

The Rise of Humanity as a Galactic Experimental Pilot: In Tribute to Kurt Vonnegut

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In the background of unexplainable processes that led to the creation of the universe ('Big Bang' theory), or lack of understanding of the continuous increase in its expansion rate, or the forces, other than gravitational (e.g., dark matter), that prevent the moving away of galaxies and stars from one another, a provocative fiction about the development of humanity on planet Earth was raised by the American writer Kurt Vonnegut in his book 'The Sirens of Titan' (ref. 1). In this novel, a spaceship of a highly developed civilization is stuck during an intergalactic voyage due to some spoilage, raising a dilemma of whether to ask for rescue from its mother planet, which might take almost endless time, or raise an intelligent civilization nearby that would eventually reach the stage capable of producing the missing part required for repair. *In choosing the second option, the entire history of the human race can actually be depicted as an alien attempt to construct a spare part for a spaceship.* As much as Vonnegut's fiction may be considered an outrageous imaginary idea, we may consider it equally credible to the unproven religious perception by a large portion of humanity about the creation of the world by a super-being (God). Moreover, the idea about other life-supportive planets and intelligent civilizations is not new and rests on a statistical probability that the universe contains almost an endless number of galaxies and stars (like our sun) surrounded by planets (ref. 2). It is plausible that some of these planets are occupied by developed civilizations, that preceded that on Earth, thus reaching higher levels of intelligence and abilities. In considering Vonnegut's idea, we actually classify humanity as a tiny temporal developing culture in a broad galactic space inhabited by superior intelligence, a comparison that may resemble in a way our own attempt to explore the growth and abilities of ants, or even a bacterial culture in a laboratory flask (ref. 3). When inoculated, the initiation of the growth is slow and is described graphically as the lag phase. Then at a certain point and presence of unlimited resources in the medium, a faster multiplication begins that graphically is described as a logarithmic growth phase (continuous cell doubling), until density is too high and the resources are limiting, leading to competition among the cells and the logarithmic growth ceases. The culture then enters a stationary growth phase (Plateau in the curve; number of divisions equals that of dying cells), that lasts as feeding on dead-cell debris is possible before most cells die and the growth curve declines. If we describe the proliferation of humanity on planet Earth graphically, there are cumulative indications that we may soon approach, or are already in the stationary phase of our growth curve (ref. 4), and so the rise of our species as an intergalactic evolutionary experiment (*à la* Vonnegut), is unfortunately nearing its end. This sad conclusion is ratified by various existing, as well as forthcoming predicaments such as the growing world population that may shortly be unable to feed all people; or, the increase in clashes over territories and energy reserves; or, the industrialized exaggerated exploitation of Earth's resources accompanied by massive

contamination of the environment and destruction of photosynthesizing organisms (responsible for the primary production of macromolecules and oxygen), or the damage to the atmospheric shield against cosmic irradiation. When these destructive activities are accompanied by extreme climate changes due to the green-house effect and ice melting in the poles; or, extinction of many terrestrial and sea animal and plant species playing an important role in food chains (ref. 5), humanity actually expedites its depressing future. In addition, we witness reckless leaders endangering humanity by threats of using weapons of mass destruction (nuclear or biological; e.g., Russia's military aggression against Ukraine; China's aggression against Taiwan; Threats of North Korea toward the entire world; Iran's imperialistic aspirations in the Middle East; The religious worldwide Islamic Jihad). Perplexingly, despite the risks, most people are apathic to the dangers, perhaps due also to soothing words by certain scientists claiming, despite the unsecured future, that humanity may still have ample time for decision and action. Another bothering issue is the enormous discrepancy between suggestions of leading scientists (e.g., S. Hawking) to develop means for evacuation of humanity from Earth to other life-supporting planets, and the actual limited technology and unattainable issues that may prevent such evacuation even after the development of means for intergalactic travel (ref. 6a and b). Of note is also the poor cognitive abilities of most world population, still busy with archaic religious rituals, marginal aggressive interactions, and territorial debates and wars, while ignoring the global risks. These drawbacks indicate that despite the important scientific warnings, humanity is unprepared for cosmic enterprises.

Although the above words about the uncontrolled destructive activities of humanity and absurd relations sound horrible, they align with Vonnegut's criticism and disappointment with our race. In his write ups (14 novels, 3 short-story collections, 5 plays, 5 non-fiction works, further publications after his death), Vonnegut expresses his socialistic philosophy, willingness of more equality, and thrive for decency, while rejecting any kind of violence. His blunt words and ideas shocked certain US educational systems due to explicit sexual scenes and obscene language, and some of his books were even banned at the time. Still and luckily, his original ideas, mixed with wry attire, imaginative science fiction, fantasy and social commentary were finally recognized, placing him in the front among philosophers of our era.

References

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