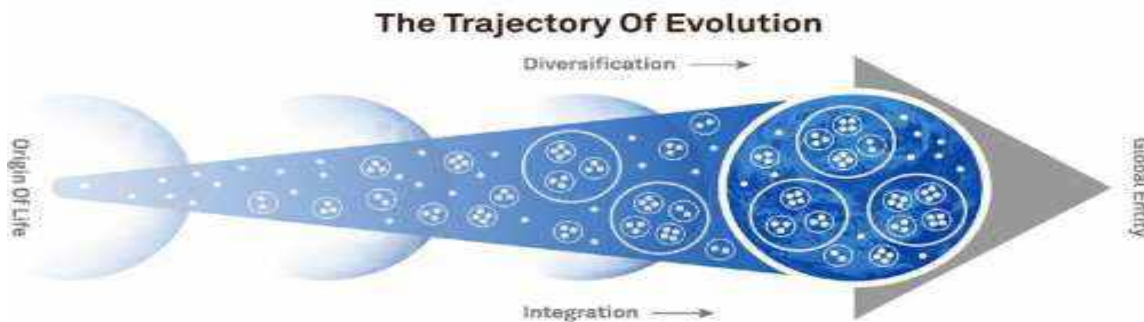


The Evolutionary Worldview and its Implications for Humanity



Introduction

A completely new phase in the evolution of life on Earth has begun. It will change everything.

In this new phase evolution will be driven intentionally, by humanity. The evolutionary worldview has the potential to transform the nature of human existence.

At present humanity is lost. We don't know what we are doing here. God is dead. We are without a worldview that can point to our place and purpose in the universe and that can also withstand rational scrutiny.

But this difficult period is coming to an end. The emergence of the new evolutionary worldview is beginning to lift us out of the abyss. The evolutionary worldview has a unique capacity to reveal who we are and what we should be doing with our lives. It relies solely on scientific knowledge and reason to identify our critical role in future evolution. The evolutionary worldview can unite us in a great common enterprise, and provide meaning and purpose for human existence.

At the heart of the evolutionary worldview is the fact that evolution has a trajectory—it heads in a particular direction. However, this trajectory will not advance beyond a certain point unless it is driven consciously and intentionally. If the transition to intentional evolution does not occur, evolution on Earth will stall, and humanity will not contribute positively to the future evolution of life in the universe. We will be a failed evolutionary experiment.

It is as if evolution is a developmental process. Just as a human embryo is organized to develop through a number of stages to produce an adult, evolution tends to produce a particular sequence of outcomes of increasing complexity. Initially, evolution moves in this direction of its own accord. However, at a particular point evolution will continue to advance only if certain conditions are met: organisms must emerge that awaken to the possibility that they are living in the midst of a developmental process; they must realize that the continued success of the process depends on them; and they must commit to actively moving the process forward.

The emergence of intentional evolutionaries

Across the planet at the beginning of the twenty first century, individuals are emerging who are choosing to dedicate their lives to consciously advancing the evolutionary process. They see that

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their lives are an important part of the great evolutionary process that has produced the universe and the life within it. They realise that they have a significant role to play in its future evolution.

Redefining themselves within a wider evolutionary perspective is providing meaning and direction to their lives - they no longer see themselves as isolated, self-concerned individuals who live for a short time, then die irrelevantly in a meaningless universe. They know that if evolution is to continue to fulfil its potential, it now must be driven intentionally, and it is their responsibility, their destiny to contribute to this.

These individuals are awakening to the understanding that evolution is not an aimless and random process. It is headed in a particular direction. This is very important knowledge - once we understand the direction of evolution, we can identify where we are located along the evolutionary trajectory, discover what the next steps are, and see what we can do to bring them about, individually and collectively

Evolution's Arrow

Where is evolution headed? Contrary to earlier understandings of evolution, an unmistakeable trend is towards greater interdependence and cooperation amongst living processes. It follows that if humans are to advance the evolutionary process on this planet, a major task will be to find more cooperative ways of organising ourselves.

The trend towards increasing cooperation is well illustrated by a short history of the evolution of life on earth. For billions of years after the big bang, the universe expanded rapidly in scale and diversified into a multitude of galaxies, stars, planets and other forms of lifeless matter. The first life that eventually arose on earth was infinitesimal – it was comprised of a few molecular processes. But it did not remain on this tiny scale for long. In the first major development, cooperative groups of molecular processes formed the first simple cells. Then, in a further significant advance, communities of these simple cells formed more complex cells of much greater scale.

A further major evolutionary transition unfolded after many more millions of years. Evolution discovered how to organise cooperative groups of these complex cells into multi-celled organisms such as insects, fish, and eventually mammals. Again the scale of living processes had increased enormously. This trend continued with the emergence of cooperative societies of multi-celled organisms, including bee hives, wolf packs and baboon troops. The pattern was repeated with humans – families joined up to form bands, bands teamed up to form tribes, tribes joined to form agricultural communities, and so on. The largest-scale cooperative organisations of living processes on the planet are now human societies.

This unmistakable trend is the result of many repetitions of a process in which living entities team up to form larger-scale cooperatives. Strikingly, the cooperative groups that arise at each step in this sequence become the entities that then team up to form the cooperative groups at the next step in the sequence.

It is easy to see what has driven this long sequence of directional evolution – at every level of organization, cooperative teams united by common goals will always have the potential to be more successful than isolated individuals. It will be the same wherever life arises in the universe. The details will differ, but the direction will be the same – towards unification and cooperation over greater and greater scales.

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Importantly, as outlined below, this progressive integration is achieved without individuals miraculously forgoing their own interests. Instead it proceeds through mechanisms that align the interests of individuals with those of the cooperative.

Life has come a long way on this planet. When it began, individual living processes could do little more than influence events at the scale of molecular processes. But as a result of the successive formation of larger and larger cooperatives, coordinated living processes are now managing and controlling events on the scale of continents. And life appears to be on the threshold of another major evolutionary transition – humanity has the potential to form a unified and inclusive global society in symbiotic relationship with our technologies and with the planet as a whole. In the process, “we” (the whole) will come to manage matter, energy and living processes on a planetary scale. When this global organisation emerges, the scale of cooperative organisation will have increased over a million, billion times since life began.

If humanity is to fulfil its potential in the evolution of life in the universe, this expansion of the scale of cooperative organisation will continue. The global organisation has the potential to expand out into the solar system and beyond. And the human organisation could repeat the great transitions of its evolutionary past by teaming up with any other societies of living processes that it encounters. By managing matter, energy and living processes over larger and larger scales, this expanding, integrated organisation could eventually achieve the capacity to influence events at the scale of the solar system and galaxy.

The great potential of the evolutionary process is to eventually produce a unified cooperative organisation of living processes that spans and manages the universe as a whole. The matter of the universe would be infused and organised by life. The universe itself would become a living organism that pursued its own goals and objectives, whatever they might be. In its long climb up from the scale of molecular processes, life will have unified the universe that was blown apart by the big bang.

Increasing intelligence and evolvability

As life increases in scale, a second major trend emerges - it gets better at evolving. Organisms that are more evolvable are better at discovering adaptive behaviours that enable them to succeed in evolution. They are smarter at finding solutions to adaptive challenges and better at finding ways to achieve their goals.

Initially living processes discover better adaptations by trial and error. Organisms have to try out new adaptations in practice: if the trial is a success the organism reproduces, if not, they die. Initially this trial-and-error search occurs across many generations as successful genetic mutations are passed on, and unsuccessful mutations die out.

An important advance occurs when this gene-based evolution discovers how to produce organisms with the capacity to learn by trial and error during their lives, without making any changes to their genetic material. However, when the organism dies, these successful experiments often die with them.

In a further major transition, organisms evolve the capacity to form mental representations of their environment and of the impact of alternative behaviours. This enables them to foresee how their environment will respond to their actions. Rather than try out alternative behaviours in

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practice, they can now test them mentally. They begin to understand how their world works, and how it can be manipulated consciously to achieve their adaptive goals.

Evolvability gets another significant boost when organisms develop the capacity to share the knowledge they use to build their mental representations. Imitation, language, writing and printing are important examples of processes that transmit adaptive knowledge. These processes enable the rapid accumulation of knowledge across generations and the building of more complex mental models. No longer do the adaptations that organisms learn during their life die with them.

Eventually organisms with these capacities will develop a theory of evolution - they will acquire the knowledge to build mental models of the evolutionary processes that produced the living processes on their planet, including themselves. For the first time they will have a powerful, science-based story that explains where they have come from, and their place in the unfolding of the universe.

On any planet where life emerges, the trend to increased evolvability is likely to eventually produce organisms who awaken to their evolutionary history and its future possibilities. They will begin to understand the wider-scale evolutionary processes that have produced them and that will govern the future of life on their planet. The organisms will begin to see themselves as having reached a particular stage in an on-going and directional evolutionary process. They will know where evolution is headed, and what they must do if they are to advance evolution on their planet.

Evolutionary consciousness

On any planet where life reaches this stage, some individuals will begin to undergo a critical shift in consciousness. Increasingly they will cease to experience themselves primarily as isolated and self-concerned individuals. Instead, they will begin to see and experience themselves as participants and actors in the unfolding of a majestic evolutionary story. The object of their self-reflection will change. When they think of themselves, they will tend to see themselves-as-part-of-the-evolutionary-process. Their conscious participation in evolution will increasingly become the source of value and meaning in their lives. Key realisations that will contribute to this shift in consciousness are:

- a life dedicated to the pursuit of narrow desires and pleasures cannot be worthwhile. They will see that their existing desires are evolution's way of programming them to be adaptive and successful in past environments, but not in future environments. They will see that in many cases their desires and pleasures do not serve the interests of future evolution – their existing desires often produce behaviour that is now maladaptive, and motivate actions that will undermine rather than advance the evolutionary process;
- they have the opportunity to be conscious participants in the evolutionary processes that will shape the future of life on their planet. They can play an important role in the actualisation of the next great steps in evolution;
- the successful future evolution of life on their planet depends on their conscious participation. Unlike past great evolutionary transformations, the steps to a unified and sustainable planetary society and beyond are too complex to be discovered by trial and error. They will be achieved only through the conscious efforts of organisms, and not otherwise.

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Conscious organisms will need to envision the planetary society and design strategies to get there;

- their actions can have meaning and purpose insofar as they are relevant to the wider evolutionary process. To the extent that their actions can contribute positively to evolution, they are meaningful in the context of a larger process outside themselves. This larger process has been unfolding long before they were born, and will continue long after they die;
- the evolutionary perspective therefore provides them with an answer to the great existential question that confronts all conscious organisms: What should I do with my life?
- their awakening to the evolutionary perspective and the awakening of others like them is itself a critically important evolutionary event on their planet.

One way of experiencing the significance of such a shift in consciousness is to think and feel your way into the following scenario:

Imagine that you are one of a community of conscious cells amongst a larger population of unconscious cells. Initially you understand your existence as being about doing the things that cells do, interacting with other cells and pursuing typical cellular goals and interests. But then you begin to discover that the moment to moment activities and interactions that occupy your time are part of much larger processes and patterns. As you accumulate more knowledge, you begin to realise that these larger processes are directional and are leading somewhere. This culminates in a sudden epiphany when you realise that you and your fellow cells are part of a developmental process that is directed at producing a complex, multi-cellular organism.

But the peak of your evolutionary epiphany is yet to come. It occurs when you see that your realisation that you are part of a developmental process has a key role in the successful unfolding of the process itself. You discover that the developmental process is organised in such a way that its successful completion depends on you and the other members of your community having this realisation – it depends on your community of cells becoming aware of the nature of the developmental process, and consciously acting in ways that advance the process. You understand that without the emergence of cells that become conscious of this process and that use this awareness to guide their actions, the developmental process will fail. Your realisation brings you to a fundamental choice: you can decide to intentionally dedicate your existence to advancing the developmental process, and assisting its successful completion; or you can continue to live out your limited cellular existence as you did before, pursuing narrow cellular interests, but now knowing that your existence will amount to nothing in the broader scheme of things.

On any planet that reaches this stage, the emergence of individuals who undergo such a shift in consciousness can be understood as the evolutionary process on the planet becoming aware of itself. Through these individuals, the evolutionary process develops capacities for self-reflection, self-knowledge, and foresight. It will use these abilities to continually redesign itself and to accelerate its own advancement.

Transcendence of our biological and cultural past

Individuals that embrace the evolutionary perspective will set out to align their personal goals with evolutionary objectives. They will attempt to free themselves from needs that conflict with evolutionary goals. They know that this will be essential if their species is to continue to contribute to the advancement of the evolutionary process. This is because the kinds of

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organisms that will play a significant role in the future evolution of life in the universe will not be those that continue to squat on the planet on which they emerge, masturbating stone-age desires forever.

Freedom from pre-existing goals will not be achieved easily in the case of motivations and needs that have been deeply entrenched by their biological and cultural past. Individuals that adopt the evolutionary worldview will seek techniques and practices – and join together in groups - that enable them to go beyond these pre-existing goals. From our current human perspective, they will attempt to develop the capacity to transcend their egos, grounding themselves increasingly in the realities and imperatives of evolution. Individuals who succeed in doing so will be able to direct consciousness to wherever it can be most effective in contributing to the advancement of the evolutionary process. The enormous creativity of consciousness will no longer be wasted on the pursuit of self-centred desires and needs established by past evolution.

Individuals that develop the psychological capacity to transcend these motivations and needs will actualise a further major transition in evolvability. They will be self-evolving beings - organisms that have the ability to adapt in whatever directions are necessary to advance the evolutionary process, unrestricted by their biological and social past. Groups, organizations, communities and societies will undergo similar transformations which enable them to transcend the constraints of their history and culture.

Individuals and groups that embrace the evolutionary perspective will also work to encourage all other groups within society to reframe their goals and mission statements to align with evolutionary objectives. Social, political, governmental and economic organisations will begin to re-evaluate their activities and goals to ensure they are consistent with the advancement of the evolutionary process.

Working towards a unified and evolvable global society

As more and more individuals and groups make the transition to an evolutionary perspective, a wave of evolutionary activism will emerge, directed at forming a cooperative planetary society.

Humanity has reached a major evolutionary threshold. The next great step in social evolution on earth is the formation of a unified, sustainable and evolvable global society. On earth, individuals and groups are beginning to emerge who have decided to consciously contribute to the evolutionary process by doing what they can to actualise such a global society. They are energised by the realisation that their evolutionary awakening and activism is part of a significant evolutionary transition on earth.

Humanity will draw on its evolutionary history to see how to build a cooperative and unified global society. Evolution has repeatedly organised self-interested entities into new cooperative wholes. Evolution shows us how cooperation can be organised without individuals having to submerge their own interests or to fundamentally change their natures. Humans will not have to become saintlike - a cooperative global society can be achieved without people having to sacrifice or suppress their self-interest.

Evolution produces cooperation by instituting forms of social organisation that align the interests of individuals with the interests of the collective. These arrangements involve systems of constraints (e.g. governance at the human level) that align interests by rewarding cooperation and suppressing cheating, theft and other forms of free-riding. Drawing on these evolutionary

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examples, humanity can institute forms of organisation at the global scale that will align the interests of citizens, corporations, and nations with the interests of the global society.

Appropriate forms of organization will ensure that entities at all levels capture the impact of their actions on others and on the collective – they will benefit whenever they act in ways that benefit others and the global society, and they will be harmed whenever they harm others and the collective. Pollution and war will no longer pay. Pursuit of self-interest alone will lead all participants in the global society to act cooperatively and in the interests of the global society. All participants will treat the other as self because appropriate governance will ensure that any impact they have on the other will have a reciprocal impact on them.

In the past, the emergence of new cooperative organisations gave rise to an explosion of diversity and differentiation within the new organisations. This will be repeated at the global scale. The new forms of social organisation will also enhance the evolvability of our existing forms of government. Government will be replaced with far more intelligent and adaptable processes that utilise the dynamism, creativity and energy of properly managed markets. Like effective markets, the new governance processes will harness a diversity of perspectives to solve adaptive challenges.

Whenever larger-scale cooperatives have emerged previously in evolution, they have undergone a process of individuation. Each cooperative becomes more integrated, co-ordinated, and able to act as a cohesive individual. The unified global society can be expected to follow a similar evolutionary path. It will progressively develop internal processes that enable it to act, adapt and relate as a coherent whole – eventually the planet will be able to speak with one voice. For the first time, there will be an entity that other planetary societies could relate to and interact with. If earth is successful in reaching this level, a new universe of possibilities will open up to humankind.

John Stewart, April 2019

Further details:

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