all kinds of life in it. All right, you can still have fun going to Jupiter. I don't know what you're going to use to get your spacemen around on Jupiter, but I have a solution for you - use magic. Use an anti-gravity suit. Then you can get him on Jupiter. But that's witchcraft! I repeat it's necessary, and it's useful. It should not be a part of the plot.

The guy who sits down and spends 20,000 words inventing the anti-gravity machine, when you know he's going to invent the anti-gravity machine anyway, has wasted 20,000 words, and the only good that has come out of that story is the \$600. check in the writer's pocket. The plot, as in any story, be it science fiction, fantasy, or even a Reader's Digest story-article, whatever it may be, always has to concern human beings, and how they react to a given situation. If the situation is magical, throw in your magic. Say: "There it is. It works, and what are people going to do about it? How are they going to react?" That makes a story. You should define at the very beginning, as you do in a detective story, your terms; tell the people who are reading the story what this is about. It is no fair to end up a detective story saying: "Ah ha, we knew it all along. It was a tramp that sneaked in in the middle of the night," and find him over by the railroad tracks in the last chapter. It ain't fair. If you throw in a clue at the beginning of a story: "Ah ha, this cigarette has rubycolored lipstick on the wrong end," you better explain that before the story is over. The same way in science fiction.

Several years ago John Campbell said you cannot write a detective science fiction story. He was proved wrong several times. Needle, by Hal Clement, though not a detective story in the classical tradition of somebody getting murdered and somebody else trying to find out who the killer is, was none the less a detective story. He defined to begin with what the powers of this alien were, and how people reacted when they were inhabited by the alien, and then threw the clues at you. Long before you reached the last chapter you should have been able to say. "He's got it." If Hal Clement had used Ellery Queen's time-honored gimmick of calling the story to a complete halt and saying, "You now have all the clues. Whodunnit?" Hal Clement could have done it with that story, simply because at the very beginning of the story he said, "Here are my limits, and beyond these I will not go. I will not drag in the butler at the end. I will not prove that it was suicide after all." And by the way, did you know that Ellery Queen did that once? In The Murderer Is A Fox.

Science fiction then, in that way, is akin to the detective story. You can use witchcraft. You can use magic. If you will define your limits to begin with, and then don't go beyond those limits. And if you don't suddenly spring something out of midair at the end which you failed to tell the reader about at the beginning.

You could write a long detective story, for instance, a science fiction detective story, in which everybody at the end is completely baffled. And suddenly, the detective whips out a time camera which is capable of taking pictures 24 hours in the past. He goes click, and has a picture of the murderer. That would be pretty damn dull. And that is, unfortunately, the way too many science fiction stories are written. I don't try to write them that way. If they come out that way it's because I've failed. We all write bad stories. But it is never simply lack of trying to please the reading public. Because any writer, using whatever gimmicks he may use, is trying to please, in the long run, the reader. Because he's trying to please the editor, and the editor is trying to please the reader. So he's one notch removed. But if the magazine doesn't sell, he'll hear about it. He looses a market. Ginnicks, magic, pseudo-scientific explanations, witchcraft, they're all legitimate. They're useful. They're necessary. But they have got to have their limitations. Just as the hero himself has to have limitations. [Applause]

#### LESTER REL REY:

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Well, as you can gather, this is hardly a debate. Because I can't argue with that. I don't intenu to argue with it. I accept most of what Randy has said, and am very happy to hear him say it. Let me put it this way however. I want to say at once that the magic he is referring to, which is magic through science, in other words making science into a magic, is something we have all used, and I do think that, for much of science fiction, as a means to an end, it has at times proved necessary. I've used it as little as I can myself because I don't believe in it. And even when I've had a faster than light drive, twice in 25 years of writing. I have tried to work it out against a possibility as we now know it. I don't always explain it fully at the time, because it would take too much time.

I will say, however, that the best stories are those which use the smallest amount of magic, because they involve the largest amount of work on the part of the writer in thinking his basic concepts out. Randy himself conceded that when he said that when Smith wrote a faster than light drive, that he had worked out inertialess drive. He had done something which all of us resent and hate because the old master did it. and by God we should have done it.

As to limits, this is the thing that interests me mostly. I think art, and even craftsmanship at times is largely a matter of working against, and, in the case of art, overcoming limits. Perhaps the reason that the plano and the violin are the two greatest solo instruments we have is because they are the two most rigidly limited instruments. The plano cannot change. It cannot produce tones except those already built into the instrument. It cannot produce a sustained tone. It cannot do many things. It is a rigidly limited instrument, in many ways more limited even than the harpsichord which preceeded it. The violin is limited by the fact that it can produce essentially one color, one note. It can couple in two, but even then they must be related.

Whereas the organ, the king of all instruments so-called. is the least limited of all instruments in its final form, for absolutes at least. In the orchestra it's certainly almost unlimited. And yet there's a tremendous body of extraordinary art written for the violin and for the piano. And you'll find that even in the orchestra, the violin is the backbone. Whereas the organ, having a tremendous body of work, has produced a comparatively small amount of great artistic work. It tends to come out as organ work only, and not as music. A few cases, such as Bach, who was working within limits, succeed. Easel painting I believe to be a greater art than sculpture simply because it has more rigid limits, and men have had to learn more rigidly how to overcome those limits. Writing is less of an art than poetry, because the rigid limitations of poetry are almost insuperable, and only genius can overcome them. And because the limits are there, and the challenges are there, a few men have overcome them to the point of being able to say adequately in poetry everything that could be said in prose and say more.

In the case of writing science fiction, perhaps we're not involved in any great art, but certainly we are involved in a lesser art. And here again the problem is to overcome our limits. If we throw our limits overboard, we have lost ourselves. If we adhere rigidly within our limits, if we even set ourselves limits, we are doing batter. And if we use the limits which are already here, recognizing that we can

extrapolate possibilities. recognizing at times that we may even introduce the element of fictional magic as opposed to a belief in magic, we may do much better. Then with the fictional magic, I think, would be an acceptance of the fact that rockets may be improved. Or that another means of travel may be found. Which will still obey physical limits. Because if we throw off all physical limits, if we throw off the limits of the fact that a certain amount of energy is necessary to do a certain amount of work - the conservation of energy, for instance - then we are in pure magic. But if we will recognize the basic limits, we will turn out greater fiction.

For one thing, Randy mentioned - and God knows how often this has happened the fact that people are tired of reading about the same old planets. They aren't. The trouble is that the writers have refused to accept the limitations of the planets they have available. Arthur C. Clarke recently wrote a story called & Fall of Moondust, as I remember it. I wrote a story, it has a few of the similar elements. But I wrote mine for a juvenile, so I'd rather talk about his. His story came out, not in a magazine, but in a hard cover book by a reputable publisher, and received considerable critical acclaim, and has been doing very well. What Clarke did was to accept the limits of his planet, and to take one element about which we don't particularly know. the depth of the dust on the Moon. Now we do know, from everything that we have been able to determine - and this is not knowledge, really, but an indication - we seem to know, from radar readings, from a great many other things, that there is dust on the Moon. How thick that is, whether it could cover a moon ship or not, we don't know. It seems to be far more slippery, and far less palpable, than talcum powder. So we can justify his basic assumption there. Working severely and rigidly within his limits, he produced a story which has done far better than most of the stories we do with our magic.

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In writing stories for juveniles, I have largely attempted to follow the limit of fact. Occasionally I have deviated from them, but when I have deviated from them, I have (a) told the reader I was deviating from them, and (b) tried to set up a reason for it. I find that it's more fun to write a juvenile than it is to write a modern science fiction story where all limits are off.

And unfortunately, I'm going to say one thing right here. I think the fans have done a grave disservice to science fiction - in one sense only. It's not their fault, this is inevitably true of any fan of any activity. They have become quite sophisticated. This is necessarily so, I don't see how they could help it. But in becoming sophisticated, they have demanded stories more and more sophisticated. They have tended to prod the old ideas out of existence. Occasionally it turns out that a writer will buck against this, and write a simple story, about a simple thing. And then it turns out that the sophisticated fans love it. So it's the fault of the writers as well as the fans, because the writer is misunderstanding what the fan is saying. What the fan I think is saying, and doesn't really understand, is: "Use your limits." What he is saying is: "Let's get rid of these old ones." But I think what he means is: "Let's get rid of the miguse of these old ones." And this is perfectly legitimate.

If we will examine every one of our limits, and see what can be done within them, we will find that there is a tremendous body of science fiction still to be written. The story of the first trip to the Moon is still the most exciting story there is. The story of the first poor devil who was in orbit around Mars waiting for the explorers on Mars to come back, when he finds they aren't going to come back, and doesn't know how and can't get down there to help them, is a far more dramatic story than anything we can write about Alpha Centauri, or any of the other things. The also must necessarily re-examine our magic, because I think we have tended to drift off further and further into the use of magic. When we first began our stories, we had to use magic to get our manninto space at all, because rockets were dimly understood by the average writer. Unfortunately this was not really our limitation. There was a guy named Otto Willi Gail who did understand rockets, and he wrote a story of the first trip to the Moon. And it still technically doesn't stand up too badly. But most of us cheated. We used magic. We abused magic. There's nothing wrong with the use of magic. But we abused magic. And I maintain that psionics is antomatically an abuse of magic.

We have used these things where we have no right to use them. Let us re-examine these simmicks that we use. Let us re-examine even telepathy if we use it. Let us find out what can be done, what are the limitations of telepathy. Again - we seem to be bringing up Hal Clement repeatedly - but Hal Clement had a story of telepathy in which everything went capably. Because he was looking to see what the limitations of telepathy were. Hal Clement has built himself a tremendous reputation by examining his limits. Mission of Gravity is a story of limits. He grants you that the human beings are off this planet by something which can be called magic. Actually what it really is is a situation he has set up in advance of the story that men can get there. That's about all. It is not a necessary part to the plot except in having human observers there, and in setting up his basic problem. I think sometimes magic can be used to create your troubles, but never to get yourself out of the difficulties.

Randy and I are in essential agreement, except that I would like to say something right now. We all make cracks about Randy's writing, and I have too. And I'll make them to your face, handy. I think the three stories that you mentioned, the trio that you mentioned - I'm going to say this to your face - were some of the poorest stories I ever read. And one of the reasons is that Randy is trying to make fun of something which is intrinsically so ridiculous that you can't make fun of it. And I think he was automatically killed by that. But on the other hand, Randy when he began writing turned out some daam good stories in which he did examine things carefully, and he can do it. He has enough background to do it. I bought a couple of stories by Randy. I bought a fantasy story by Randy which I'll still say is a damn good story. And I've seen other stories of Randy's that I think were good. It's when he examined his limits, when he worked in his limits, that he turned out good stories. And I'd like to see him do more of it. I'd like to see all writers, including myself, do more of it. [Applause]

#### RANDALL GARRETT:

This has been a fine debate. It has sort of degenerated into a mutual backpatting society. I agree wholeheartedly with the examinations of the limits, whatever they may be. Even if you're using magic, they're so damn necessary that it almost seems stupid to bring it up. It's like talking about where babies come from - it's something we all know. and why talk about it. Do it!

The basic thing that any competent science fiction writer tries to do is to examine a field within its limits. There have been times when I have ripped out a story. Usually it was with a sort of "Neh! Have fun," which had no limits, it just went hog wild. I played around with that for a while. I found that that too has limits. It turns out a bad story all too often. There are some friends of mins, other science fiction writers, who have also played around with the notion of "Let's grab a comet by the tail and see where it goes. Let's pretend there are no limits, and let that be our limitation." It makes bad stories. I've tried it. I'll never try it again. Lester's tried it. I don't think he'll ever try it again. It's one of the things that I think any competent writer decides to try once in a while. Until He suddenly realizes that without limitations you don't have a story. You don't have -anything. A science fiction story written without rigid examination of your limitations is similar to free verse. According to Archie the Cockroach:

with vers libre is anything at all with anything at all with this."

#### LESTER DEL REY:

On a very serious level, may I point out that one of the things that science fiction has not done adequately, in terms of its responsibility to science itself, is to point out a very great change that took place in science along about 1930. This is a change of attitude - we no longer have to picture things. Our functions are our definitions. This is a very important point. It would take me 6 hours to touch on it briefly. Randy I know damn well understands this thoroughly. A number of other writers in science fiction understand it. When we describe the function of the thing we have defined and described the thing.

#### RANDALL GARRETT:

We don't have to make a model of it. We don't have to construct models any more. Most of you remember The <u>Girl In The Golden Atom</u>. Whether you ever read that little horror or not I don't know, but at least you have heard of it. It is the story of a Chemist who has a large capital C attached to his name. He is a very good Chemist. He invents a medicine which will shrink him. And he goes down and lives on an electron travelling around a nucleus which, said the author, is a planet travelling around a sun. A lot of these stories have been written. The basic error in every one of those stories was that they were still thinking of models. They were not defining electrons and nucleons in terms of their function. They were sitting down creating little tiny solar systems with electrons whirling around in the orbits.

When we speak today of the orbit of an electron, it has nothing whatever to do with the term orbit when we are talking about the orbit of a planet. Nothing! It is a hangover word, from when they actually were trying to construct models. "Now," you say, "all right, function. These dowsing rods do work within certain limits. They do find water." How they find it - there are several theories. As Lester said, he can cook up at least two good ones. I can think of three, and I could probably concoct another one right off the bat. Which one of them is true? Nobody has ever done any experimenting to find out. A dowsing rod per se, then, has no theory behind it. It has function which is hanging unconnected in space. It is not related: Function alone isn't enough, it must be related function.

#### LESTER DEL REY:

Well, I only question this in this sense: Does the dowsing rod have a function, or does the human in using it have a function? If it is the man who is performing the function, and the dowsing rod is simply something he fools himself with, because he needs an outside indicator, then of course the dowsing rod has no function, and does not exist. Since I believe this to be the case, I will say that functionally the dowsing rod does not exist. The man does exist, therefore our whole question of whether a dowsing rod works boils down to whether we say the man works or the dowsing rod does.



#### RANDALL GARRETT:

Now wait a minute, Lester. You are saying, then, that the needle on an anneter does not exist functionally. It's merely there to show what the ammeter is doing.

#### LESTER DEL REY:

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Well, no. not at all. Because, without the needle. or some other indicator on the ammeter, the ammeter would not function. However there are waterwitches who do not use dowsing rods, and who work just as well. Therefore I say that the dowsing rod, or the needle in this case, has no function, and is an unnecessary part. There are definitely waterwitches who work in very many other ways. There are waterwitches, for instance, who use doss. I'm surprised that Campbell hasn't discovered this.

My point on the dowsing rods - let me sum this up briefly. The dowsing rod was used for a great many years. And so long as the man using the dowsing rod was within familiar territory - it is a necessary stipulation - he would find water with a quite respectable percentage. However science, using other methods, which it could explain, was able to find oil. mineral deposits, and a great many other things, by methods which were controllable, and which dowsing rods hadn't even thought of using, and which they've never been applied to successfully, although they've been tried. And 1 would say that the limitations have been pushed further back by dropping the dowsing rods than by using them. So I can't get particularly concerned to this return to the best we had when we had nothing.

#### RANDALL GARRETT:

Lester said, at the beginning of his speech, that for 6,000 years we played around with magic and found nothing. Whereas in the 600 years we have been playing around with science we have found something. I think that 600 years is a little bit exaggerated, and he said it was too. But how long did we play around with the same scientific gimmicks without ever looking at them? If you will say 600 years for science and 6,000 years for magic, then you must admit that for 5,400 years we were also looking at science without doing anything about it.

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#### LESTER DEL REY:

I'll grant you this at once. However I would point out this: That unlike science, for the matire 6,000 years people were looking at magic and trying to find a theory for it. They were trying to get a body of exact science. The alchemists did. The mystics certainly tried to. They were working hard at it, harder as a matter of fact than most scientists work today. It was only after dropping it that the human race managed to get somewhere. And of course the mystics are still objecting to that because they won't do the hard work necessary to understand science. Nor, unfortunately will the Blavatskyites bother to do the hard work necessary to understand the theory of their own magic. Now I speak of magic with a certain amount of familiarity, because I am familiar with the theory behind it, and with the data behind it. I have worked at it.

As a matter of fact, I find that a person who follows Blavatsky spends ten years trying to understand Blavatsky. The proof of the matter is that to any competent theorist in the subject of magic, Blavatsky is about two night's light reading with nothing new in it whatsoever.

#### RANDALL GARREPT:

Lester, do you know the basic rule against using eggs in magic?

#### LESTER DEL REY:

On which continent, in what culture, and at what time?

#### RANDALL GARRETT:

It's a basic rule.

#### LESTER DEL REY;

No, it is not a basic rule.

#### RANDALL GARRETT:

Yes, it is. Never conjure chickens till they hatch. [Laughter]

#### LESTER DEL REY:

May I point out that one of the favorite conjuring tricks of Africa was the conjuring of chickens from unhatched eggs.

#### RANDALL GARRETT:

Well, do you want to argue politics instead?

#### LESTER DEL REY:

Religion.

#### RANDALL GARRETT:

Religion, Which religion, and which side do you want to take?

LESTER DEL REY:

All and both.

#### RANDALL GARRETT:

Now you see how to win a debate. [Applance]

#### EDITORIAL (Conclusion)

corrections. These include changes in the punctuation I've used, corrections of grammatical errors, etc. - the editing necessary before a speech is printed.

When the speech is returned, it's ready for publication. But this may be some while; not every speaker is able to drop their current work to favor a fan project. This, particularly, can and has affected the publishing schedule - limited time has prevented the preparation of a large assortment of material.

Publication then presents anditional problems. those many fan editors are very familiar with. Recently in particular my time, never an abundant commodity, has been even more limited. This is something we just have to live with, although prospects for forthcoming insues now look more promising. With time, the mechanics of production present few difficulties, other than a need for more artwork to brighten the pages. Any interested artists?

It would seem that the above also answers the related questions of the size and quantity of material in each issue. It would be nice to produce larger issues, agreed. But the topic is not really in order for discussion, at least until I meet the quota of quarterly publication, don't you agree?

Good reading .....

Frank