

Infrared star

The Urth list — 2 messages, 2 voices, 30 Nov 1999

<https://urth.darkrealm.vip/thread/urth/1988>

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Michael Andre-Driussi — 30 Nov 1999, 17:05

Maybe we should just go ahead and call the Old Sun, aka the dying sun, an "infrared star." This because: it ain't natural (must always bear that in mind); with a hypothetical IR star you have the output so shifted into red that there is no blue to scatter in the atmosphere, and it stays dark in the day (as in the text); a habitable zone (planetary orbit around a star) can be maintained by IR heat, so there will be liquid water and dim illumination, but if I understand it correctly, plant life needs higher energy (like ultraviolet grow-lamps), so the plant life begins to fall off . . . and ultimately the entire life network relies upon plants.

In this model, the "dying" of the sun is experienced on Urth as a shifting of the solar output down from the blue end and into the IR--that is to say, it is "dying" in the sense of pigment rather than mortality (<g> to Charles Dye, remembering the "These Are the Jokes" one about the dyer). Animal habitability is maintained, but plant habitability is shaved away bit by bit (which in turn reduces long term animal habitability).

Just a thought.

=mantis=

mark millman — 01 Dec 1999, 12:51 · follows Michael Andre-Driussi

At 05:05 PM 30-11-99 -0700, mantis wrote:
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Clever thought, mantis, but I can't swallow that idea. Master Ash tells us that ice covers the entire globe in his time, which implies a cooling process. Hallvard and Typhon confirm this. If loss of plant life affected Urth's albedo so that more solar radiation were reflected, cooling might result, but a) such a change in albedo through loss of plant life seems unlikely, and b) even if there were some such change, so extreme an effect seems beyond the range of possibility.

And at 05:37 PM 30-11-99 -0500, Carlton Greene wrote:

One last thought: Has anybody questioned why a White Fountain would stop a black hole? One cannot (at least as we understand it now) "fill up" a black hole by bringing another star (or quasar) into the picture. So does this mean that the White Fountain is merely outshining the black hole while the hole slowly feeds off it? Is the Messiah's salvation merely a temporary fix (albeit a long one)? That seems very unsatisfying from an allegorical standpoint. Perhaps the lesson is that Man is not truly redeemed, merely on probation.

Regrettably, it seems that Wolfe was using science obsolete even at the time of his writing when he came up with the White Fountain idea. (This is the part of UotNS I perhaps like least.) There had been a theory that the energy absorbed by black holes was somehow shunted into other dimensions or universes via what came to be known as wormholes, but the "missing" energy was adequately accounted for when the polar X-ray jets that black holes emit were discovered. We know that the White Fountain was meant to be the output of a black hole from another universe from Severian's experiences in Yesod--I believe (though I'm not sure, and I don't have the book here to check) that Apheta tells him how the White Fountain is to work.

Now we know that Wolfe likes, or says he likes, generally-discredited scientific theories, such as Lamarckism. In "Silhouette", he even has Johann adhere to an older (and, in the story's context, obsolete) understanding of relativistic time dilation (Johann believes in the Einsteinian model, in which the time difference can never be made up, where other characters believe that by following the exact same path back that was taken out, the time difference can be erased). So in this case, he may again be indulging his penchant for old science. But I rather think that he chose to use the Fountain for its symbolism, and let science go hang.

I'm not, now that I think about it, bothered by the thought that the solution is only "temporary"; we know that Briah, or its current cycle, will come to an end in the Grand Gnab, and the Green Men, and thus the Hieros, know how to walk the corridors of time. I think that the idea is more that the premature end of life on Urth is an evil to be avoided, rather than that any end is bad. After all, to every thing there is a season, etc. And besides, the symbolic value of saving the home of humanity must be weighty to the Hierodules.

Mark Millman