

THE LITERARY CORE OF HARD SCIENCE FICTION

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Summary

The article is devoted to historical background and to attempt to find out the core element of the formation of such literary phenomena as science fiction.

Ключевые слова: научная фантастика, жанр, метафора, познавательный элемент, литературное течение.

Keywords: hard science fiction, genre, metaphor, cognitive element, literary trend.

Hard SF isn't the prevailing literary fashion, even within "genre SF" – that body of fiction published as "science fiction" in magazines and specialty book lines. On the one hand, Star Trek spin-offs, Dragonrider novels, and the like head the best-seller lists. On the other, the most critically-admired works are from the "metaphorical" school of Stanislaw Lem, Philip K. Dick, and, perhaps, even Ursula K. Le Guin. Whatever else can be said of a work like "Raft", it is safe to predict that it will never show up in any literary canon – "conservative" or "radical" – any more than it will be a runaway commercial success. Hard SF will always be a minority taste.

When Robert A. Heinlein started writing SF for the "slick" magazines, he realized that he would have to minimize the science to reach a wider audience [8, 259]. When he finally did reach a mass book-reading audience, it was with "Stranger in a Strange Land", which stressed social and religious satire – Heinlein himself denied that it was SF at all [8, 260]. Frank Herbert's "Dune" doubtless caught up non-SF readers more for its Great Thoughts than for its ecology – as demonstrated by the sequels it spawned. Even Isaac Asimov, when he hit the best-seller lists with a series of belated "Foundation" / "Robot" novels, stressed social issues rather than hard science. Hard SF may become the stepchild of its own genre: it simply isn't the best way to make a living.

Hard SF also seems to remain a stepchild of SF scholarship. Some critics, it seems, not only don't want to read hard SF, but don't want to read about it. Robert A. Collins, for example, faulted James Gunn's "The New Encyclopedia of Science Fiction", for, among other things, a bias toward hard SF: in particular, he was irritated by Poul Anderson's "Alien Worlds" entry because it failed to discuss the metaphorical uses, which interest me more than the so-called 'scientific' ones. Collins cites Michael Bishop's "Rogue Tomato" as the kind of SF that should have been covered under "Alien Worlds" [4, 12].

Although Collins may rightly believe that metaphorical SF was slighted in the Gunn encyclopedia, it is hard SF that is slighted elsewhere. David G. Hartwell, in his introduction to The World Treasury of Science Fiction, felt it necessary to defend an esthetic that once was taken for granted by genre-SF writers and fans: "I do not, of course, deny the metaphorical level of SF texts. I simply state the obvious, which somehow seems to have been lost in several decades of critical discussion: in a work of science fiction, the reader must grant the premise that whatever is stated as the case is literal and true. For instance, in Gerard Klein's "Valley of Echoes", the reader must believe that we are two hundred years in the future, exploring the planet Mars, not merely in some surreal landscape that embodies a metaphor for the human condition" [7, 17-18].

Perhaps there has always been hard SF and soft SF, and the debate between them goes back at least as far as the differences between H.G. Wells and Jules Verne [3, 8]. Benford's novels are all hard SF, of course, but they are other things as well. Can hard SF be literature if it is not also these other things? Is there a literary experience characteristic of hard SF in and of itself? We are all familiar with arguments to the contrary. We have even come to cringe at the mention of Hugo

Gernsback, who, as Brian W. Aldiss once put it, reduced SF to "stories built like diagrams, and made clear like diagrams, and stripped of atmosphere and sensibility" [1, 211]. We can only chuckle at much of the hard SF of the Golden Age: for example, George O. Smith's "Venus Equilateral" stories, with their outdated technology inspiring rapture in cardboard characters. Nor do we have to look to the past for the embarrassments of hard SF: Robert L. Forward's "Martian Rainbow" is a recent case in point. Because Forward is also the author of "Dragon's Egg", a novel that won the praise of, among others, Frank Herbert, Hal Clement, and Isaac Asimov as an example of hard SF at its best, he is thus a test case [4, 11]. Its no use pretending that the human side Dragon's Egg is any better. It isn't: Forward's astronauts therein are cut from the same cardboard as those generals, scientists, and technicians in "Martian Rainbow". We simply don't notice them, because they aren't the story; the story is the cheela, the creatures Forward makes us believe could actually live on the surface of a neutron star. Like any number of hard-SF novels, "Dragon's Egg" includes an appendix in which the author explains the scientific basis for his literary invention. It is all very speculative science, of course, but science itself is based on speculation: theories are advanced and then tested against reality. We have no way of testing Forward's theory against reality, but we trust him as both scientist and hard-SF writer not to knowingly contradict the known possibilities of the universe we inhabit.

The literal reading of SF seems to have few defenders, but one of them is no less than Samuel R. Delany, whose argument, though surely familiar to all of us. Delany denies that SF is true literature: "Literature's philosophical arguments tend to be about the subject, the human consciousness, rather than about the way the real world functions. Science fiction is a critique of the object rather than a critique of the subject – or of the subject in terms of the object". Yet he also argues that "the science-fictional enterprise is richer than the enterprise of mundane fiction", and he clearly means richer in a literary sense [5, 38]. Delany may not have read "Dragon's Egg", and he might not care for it any more than other critics sensitive to literary style, which he regards as inseparable from content [5, 38].

Nevertheless, Forward's novel conforms to his theory that the essence of SF is the "technological discourse" that enables the SF writer to create "possible images of the impossible." By outlining the entire evolution of life on his neutron, Forward sets up a memorable scene later in the novel. It develops that the cheela, in extreme circumstances, can revert to the plant stage – and that this even has a rejuvenating effect. We do not read "Dragon's Egg" as we would a technical paper: whatever faults we may find with his clumsy style and characterization, we can still admire Forward as the creator of a unique fiction. It is precisely because "Martian Rainbow" offers nothing so unique (anyone writing hard SF about Mars must, of necessity, cover much the same scientific ground), and because Forward makes the error of trying to write the kind of human and political drama for which his limited talents in no way suit him, that we cannot forgive the same faults in that novel. We find the same esthetic in other examples of hard SF that do not aspire to be literary in the prevailing sense. In John E. Stith's "Redshift Rendezvous", the human side of the plot is pure cornball, and Stith's characters as such are nothing to write home about. Yet we are caught up in a story that could take place only in the fascinating reality of a subspace where the speed of light is so low we can actually see the illumination spread to the far corners of the starship cargo hold when the lights are switched on. We trust Stith to have worked out all the logical consequences of his invented reality, but when we read his novel it is the literary experience of that reality we are looking for. The same principle applies to Baxter's Raft, in which we share the experiences of a hero who is at one point exiled to a labor camp on the hulk of a dead star: in Baxter's invented universe it is possible to live and work – albeit not very comfortably – on such a world. Neither "Redshift Rendezvous" nor "Raft" offers any significant psychological insight, political message, or metaphor about the human condition. Neither is "literature" as usually recognized. Yet each of these is a highly literary work in its own way [2, 231].

Clement's "Mission of Gravity" is rightly recognized as one of the classics of hard SF. Yet Clement wrote a sequel, "Star Light", which was quickly forgotten. The science was just as good in the second novel, but Clement was unable to recreate the literary excitement of the first. The reason

is obvious: the world Clement offers in “Star Light” is simply a dull world – and a dull world makes for a dull story. All sorts of amazing things happen on Mesklin, but practically nothing could happen on Dhrawn. The difference between the two worlds, and the stories they inspire, is the result of a literary rather than a scientific failure.

Hard science fiction may be a quite limited literary form, but the fact that it can create its own kind of literary experience – even when it has no other claim to literary value – shows that it is a valid literary form, and worthy of respect in its own right.

References

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When science fiction writers speak of "hard SF," they seem to be designating, more than a form, a place, solid literary ground on which to resist the shocks of literary fashion. Indeed, it may be a place which resists the temptation of fiction itself. For to create this sense of substantiality at the core, science must ultimately seem to outweigh the fiction. And to do so, that science must be the "hardest" possible. In a basic sense this means that both setting and dramatic situation must derive strictly from the rigorous postulation and working out of a concrete physical