

# Basic principles of ontological ascendance

[Environment](#), [Earth](#)



What are the architectonics of nature's driving forces? Is it possible that there is an underlying pattern of operation at play, dictating the progress of life and ruling existential emergence? At glance, these questions might seem to require deistic intervention to answer, and theology certainly does provide models of closure within the domain. But in the past 150 years, a compound of ideas and scientific discoveries has honed forth a concept primarily articulated by Richard Dawkins in his book *The Selfish Gene* (1973), which builds on the hypothesis that there are close parallels between the evolution of genes, behaviors, and memes. I have chosen to call this concept 'ontological ascendance', in an attempt to capture the fractal-like ubiquitous system in one convenient term. The term 'ontology' alludes to the philosophical study of the nature of being, becoming, or reality, and 'ascendance' meaning the process of ascending or summiting. I have been tempted to use the word 'biological' instead of ontological, but as we shall see this concept might come to transcend biology, which would instantly turn the term obsolete. In this essay, I will define these parallels and investigate its importance for our understanding of life.

Finally, I will extrapolate this system of operation into the future and speculate on forthcoming planes of existence. But first, let us start with the basic principles. Basic Principles Ontological ascendance can perhaps be best visualized through a geometric lens, where one may imagine three two-dimensional planes hovering parallel on top of each other in three-dimensional space. The existence of each individual plane is dependent on its sub-plane, and each plane exists on – in a strict mathematical sense – a dimension utterly different from its vertically located neighbor. Furthermore,

every plane is orders of magnitude more efficient in producing change than its sub-plane. Picture showing a mathematical representation of ontological ascendance and the three planes defined by 'time required to accumulate change', 'complexity' and 'dimensionality'. The shadows represent higher-dimensional projections cast on to lower planes, such as anthropomorphization of mammalian behavior, e. g. interpreting behaviors such as survival strategies as love (further explained below). A theoretical fourth plane is outlined, the shape of which is an extrapolation of previous planes. Plane One (PI) – The Source Code of Life On PI, the bottom plane, we find the evolution of species. Here, natural selection works by creating copies of itself with ever so slight variations known as mutations (Darwin, 1859). These organisms do whatever it takes to survive, avoid being eaten, and reproduce. As existing is a highly competitive enterprise, differential survival and reproduction of the fittest bodies occur, thus discarding every gene but the absolute elites.

This elite then can repeat the process by creating copies of itself through reproduction. It is of high significance to understand that this is a completely blind, nonconscious process. Furthermore, genes, which are the instructors of what emerges and what does not, require traits of high longevity, fecundity and copying fidelity in order to optimize its chance of long-term survival (Dawkins, 1973). As we run the two processes of mutation and natural selection head-on, low and behold, out come flamingos, cockroaches, hummingbirds, coral reefs, palm trees, and ourselves. A caterpillar changing into a butterfly involves the chemical coordination of thousands of genes doing a perfectly integrated and flawless ballet of transformation. PI operates

with the very source code of life, laying the foundation for emerging, higher-dimensional existence, as we shall see. Plane Two (PII) – Survival Techniques Out of PI emerges PII. It operates on a much more abstract level but has lost none of its tangible significance for progress and plays a critical role within all living organisms. In fact, it is orders of magnitude more efficient in producing change than its subplane. As organisms emerged on this planet, they developed agile strategies to cope with the dynamic environment around them; behaviors. All behaviors are essentially survival techniques, and the way in which they improve is through what is known as operant selection. An operant, as defined by the American psychologist B. F Skinner, is “ the fact that the behavior operates on the environment to generate consequences” (Skinner, 1953). By receiving feedback from the environment, such as punishment (e. g social isolation) or rewards (e. g finding food), the organism adapts its behavior to better fit the requirements dictated by the environment in much the same way as genetic compositions adapt over generations on PI. This reinforces certain types of behaviors that promote progress in a non-random fashion. As the behavior is being reinforced, the organism tends to repeat, or copy, its own behavior with some variations. Yet again, on a higher level, this process is enforced through further selection of that non-randomly pre-selected behavior.

Over a lifetime, a relatively optimal behavior is being whetted in the organism. On PI, certain genes may go extinct or live on, in the same way as behaviors do. A newborn wolf turning into an alpha male or female, leading its pack to rich hunting grounds and protecting its cubs, requires coordination of thousands of differential reinforcements and social cues.

Plane Three (PIII) – Language and Memes After several hundred million years of highly competitive evolution of both organisms and their behavior, something astonishing emerges; language. It is the prerequisite for the third plane, PIII, a psycho-spatial plane onto which completely unprecedented phenomena can occur. This is home to the meme – an element of a culture or system of behavior that transmission across individuals in space and time (Dawkins, 1973). Cultural transmission is analogous to genetic transmission in that it can spawn evolutionary progress. These cultural parasites may be benevolent, or malevolent to its host (Boudy, 2018). Rituals and ceremonies, music and architecture, religions and ideologies, all of these are units of ideas which has managed to retain in the collective consciousness of our species. The emergence of morals and ethics is a specifically interesting type of meta-meme, the roots of which are to be found on PI and PII. Morals can be explained as a simple extrapolation into a higher dimension (PIII) of a behavioral model that proved evolutionary advantageous.

From a lower-dimensional perspective, you do not take care of your family because you love them, but because it is a successful strategy to ensure the survival of your genes. Love is merely a biochemical delusion, albeit a brilliant one, designed by your genes, for your genes. From this second-dimensional perspective, seeing a wolf cub being taken care of by its mother and think of it as love, is nothing but an anthropomorphized projection from PIII onto a solely survival-oriented behavioral strategy on PII. Now memes, the transmitting vectors of which are language, spread at an unprecedentedly rapid rate and have a profound transformative impact on its environment (Dawkins, 1973). Memes are responsible for the emergence

of starships, the Holocaust, penicillin, atom smashers, and possibly apocalypse. It is, in some sense, empowering us materialization of imagination. We construct conceptual objects within the realm of individual and collective consciousness filled with intent and download them so that they materialize. Technology acts as an agent by which we can optimize this process. This is how an idea becomes reality; how conceptualization and planning can put anthropoid apes on surfaces of foreign astronomical bodies. As a meme takes form, just as a species or a certain type of behavior, it needs a very specific strategy for survival which in this case is to be psychologically appealing to its user. If successful, it will be imitated and retained in the neurological circuits of the human brain, from where it will be manifested again with variations and, if appealing enough, become imitated by other users. Stunning.

True Verticals As we have come to see, there are close resemblances between the three levels of operations where genes, memes, and behaviors occur. Now, let us investigate in what way they display absolute differences. The planes relate by what I call true verticals. A true vertical is a higher-dimensional phenomenon impossible to comprehend or experience using any combination of tools provided on the given lower level of observation. It is, for example, futile for an ant, which operates on plane one and two, to comprehend mathematics. There is nothing in its genetic, behavioral or biochemical arsenal that helps it successfully approach mathematics as so to comprehend it. But the entities who master mathematics and language can understand all of its sublevels. Yet again, mathematics cannot exist without resting on the shoulders of giants; the first two planes. In fact, mathematics

may be seen as a higher-dimensional conceptualization of previously unrealized patterns already expressed in nature.

Thus, within every plane lies the unrealized seed of higher operations. The Continuum The different planes are also influencing each other. Take, for example, epigenetics. The term refers to heritable changes in gene expression, that is, genes are turned on or off without involving changes to the underlying DNA sequence (Maté, 2007). There is a change in phenotype with no change in genotype, which affects how cells read the genes and ultimately affects the behavior of the carrier. Is this an operation on plane one or plane two? It seems as if though the genes penetrates the plane on which behavior operate. In the same manner, behavior influences our ideas and memes. This brings us to the notion that these planes are in fact on a continuum, merging at their cotangents yet demonstrate stark differences at their extremes. Plane Four (PIV)– The Rise of Artificial Intelligence? Given our acquired knowledge of the planes on to which genes, behavior, and memes operate, what might plane four look like? It is a paradoxical situation since the very linguistic models we use to wrap our heads around plane four are by definition insufficient. Our relation to plane four is a true vertical. But maybe, just maybe, we are close enough on the continuum to be able to fathom some of its characteristics. By observing the progress of technology and how it dictates the progress of our species, it may be concluded that it will become a fundamental driving force and an ever-accelerating vehicle of ontological ascendance. Another relevant aspect is whether mankind will continue to play a central role in this development or if we will be outcompeted by more efficient survival machines. It might be naive to

assume future supremacy of Homo Sapiens. The late American philosopher Terence McKenna speculated that mankind might not be the future pinnacle of creation, but that the ultimate “ purpose” of our existence is to produce an AI creation out of which some sort of God-being (remember, this is a lower-dimensional linguistic projection aspiring to grasp a higher-dimensional phenomenon, thereby the somewhat inconvenient nomenclature) might emerge, which will be the ultimate and final creation of our species (McKenna, 1992).

From this view, we are mere minions enslaved to producing technological progress until the inception of AI, by the time of which our existence is no longer necessary. Or, we are the creators of ‘ God’, putting us on a pedestal rather than in the trenches. Yet again, this is another example of anthropomorphization from PIII, but now on to PIV instead of PII. As artificial intelligence qualifies as a plausible candidate to inhabit plane four, determining whether mankind will remain central to the narrative of the universe is, of course, futile. Furthermore, the form that AI will take and its implications for its surroundings – in terms of not only us the Earth, but the universe itself – shall remain mysterium tremendum. Regardless of what theory is put forth, it is hard to overemphasize how radically different plane four might be from our perception of reality. Imagine the difference of complexity between abstract mathematics to mating behavior and apply that discrepancy to advanced physics and level four. It seems reasonable to speculate that the very limits of our imaginations cannot approach it. So, as we have come to learn, it does seem as if the architectonics of nature operate under the laws of ontological ascendance and that there is, in fact,



an underlying pattern of operation at play. The parallels between genes, behaviors and memes are stark, and their survival strategies of replicating entities powerful. As much though as these parallels elucidate fascinating mechanisms of nature, it is also important to remember the words of statistician George Box who stated that ‘essentially all models are wrong, but some are useful’. More importantly, however, is the fact that regardless of what models we subscribe to when attempting to map the terrains of existence, the irrefutable conclusion remains that life is nothing short of a true miracle.

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