The Convection Principle of Life Formation

Jeffrey J. Wolynski Rockledge, FL 32955

Abstract: A branch to the volume principle of life formation is offered. Essentially to form life, not only are large volumes of moving fluid required, whether it is gas or liquid material, but that that fluid needs to convect on large scales. This signals large scale heat transfer, which can be removed from needing to orbit a hotter host.

The volume principle of life formation according to the General Theory states:

"Life begins where the highest mobility for molecular interaction and mixing can take place."

The convection principle states:

"Life begins and evolves where the fluid of an evolving star convects due to heat transfer."

This is very important because it states quite clearly that radiation from a host is secondary to convecting fluids in the star itself, due to heat transfer. So sure, there may be some heat from a hotter host, but the majority of the heat provided is internal, as the star continues cooling from the outside in and the inside out. Without convecting fluids due to heat transfer, there can be no life forming or evolving. Life itself even requires convecting fluids itself to function properly, such as blood in human bodies and even the protoplasm of individual cells themselves.

As well, it places the availability of life in a convective Goldilocks zone. So there could be a star that is completely frozen over on the surface such as a snowball Earth, but internally will be full of life due to convective ocean currents induced by magma and internal heat. This essentially makes the original Goldilocks zone hypothesis obsolete, which is a good thing. We cannot assume that Earth's current stage of evolution, current conditions, atmospheric composition and even convective fluids were the same far in its past. With GTSM the convective currents and fluids available far exceeded the current amount of convective fluids on Earth as it currently stands in its last stages of metamorphosis. As well, the composition of the convective fluids were different, meaning the heat capacities of the fluids were different, causing slower or faster convection in different layers of the thicker atmosphere.

It is suggested to notice that the locations for the majority of convective currents in the solar system exist on Jupiter, Saturn, Neptune, Uranus and the Sun, not in the interstellar medium and most definitely not on the surface of an asteroid, per the panspermia hypothesis. In fact, no convective currents at all exist on the surfaces of asteroids as compared to objects that host life such as the Earth. This is telling, as it shows us where life actually began. It simply begins where the convective fluids exist to spread it around, which also explains why life is essentially all over the Earth.

To further drive the point home, it is suggested to calculate the number of collision events that would have occurred inside a highly evolved star such as the Earth, given its age of 10 billion years, as much greater mass and amount of molecules available earlier in its evolution up to now, as opposed to the number of collision events in vast molecular clouds near vacuum of a tiny fraction of the permanence of Earth, say 1 million years. It should be obvious that the required intermolecular interactions to form life, statistically, in their sheer magnitude would only happen where they interact the most, not where they would zoom past each other regularly. As well, repeated interaction would also be required, so the same molecule might hit similar molecules repeatedly until a reaction of specific characteristics would take place. You increase those odds by creating a gravitational container, of course is also outlined in the gravity principle of life formation, which states that life requires a significant gravitational field so that forming and formed molecules cannot escape into interstellar space. It would be analogous to making money at a job, and tossing it out of your car window as you drive home. Instead, make sure the money cannot escape by investing it. As well, the analogy for this paper can be stated in money terms, money in motion (invested wisely) grows. It will be stagnant under your mattress and eventually lose all its value due to inflation.