

THE TRUE HUMAN CONDITION?

Intro

My letter began as a very short 250 words inspired by astrophysicist Jeff Hester's (pro-evolution) pages on entropy (Astronomy magazine - Oct. and Nov. 2017 -

<http://www.astronomy.com/magazine/jeff-hester/2017/09/entropys-rainbow>
and

<http://www.astronomy.com/magazine/jeff-hester/2017/10/entropy-redux>).

The letter I wrote pointed out evolution's pluses (eg adaptations) and minuses (regarding origins). It went on to speak of a human, scientific, entirely natural explanation for what is called God. This led to a few hundred more words about why some people call an entirely natural process "supernatural". I speculate that it must be because of the applications in thousands of years of finding a successful theory of quantum gravity (union of quantum mechanics and Einstein's theory of gravity - general relativity). Like quantum mechanics and gravitation, those apps would include all space and all time, and would undoubtedly be as mysterious to us as our technology would initially be to the builders of Egypt's first pyramids. In years past, the denial of divine beings by science may have been logical. But times sometimes change radically. Such a paradigm shift seems to be upon us now, with the recent discovery of gravitational waves and the anticipation of quantum gravity. In changing times, scientists and philosophers and everyone must always keep open minds.

Biological Revolution and Gravitation

I've enjoyed Jeff Hester's entropy (and pro-evolution) articles immensely. They're extremely informative! I have a question about my wristwatch, though. Assuming it's less complex than the brain and body of its owner (which evolved, science tells me), why didn't atoms of metal and quartz come together to form the watch without the intelligent design of humans? Dr. Hester's 2nd article was in the Nov. issue featuring a story on gravitational waves. After thousands of years of further progress, scientists may not only be detecting these waves from collisions between black holes or neutron stars, but may also be detecting weaker waves on terrestrial and atomic scales. They may also be manipulating them, rather like the way electromagnetic waves are exploited today. General Relativity says gravity doesn't exist in space-time but IS space-time. Manipulating gravity is therefore manipulation of space-time and will lead to presently unbelievable revolutions in space travel and so-called time travel (including travel millions of years into the uninhabited past). If we combine these revolutions with the unimaginable biotechnology and genetic engineering of centuries to come; isn't it conceivable that plants, animals and even humans are the product of entirely natural* intelligent design by humanity of the distant future? Making production a two-way process is the fact that humans of the distant future rely on the reproductive instincts of past and present men and women for their existence. Evolution would always exist in the forms of adaptation and of modification to anatomy/physiology, but it would not explain origins.

Quantum Gravity and Elohim

* How does an "entirely natural" process end up being called "supernatural" by some people? When combined with the Wheeler's "Feynman absorber theory from last century, as well as the more recent transactional interpretation of quantum mechanics (TIQM); the universal gravitational field (space-time) might possibly combine with quantum mechanics to form the unified field of quantum gravity.

For example - The existence of both advanced waves (which travel backwards in time) and retarded waves (which travel forwards in time) as admissible solutions to James Clerk Maxwell's equations about electromagnetism was explored in the Wheeler's "Feynman absorber theory last century, as well as in the more recent transactional interpretation of quantum mechanics (TIQM). Einstein's equations say gravitational fields carry enough information about electromagnetism to allow Maxwell's equations to be restated in terms of these gravitational fields. This was discovered by the mathematical physicist George Yuri Rainich - "Transactions of the American Mathematical Society" 27, 106 - Rainich, G. Y. (1925). Therefore, gravitational waves also have a "retarded" component and an "advanced" component. They can travel forward or backward not only in space, but in time too.

17th century scientist Isaac Newton's idea of gravity acting instantly across the universe could be explained by gravity's ability to travel back in time, and thereby reach a point billions of light years away not in billions of years, but in negative billions-of-years. That is; the negative/advanced component of a gravitational wave would already be at its destination as soon as it left its source, and its journey is apparently instant. Instantaneous effect over large distances is known as quantum mechanics' entanglement and has been repeatedly verified experimentally.

'Physicists now believe that entanglement between particles exists everywhere, all the time, and have recently found shocking evidence that it affects the wider, "macroscopic" world that we inhabit.'
["The Weirdest Link" (New Scientist, vol. 181, issue 2440 - 27 March 2004, page 32 - online at <http://www.biophysica.com/QUANTUM.HTM>].

Though the effect is measured for distances in space, the inseparability of space and time means that moments of time can become entangled too, as "Quantum Entanglement in Time" by Caslav Brukner, Samuel Taylor, Sancho Cheung, Vlatko Vedral (<http://www.arxiv.org/abs/quant-ph/0402127>) showed. If the retarded

(forwards) wave component travels in positive space, the advanced (backwards) component corresponds to an equal amount of negative distance. The forwards and backwards movement in time can potentially cancel to produce a quantum (and macroscopic) entanglement that eliminates the need for the Big Bang's and Cosmic Inflation's solution that the universe is roughly the same everywhere on large scales because everything was once in contact in a tiny space.

Many scientists have said mathematics is a universal language because $1+1=2$ no matter who you are. The trend in modern physics is towards a unified theory of the universe - starting with the unified theories of the 20th century (notably Einstein's) and extending to string theory and quantum gravity. What happens if a person in, say, the 24th century is raised believing in a unified theory that has implications in physical terms for everything in space-time? Would he or she think there is actually only one thing? Would (s)he think it's a mistake to add one apparently separate thing to another apparently separate thing to produce two, and that such addition is merely the result of the way the body's senses operate? (Our whole mathematical system is ultimately based on the idea that $1+1=2$, and would therefore be incomplete in a unified universe.)

Learning to link with the unified field of quantum gravity would give people in the far future abilities like omnipresence (being everywhere and everywhen in space-time), omniscience (knowing everything) and omnipotence (being able to do anything). Incomprehensible to today's population as being entirely natural, these qualities would be dubbed supernatural. And the billions upon billions of possessors of these qualities could be described by the word Elohim - a name used for God in the Old Testament which, according to World Book Encyclopedia, means the "plural majesty of the one god".

When his engineer friend Michele Angelo Besso died, Albert Einstein wrote a letter of condolence to the Besso family, including his now famous quote: "Now he has departed from this strange world a little ahead of me. That means nothing. People like us, who believe in physics, know that the distinction between past, present and future is only a stubbornly persistent illusion." This suggests the following interpretation of his statement - if someone is alive in what we call the present, they must continue to be alive at any point in the future, all points of which have no actual separation from the present (though that future life would not be in the form we know). So there would be life after death. If all times in the past are united with the present, there must also be life before conception (in a different form). It seems very plausible that, after death and before birth, a human exists as a member of the Elohim. Since anything and everything is possible for such a being, we could either exist eternally in that condition or choose to be born on Earth and have a human life. Doing so would give us new perspective and experiences. It would also allow us to directly contribute to the eventual rise of Elohim civilization - perhaps by adding something to some field of knowledge or technology (this might one day lead to the ability to choose eternal life as a human), perhaps by ensuring that the human race continues into new generations, perhaps by sharing with - and otherwise helping - whomever we can.