

NOOSPHERE, OMEGA POINT, SINGULARITY, ASCENSION, CONSCIOUS EVOLUTION

Noosphere (/'nəʊ.əˌsfɪə/; sometimes **noösphere**), according to the thought of Vladimir Vernadsky and Teilhard de Chardin, denotes the "sphere of human thought". The word is derived from the Greek $vo\acute{u}\varsigma$ ("nous"; en."mind") + $\sigma \varphi \alpha i \rho \alpha$ (sfaira; en."sphere"), in lexical analogy to "atmosphere" and "biosphere".

In the original theory of <u>Vernadsky</u>, the noosphere is the third in a succession of phases of development of the Earth, after the geosphere (inanimate matter) and the biosphere (biological life). Just as the emergence of life fundamentally transformed the geosphere, the emergence of human cognition fundamentally transforms the biosphere. In contrast to the conceptions of the Gaia theorists, or the promoters of cyberspace, Vernadsky's noosphere emerges at the point where humankind, through the mastery of nuclear processes, begins to create resources through the transmutation of elements.

For Teilhard, the noosphere is best described as a sort of 'collective consciousness' of human-beings. It emerges from the interaction of human minds. The noosphere has grown in step with the organization of the human mass in relation to itself as it populates the earth. As mankind organizes itself in more complex social networks, the higher the noosphere will grow in awareness. This is an extension of Teilhard's Law of Complexity/Consciousness, the law describing the nature of evolution in the universe. Pierre Teilhard de Chardin added that the noosphere is growing towards an even greater integration and unification, culminating in the Omega point, which he saw as the goal of history.

One of the original aspects of the noosphere concept deals with evolution. Henri Bergson (1907) was one of the first to propose that evolution is 'creative' and cannot necessarily be explained solely by Darwinian natural selection. *L'évolution créatrice* is upheld, according to Bergson, by a constant vital force that animates life and fundamentally connects mind and body, an idea opposing the dualism of René Descartes. In 1923, C. Lloyd Morgan took this work further, elaborating on an 'emergent evolution' that could explain increasing complexity (including the evolution of mind). Morgan found that many of the most interesting changes in living things have been largely discontinuous with past evolution, and therefore did not necessarily take place through a gradual process of natural selection. Rather, evolution experiences jumps in complexity (such as the emergence of a self-reflective universe, or noosphere). Finally, the complexification of human cultures, particularly language, facilitated a quickening of evolution in which cultural evolution occurs more rapidly than biological evolution. Recent understanding of human ecosystems and of human impact on the biosphere have led to a link between the notion of sustainability with the "co-evolution" [Norgaard, 1994] and harmonization of cultural and biological evolution.

The resulting political system has been referred to as a noocracy.

American integral theorist Ken Wilber deals with this third evolution of the noosphere. In his work, *Sex, Ecology, Spirituality* (1995), he builds many of his arguments on the emergence of the noosphere and the continued emergence of further evolutionary structures.

The noosphere concept of 'unification' was elaborated in popular science fiction by Julian May in the Galactic Milieu Series. It is also the reason Teilhard is often called the patron saint of the Internet.^[1]

Omega Point is a term invented by the French Jesuit Pierre Teilhard de Chardin to describe a maximum level of complexity and consciousness towards which the universe appears to be evolving. Teilhard's term recurs in highbrow and popular culture, especially the cosmological theory proposed by the mathematical physicist Frank Tipler.

Teilhard de Chardin

In this theory, the universe is constantly developing towards higher levels of material complexity and consciousness, a theory of evolution that <u>Teilhard</u> called the Law of Complexity/Consciousness. For Teilhard, the universe can only move in the direction of more complexity and consciousness if it is being drawn by a supreme point of complexity and consciousness. Thus Teilhard postulates the Omega Point as the supreme point of complexity and consciousness, which is not only as the *term* of the evolutionary process, but is also the actual *cause* for the universe to grow in complexity and consciousness. In other words, the Omega Point exists as supremely complex and conscious, *independent* of the evolving universe. I.e., the Omega Point is transcendent. In interpreting the universe this way, Teilhard kept the Omega Point within the orthodox views of the Christian God, who is transcendent (independent) of his creation.

Teilhard argued that the Omega Point resembles the Christian Logos, namely Christ, who draws all things into himself, who in the words of the Nicene Creed, is "God from God", "Light from Light", "True God from true God," and "through him all things were made."

Five Attributes of the Omega Point

Teilhard de Chardin's *The Phenomenon of Man* states that the Omega Point must possess the following five attributes. It is:

- Already existing.
 Only thus can the rise of the universe towards higher stages of consciousness be explained.
- Personal an intellectual being and not an abstract idea.
 The complexification of matter has not only led to higher forms of consciousness, but accordingly to more personalization, of which human beings are the highest attained form in the universe. They are completely individualized, free centers of operation. It is in this way that man is said to be made in the image of God, who is the highest form of

personality. Teilhard expressly stated that in the Omega Point, when the universe becomes One, human persons will not be suppressed, but super-personalized. Personality will be infinitely enriched. This is because the Omega Point *unites* creation, and the more it unites, the more the universe complexifies and rises in consciousness. Thus, as God creates the universe evolves towards higher forms of complexity, consciousness, and finally with humans, personality, because God, who is drawing the universe towards Him, is a person.

Transcendent.

The Omega Point cannot be the *result* of the universe's final complexification of itself on consciousness. Instead, the Omega Point must exist even *before* the universe's evolution, because the Omega Point is responsible for the rise of the universe towards more complexity, consciousness and personality. Which essentially means that the Omega Point is outside the framework in which the universe rises, because it is by the attraction of the Omega Point that the universe evolves towards Him.

- Autonomous that is, free from the limitations of space (<u>nonlocality</u>) and time (atemporality).
- Irreversible, that is, attainable.

Tipler's cosmological Omega Point

Main article: Omega Point (Tipler)

The *Omega Point* is Frank Tipler's term for what he maintains is the ultimate fate of the universe required by the laws of physics. Tipler has summarized his theory as follows:

- The universe has finite spatial size and the topology of a three-sphere;
- There are no event horizons, implying the future c-boundary is a point, called the Omega Point:
- Sentient life must eventually engulf the entire universe and control it;
- The amount of information processed between now and the Omega Point is infinite;
- The amount of information stored in the universe asymptotically goes to infinity as the Omega Point is approached.^[1]

According to Tipler's Omega Point Theory, as the universe comes to an end in a specific kind of Big Crunch, the computational capacity of the universe will be accelerating exponentially faster than time runs out. In principle, a simulation run on this universal computer can thus continue forever in its own terms, even though the universal computer is embedded in a universe that will last only a finite time. The Omega Point Theory requires that the universe eventually contract, and that there be intelligent civilizations in existence at the appropriate time to exploit the computational capacity of such an environment.

Tipler identifies the final singularity of this asymptotically infinite information capacity with God. According to Tipler and David Deutsch, an implication of this theory is that this ultimate cosmic computer will be able to resurrect (via emulation) everyone who has ever lived, by

simulating all possible quantum brain states within the master simulation. This will manifest itself as a simulated reality. From the perspective of its simulated inhabitants, the Omega Point is an infinite-duration afterlife, which could take any imaginable form due to its virtual nature.

Tipler's Omega Point Theory is predicated on an eventual Big Crunch, a scenario believed unlikely by some because of certain recent astronomical observations implying that the expansion of the universe is accelerating. [2] Tipler has recently amended his theory to accommodate an accelerating universe due to a positive cosmological constant. He proposes baryon annihilation (via the inverse of electroweak <u>baryogenesis</u> using electroweak quantum tunneling) as a means of propelling interstellar spacecraft. Tipler maintains that if all baryons in the universe were to be annihilated by this process, then this would force the Higgs field toward its absolute vacuum state, cancelling the positive cosmological constant, stopping the acceleration, and forcing the universe to collapse into the Omega Point. [3]

Tipler argues that his Omega Point theory is fully consistent with what God said to Moses in Exodus 3:14, whose Hebrew original Tipler translates into English as: "I shall be what I shall be." Tipler (2007) argues that his theory is consistent with orthodox Christianity.

Technological singularity

Some transhumanists argue that the accelerating technological progress inherent in the Law of Accelerating Returns will, in the relatively near future, lead to what <u>Vernor Vinge</u> called a technological singularity or "prediction wall." This singularity is a state in which humans will be semi-aware components of a computerised social structure of such complexity that no one person or group of persons will be able to understand more than a tiny fraction of the whole. These transhumanists believe we will soon enter a time in which we must eventually make the transition to a "runaway positive feedback loop" in high-level autonomous machine computation. A result will be that our technological and computational tools eventually completely surpass human capacities.[1] Some transhumanist writings refer to this moment as the *Omega Point*, paying homage to Teilhard's prior use of the term. Other transhumanists, in particular Ray Kurzweil, refer to the technological singularity as simply "The Singularity."