BaD sCienCe

The Urth list — 3 messages, 3 voices, 01 Dec 1999

https://urth.darkrealm.vip/thread/urth/1998

Michael Andre-Driussi — 01 Dec 1999, 21:07

I'm trying to think of a major science fiction work in which the sensawunder science has held up . . .

I keep thinking of poor old Larry Niven, who was about as close to the non-classified source of Big Science as a fiction writer could be; in one sense he seemed to be in the position of being a "bard of Big Science," hearing the jargon from the white coats, then bringing it down to the common reader like Prometheus carrying fire from the gods to humankind . . . yet "Neutron Star"? RINGWORLD? (Although, as a sop for the topic: the mini-black holes that he used in some short stories are kissing cousins to the sort of black hole I envision at work in Old Sun.)

Or Paul Park, who dusted off Tommy Gold's discredited theory on hydrocarbon formation (Park's "sugar rain"), as well as tucking in a few earlier age skiffy artifacts like a car that runs on gunpowder (I thought that Park might have actually thought something up with this item, until I saw a literature survey and learned better). Sharing this trait with Gene Wolfe; maybe Wolfe's motto should be "Never let science get in the way of story." (But with Wolfe I also sense that he is impishly playing with the fickle nature of science vogue.)

(Alas! Paul Park left me behind in CELESTIS when he had an orbital beanstalk in place on a tidelocked world, without a breath to spare about the extra kinks that this puts in the engineering exercise . . . I have a hard time seeing a geostationary orbit around a tidelocked world . . . and if the orbital elevator is reaching all the way out to a Trojan Point, well of course I'd like to hear about it.)

Has anything held up any better than FRANKENSTEIN, which was written vaguely in the science of its day by a non-scientific wisp of a girl? After being discredited in the early part of the 20th century, has Mary been validated because in the late 20th century it is an everyday occurance to ressurrect the (recently) dead with electrical discharge?

It is also peculiar to me that scientists get to "discover" ideas (or claim them or name them, which is perhaps the most important in the end) first laid out in sf. For example, the so-called "Dyson Sphere" is really a Stapledon Light Trap; Martyn Fogg gets to work out the mechanics of "stellificating" Jupiter without a mention of Arthur C. Clarke; etc. Which is fair, in the sense that the scientist is working with his calculator for an afternoon or whatever, figuring out this and that, and furthermore, a supposedly scientific paper will be tarnished by any sort of mention of "inspiration by genre," but still: I think it is a two way street between science and sf, yet it is constantly portrayed as a one way street, or worse, a high tower and a slimy ghetto. Which is true, of course: charlatans and bonefides on both sides.

=mantis=

Damien Broderick — 02 Dec 1999, 17:24 · follows Michael Andre-Driussi

At 09:07 PM 1/12/99 -0700, mantis wrote:\

> in the sense that the scientist is working with his calculator for
> an afternoon or whatever, figuring out this and that, and furthermore, a
> supposedly scientific paper will be tarnished by any sort of mention of
> "inspiration by genre,"

I wonder of the usually forgotten Fred Hoyle might sneak in here? Great audacious ideas (for his time), clunky but serviceable fiction warpped around them. THE BLACK CLOUD is the canoincal instance, of course, but I'm just halfway through COMET HALLEY which I've never seen anyone else in the world mention. Came out in 1985. Amazingly CPSnovian in its corridors of power emphasis, even as it recycles the dusky dusty cloud and fills it with smart bacteria. (One of the refrains of the book is the intemperate hostility of establishment science, Royal Society, et al, to wonderful off the wall discoveries. Poor Fred.)

Damien Broderick

Jim Henley — 02 Dec 1999, 20:26 · follows Damien Broderick

> -----Original Message-----
> From: urth-errors at lists.best.com [mailto:urth-errors at lists.best.com]On
> Behalf Of Michael Andre-Driussi
>
> I keep thinking of poor old Larry Niven, who was about as close to the
> non-classified source of Big Science as a fiction writer could be; in one
> sense he seemed to be in the position of being a "bard of Big Science,"
> hearing the jargon from the white coats, then bringing it down to the
> common reader like Prometheus carrying fire from the gods to
> humankind . . . yet "Neutron Star"? RINGWORLD?

There's a deep lesson in "Neutron Star" about "realism" in SF, particularly so-called hard sf. Jerry Pournelle pointed out that the the science in "Neutron Star" was so accurate that the story could never happen: if 20th century writers and scientists understand tidal forces, you can bet that 30th century spaceship pilots and manufacturers understand them. So the dead scientists never put themselves in that position in the first place, the puppeteers never wonder what happen to them if they drop acid and do it anyway (no moon? phooey! if you can calculate gravity you can derive the existence of tidal forces), and no matter what, Beowulf Schaffer doesn't put himself that deep in harm's way.

So even for its time, "Neutron Star" was one of the least realistic stories in science fiction. Pournelle resisted drawing the larger lesson about "hard science fiction" and realism, but I commend Norman Spinrad's essay, "Rubber Science," as the text for the advanced course. IIRC (been 15 years since last I read it), Spinrad argues that the disciplines of science themselves change over time - there never used to be molecular biology or psychopharmacology, frex, and there's no reason to believe that paradigms and even fields of study won't keep changing into the future. Hence the "realistic" thing for the sf writer to do is to invent entire new sciences for his worlds and, realistically, these "rubber sciences" can owe only so much to our contemporary understandings of the laws of the universe - otherwise we play the future false. Spinrad had no illusions that the SF writer's rubber sciences would turn out to be the real sciences of the future, only a conviction that, say, an imagined 25th century where scientists understood the universe in terms of "the best thinking of scientists of today" was absurd.

> (Although, as a sop for the topic: the
> mini-black holes that he used in some short stories are kissing
> cousins to the sort of black hole I envision at work in Old Sun.)

John Varley loved these things too - in at least one of his 70s stories, the mini-black hole talked. Before too much longer Hawking announced that the little critters would have to have half-lives measured in nanoseconds.

> (But with Wolfe I also sense that he is impishly playing with the fickle
> nature of science vogue.)

Hey, interesting idea!

> Has anything held up any better than FRANKENSTEIN, which was written
> vaguely in the science of its day by a non-scientific wisp of a girl?
> After being discredited in the early part of the 20th century, has Mary
> been validated because in the late 20th century it is an
> everyday occurance
> to ressurrect the (recently) dead with electrical discharge?

Held up scientifically? "Zero Gee," by Ben Bova, from AGAIN DANGEROUS VISIONS II. About two shuttle passengers who do the nasty in orbit (joining the "zero gee" club). It's basically a mimetic story now by Delany's definition of mimetic fiction (the set of all stories that have not happened but could). Even the celebrity culture sociology of this story holds up pretty well, though it's not exactly a landmark of the literature, and that may tell us something.

"Cold Equations" is vague enough about its underpinnings (how starships go, e.g.) that it might still be "live." McCaffery and other PoMo types dismiss it as essentialist and phallocentric and other bad things. What they don't do is acknowledge that it's a fairly deliberate critique of their premises that maybe they don't have an answer for.

But probably that very vagueness (how starships go) contributes to its longevity - the less specific you are about the scientific underpinnings of your story, the less vulnerable the underpinnings are to new issues of
Nature. Much of what drives "Rogue Moon" remains vital stuff in today's culture; the least compelling parts are the details about tape drives and such.

Moral: in the long run, the scientific accuracy of an SF story means next to nothing. It will survive on story value - like anything else - if it survives on anything. I still recall Varley's little black holes with fondness and I'll probably reread TBOTNS before the Librarians have their next festival.

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> science and sf, yet it is constantly portrayed as a one way street, or
> worse, a high tower and a slimy ghetto. Which is true, of course:
> charlatans and bonefides on both sides.

Does the "slimy ghetto" bit still have any currency? I mean, outside the fainthearts on this list who were worrying a few weeks ago what (gasp) some assistant lit professors might think about the covers of Wolfe's books? <g> I think Disch is right: science fiction has pretty much taken over the culture, and the culture is cool with that.

Best,

Jim
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"It ain't the knife thru your heart that tears you apart
it's just the thought of someone sticking it in"
-- Graham Parker, "Protection"