aware that in time they will learn better of both history and science.

Paul H. Seely ASA Member 1544 SE 34th Avenue Portland, OR 97214 phseely@aol.com

Why We Exist

Freeman Dyson, the famous astrophysicist, writes: "Life resides in organization rather than in substance, and it makes sense to imagine life detached from flesh and blood and embodied in networks of super conducting circuitry." From this we can postulate that a life form of superior intelligence evolved slowly in the cosmos, over eons and eons, from the gradual accumulation and self-organization of energy; and that this energy arose in the cosmos through the same random quantum mechanism as used by cosmologists to provide the energy need for the Big Bang, to create an "accidental universe." We can also postulate that the cosmos has always existed and still exists as that space or space time into which our universe is now expanding.

We can further postulate that the energy of the life form was slowly decaying, as all energy does, so that at some point this loss of energy exceeded the gain of energy being acquired from the cosmos so that the life form was either slowly dying, or becoming static in some way, so that the situation had become desperate for the life form.

We can postulate too that the planning for, and the creation of a universe as a survival plan is such a monstrous task that it could only be undertaken as an act of desperation, for survival itself. We can postulate such a survival plan must permit the life form to acquire new and fresh energy, an energy that was not being recycled from somewhere else.

We can postulate then that the life form evolved a Plan to create a universe the fundamental constants of nature and the laws of physics fixed in advance so that a universe had to evolve whereby intelligent life would emerge on countless planets throughout the universe and whereby the dominant intelligent life form on such planets had the mission and opportunity to develop a source of fresh energy which became accessible at some point to the life form; and that the life form then creates such universe through some inflationary big bang scenario.

We can also postulate that this fresh energy can be generated in the mind and brain of a dominant intelligent planetary life form through the exercise of free will, an act which is absolutely vital to the Plan; and that free will is so important to humanity that it has been handed down in allegorical form through the story of Adam and Eve, where Eve exercised her free will through the taking of the apple; and that this fresh energy increases with free will thoughts and actions which are good and decreases with those that are evil, which may be why the teachings of Moses, Jesus, and Mohammed are dedicated to encouraging that moral system which would promote the development of fresh energy; and that this fresh energy passes directly on death to the energy field of the creative life

form; and this may be why Jesus could tell his disciples with confidence as he was taken away to be crucified, as reported by John, "On that day you will understand that I am IN my Father and you IN me and I IN you." It may be that here Jesus was trying to tell them, before anyone had ever heard of anything called "energy," that the Father was a pool of living, sentient energy, and that He, Jesus, was in this pool, and that they would be in this pool too!

And finally, we can postulate that we know this fresh energy as the soul, and the creative life form as God, and that this then is the Destiny of Humanity, our reason for existence, to develop a soul which can merge with God and flow throughout the cosmos as a living sentient field, supporting this and other universes unto eternity.

Note

¹Freeman Dyson, *Infinite in All Directions* (New York: Harper and Row, 1988), 107.

R. C. Quittenton S-152, C-39 Bowser, BC Canada V0R 1G0 islandq@shaw.ca

Altruism as Evidence for Intelligent Design

Some biochemical processes are believed to be irreducibly complex, and the molecular components cannot be broken down into simpler molecules without the system falling apart. This complexity has been presented as evidence for intelligent design in living systems.¹

The intelligent design hypothesis has been challenged on the grounds that the structures of living things are not in fact irreducibly complex, but have a built in redundancy.² Furthermore, it has been shown that irreducibly complex and functionally indivisible structures can be accessible by some Darwinian pathways, and there is fossil and biochemical evidence that some of these pathways have been traveled in the past.³ Moreover, once complex biochemical systems have been selected for, natural selection would act to maintain these structures, since any slight deviation from a complex and inter-related process would have severe selective disadvantages.

Some altruistic interactions on the other hand not only can not be accessed through any known Darwinian selection pathway, but natural selection would be unable to maintain such systems. In a previous paper,⁴ I reviewed three examples of altruism which would not be maintainable under any known mechanism of natural selection. My examples have been challenged by David Lahti⁵ who concludes that these are all cases where Darwinian mechanisms would act to preserve altruism.

My first example concerned the reciprocal altruism of cleaner fish and the predators they clean. In this case, the predator is acting altruistically by not eating the cleaner when it has finished cleaning, and in some cases the predator may risk its life by ensuring the safety of the cleaners before itself escaping from larger predators. Lahti states that this is an example of simultaneous mutualism, which is demonstrably false. The altruism here is not merely between the cleaner and the predator. Experimental evi-