

 **Christian Arnsperger**

University of Lausanne

## How Deep Time Can Help Shape the Present: Existential Economics, “Joyful Insignificance” and the Future of the Ecological Transition

# ABSTRACT

An awareness of deep time—both humanity’s deep past and the Earth’s deep future—and an understanding of its existential implications can significantly enhance the chances that humanity might still be able to transition towards an ecologically sustainable way of inhabiting the biosphere. This essay explains in detail why this is so, using analysis of a science fiction story that evokes existential horror at humanity’s ultimate cosmic insignificance. With the tools of “terror management theory” (a paradigm of existential thought based on the work of Ernest Becker and emphasizing the saliency of the denial of death in human motivation and behaviour) and of “existential economics” (an approach postulating that the way in which the economic system is organized and operates is crucially influenced by this widespread denial of death), the essay suggests that death denial has turned into the capitalist denial of life, and that only a deep reconciliation of humanity with its true ontological place in the universe will make it possible for us to transition towards a regenerative rather than a destructive system. This will entail new modes of human thinking, feeling, and acting anchored in a shared sense of “joyful insignificance,” as well as a renewed sense of “cosmic indigeneity”—a sense that all humans are indigenous to this planet and that this fact has major implications for how we ought to live into the deep future, anchored in our deep past.

**Keywords:** deep time, ecological critique of modernity, ecological transition, cosmic insignificance, denial of death, Ernest Becker, terror management theory, existential economics.

## NARRATING THE DEEP FUTURE

In his short story entitled “The Next Ten Billion Years,” John Michael Greer offers a chronicle of the deep future of humanity and Earth, imagining how successive global civilizations will arise and then collapse in sequence, and how intelligent species, resembling *homo sapiens* less and less, will follow one another over billions of years. What is striking about the story is the manner in which it shows anthropocentrism fading forward into insignificance as the millennia pass, the deep future swallowing up all but the last shreds of the memory of humanity’s presence on Earth. In the graphic-novel version of the story, entitled *10 Billion* (Greer, Knoesen and Knickrehm), a significant narrative twist is added: the chronicle of the deep future is spoken during an occult ceremony performed by a venerable seer, and is addressed to a businessman who came to ask this seer for his vision of the distant future, in hopes of finding out how he could use technologies such as Artificial Intelligence, nuclear fusion and space travel in order to serve the needs of humanity and make his own corporation—and therefore himself, symbolically if not physically—immortal.

As the description of the deep future of the planet unfolds with less and less human presence (after a protracted period of descent and disintegration of human civilizations with future humans becoming as different from *homo sapiens* as the latter is from the Neanderthals), the businessman slips into ever more profound despair, as well as impotent anger. Already after the glimpse into the 1,000-year future, he exclaims: “Absurd! So humanity becomes nothing more than a bunch of subsistence farmers and nature worshippers!? Where is my corporation? Where is my A.I.?” Much later, at the end of a one-million-year dive into the deeper future, he sits despondent on his chair and, when asked if he is okay, complains: “I don’t matter? I will have no lasting impact. What’s the point?” Later still, having had to listen to the seer’s description of Earth and its eleventh and last intelligent species, in the shape of highly sophisticated water clams, he bursts out: “So there is no point in my A.I.? No point in pursuing nuclear fusion or travelling to the stars? I will double my donation if you tell me how to realize an A.I.! It will solve all our problems.” The seer, of course, refuses and instead moves to the last stage of his vision: ten billion years in the future, when the Earth has died and the first intelligent species on a neighbouring planet, not resembling a human in any way, sits on a rocky peak, lifts what looks like a teeth-circled perception organ mounted at the end of a fleshy tube, and takes its first “look” (or whatever the equivalent might be) at the vast universe. When asked by the seer whether he is satisfied, the businessman gets up and leaves, stammering: “I’m insignificant! Mankind doesn’t last! We don’t even go extinct with a bang! Nothing matters!”

The print version of the story ends with a metaphysical question addressed to us in the present:

The creature's [meaning that first intelligent post-Earth species] biochemistry, structure, and life cycle have nothing in common with yours, dear reader. Its world, its sensory organs, its mind and its feelings would be utterly alien to you, even if ten billion years didn't separate you. Nonetheless, it so happens that a few atoms that are currently part of your brain, as you read these words, will also be part of the brain-analogue of the creature on the crag on that distant, not-yet-existing world. Does that fact horrify you, intrigue you, console you, leave you cold? (Greer, "The Next Ten Billion Years" [a] 143)

If we are to take our cue from the despondent businessman in the graphic novel, the reaction is likely to be one of horror—and indeed, the creature is drawn to be rather Lovecraftian, an eldritch apparition from the very deep future, and above all a seeming negation of everything that humanists understand under the notion of “progress” in the anthropocentric sense. It is probably no coincidence that the worm-like creature vaguely resembles a less tentacled, more winged version of the *shoggoth*, one of the species of Ancient Ones that people Lovecraft's weird world, and in particular his 1936 story “At the Mountains of Madness.”

As Greer reveals in his remarks preceding a later printed version (Greer, “The Next Ten Billion Years” [b]), he was initially inspired to write his story in 2013 by a blog post authored by the Italian academic, extractivism specialist and peak-oil activist Ugo Bardi, also entitled “The Next Ten Billion Years,” which delineates two different scenarios. In one of them, computers and A.I. allow humans to survive for a while under optimal high-tech conditions and, in parallel, generate over the millennia a form of superintelligence—a “new planetary intelligence” capable of terraforming Mars and Venus—which will eventually recreate a new universe after the “current” one has wound down, ten billion years from now, from heat death. In the other scenario, this technological progress does not occur and the universe—including the Earth and the humans inhabiting it—move through cycles of decay and resurgence in a natural, unassisted way, with no superintelligence saying at the end, marking a new beginning, “Let there be light.” Clearly, the businessman in the graphic novel is in part a stand-in for Bardi: as Greer suggests, Bardi himself is supremely depressed by the idea that humanity will end up leaving the stage and other intelligent Earth species will be evolving, after which the Earth will gradually get swallowed up by an expanding Sun (so that the last Earth species goes extinct forever), and finally a new intelligent species will be arising naturally in another part of the universe. Bardi is despondent, so Greer claims, at the idea of a humanity not being ultimately redeemed and

being made *cosmically significant* again by a superintelligence it made possible through its own past technological prowess in the area of A.I. This is why Greer emphasizes that Bardi's project, which is to suggest that we need today to choose the "right" rather than the "wrong" scenario, and to throw all our efforts into transcending human finitude by creating a posthuman deep future where a computerized form of human intelligence can perform a new, quasi-Biblical act of creation, "only makes sense if you happen to be a true believer in the civil religion of progress" (Greer, "The Next Ten Billion Years" [b] 289).

This suggests an interesting connection between the contemporary literary tradition of weird horror, at least in its Lovecraftian version, and the modern belief in technological and civilizational progress: deep time haunts the modern present in reverse, so to speak. The so-called monsters that symbolize humanity's cosmic insignificance are not, in Greer's story, remnants of a deep past as they are in Lovecraft's Mythos cycle. In "The Next Ten Billion Years," and especially in the graphic novel, the possibility of horror for which Greer leaves room comes from the fact that the intelligent species of the deep future—the upright-walking raccoons emerging thirty million years after the extinction of humanity, the crow-like bipeds of a hundred million years from now, the industrious and intellectually superlative corbiculae living one billion years in the future, and the final creature (or, as it were, the first creature of a new world-cycle) with its wormlike and multi-mouthed body—are not Ancient Ones but rather "New Ones," if I may call them that. They are just as indifferent to the human species, but they deny its significance from the deep future instead of from the deep past. The New Ones have not always been here, as have the Old Ones in Lovecraft's Mythos; they have *never been here* and will only be here once we are not. If anything, the abruptness of the cosmic insignificance hurled at modern humans is even harsher here than in Lovecraft, where at least the Old Ones coexist with humans and occasionally clash with them; here, they "post-exist" the human species, harbouring no memory whatsoever of its erasure from the universe. All of humanity's supposed "progress" is forgotten, or even worse—not even known to ever have taken place. This is the essence of the existential horror felt by the disillusioned businessman as he listens to the seer's successive visions.

## BIOPHOBIA, THE QUEST FOR COSMIC SIGNIFICANCE, AND THE DENIAL OF DEATH

Greer's plausible claim is that it is also the horror more or less consciously felt by Bardi, and which motivates his flights of fancy about a cosmically miraculous A.I. solution, designed to give hope to the believers in the civil religion of "progress." It even has, according to Greer,

the classic structure of evangelical rhetoric—the awful fate that will soon fall upon those who won't change their wicked ways, the glorious salvation awaiting those who get right with Progress, and all the rest of it. Of course, the implied comparison with Christianity can only be taken so far. Christians are generally expected to humble themselves before their God, while believers in progress like to imagine that humanity will become God . . . The horrible fate that awaits the sinful [in Bardi's version of the secular religion of progress] is simply that nature will be allowed to go her own way, while the salvation awaiting the righteous is more or less the ability to browbeat nature into doing what they think she ought to do—or rather, what Bardi's hypothesized New Intelligence, whose interests are assumed to be compatible with those of humanity, thinks she ought to do. There's plenty that could be said about the biophobia—the stark shivering dread of life's normal and healthy ripening toward death—that pervades this kind of thinking . . . (Greer, "The Next Ten Billion Years" [b] 289–90)

As we will see presently, it is precisely this biophobia, driven by the denial of death, that underlies the horror felt by those who, like the greedy but ultimately anguished businessman, recoil with "shivering dread" from the seer's vision of a deep future in which humans, both through natural causes and through wilful choices, have become extinct. And as I will argue later in this essay, if the wilful portion of humanity's extinction is to be warded off, and if something like an ecological transition is to be feasible within the context of our "long descent," it is this biophobia and its multiple manifestations in culture and society that will need to be addressed through new means. The first step, for now, is to delve more deeply into the meaning of the expressions "cosmically significant" and "cosmic insignificance" which I used in the previous section.

I used these expressions on purpose because they connect with the ideas of a thinker who, I believe, is fundamental for the understanding of our modern industrial predicament—namely Ernest Becker, the American anthropologist and philosopher, author of the landmark books *The Denial of Death* (1973) and *Escape from Evil* (1975). One of Becker's main claims is that all human beings, as living and hence precarious and mortal organisms, have an inherent need to cultivate self-esteem and find purpose in their existence through participation in what he calls "hero systems." These are cultural constructs which, by offering people ways to belong to, and embrace, wholes that transcend the individual, provide both day-to-day meaning and teleological orientation. A key notion in this context is what Becker calls "cosmic significance" (or sometimes also "cosmic specialness"), which he initially casts within the framework of existential child psychology:

The child is unashamed about what he needs and wants most. His whole organism shouts the claims of his natural narcissism. And this claim can make childhood hellish for the adults concerned, especially when there are several children competing at once for the prerogatives of limitless self-extension, what we might call “cosmic significance” . . . We like to speak casually about “sibling rivalry,” as though it were some kind of product of growing up . . . But it is too all-absorbing and relentless to be an aberration, it expresses the heart of the creature: the desire to stand out, to be *the* one in creation. . . . Sibling rivalry is a critical problem that reflects the basic human condition: it is not that children are vicious, selfish, or domineering. It is that they so openly express man’s tragic destiny: he must desperately justify himself as an object of primary value in the universe; he must stand out, be a hero, make the biggest possible contribution to world life, show that he *counts* more than anything or anyone else. (Becker, *Denial of Death* 3–4)

While it is very likely that—contrary to what Becker and some of his followers have occasionally appeared to claim—this characteristic is more a historically situated (as well as gendered), modern-Western trait than a human universal, it certainly translates adequately into the norms of industrial and consumerist “progress” and their linear and redemptive vision of time:

When we appreciate how natural it is for man to strive to be a hero, . . . then it is all the more curious how ignorant most of us are, consciously, of what we really want and need. In our culture anyway, especially in modern times, the heroic seems too big for us, or we too small for it. Tell a young man that he is entitled to be a hero and he will blush. We disguise our struggle by piling up figures in a bank book to reflect privately our sense of heroic worth. Or by having only a little better home in the neighbourhood, a bigger car, brighter children. But underneath throbs the ache of cosmic specialness, no matter how we mask it in concerns of smaller scope. . . . It doesn’t matter whether the cultural hero-system is frankly magical, religious and primitive or secular, scientific, and civilized. . . . The hope and belief is that the things that man creates in society are of lasting worth and meaning, that they outlive and outshine death and decay, that man and his products count. . . . Western society since Newton, no matter how scientific and secular it claims to be, is still as “religious” as any other . . . : “civilized” society is a hopeful belief and protest that science, money, and goods *make man count* for more than any other animal. (Becker, *Denial of Death* 4–5)

A deeply ingrained yearning for cosmic significance, as well as a translation of this yearning into material and financial accumulation: these are, according to Becker, the main ingredients of what he calls the “plain

debasement and silly heroics” of industrial and consumerist capitalism—“the plain debasement and silly heroics of the acquisition and display of consumer goods, the piling up of money and privileges that characterizes whole ways of life” (*Denial of Death* 7). One of the main claims I will make later in this essay is that such substitute heroics can and should be replaced by *more existentially lucid, less acquisitive, and more biosphere-centred heroics* if a genuine ecological transition, compatible with resource depletion and reduced material expectations, is to take place. On our way to establishing this claim, however, we first need to delve more deeply into the main cultural and existential cause for the modern-Western quest for cosmic significance.

Becker’s most enduring and influential contribution to the humanities is his thesis—which has since spawned a vast scientific literature and given birth to a whole new sector of academia called “terror management theory” (see e.g., Solomon, Greenberg and Pyszczynski, *The Worm at the Core*; Harvell and Nisbett)—that what drives the heroic quest for cosmic significance and its social, economic, political and cultural manifestations is the *denial of death*, or more precisely the various strategies we use unthinkingly in order to push the awareness of our fragility and mortality, along with the existential terror it creates in us, out of our day-to-day consciousness:

The first thing we have to do with heroism is to lay bare its underside, show what gives human heroics its specific nature and impetus. Here we introduce directly one of the great rediscoveries of modern thought: that of all things that move man, one of the principal ones is his terror of death. After Darwin the problem of death as an evolutionary one came to the fore, and many thinkers immediately saw that it was a major psychological problem for man. They also very quickly saw what real heroism was about . . . heroism is first and foremost a reflex of the terror of death. (Becker, *Denial of Death* 11)

The implications of Becker’s approach have been cogently summarized by three of its most well-established contemporary representatives:

We humans all manage the problem of knowing we are mortal by calling on two basic psychological resources. First, we need to sustain faith in our cultural worldview, which imbues our sense of reality with order, meaning, and permanence. . . . Since we’re constantly on the brink of realizing that our existence is precarious, we cling to our culture’s governmental, educational, and religious institutions and rituals to buttress our view of human life as uniquely significant and eternal. But . . . the paths to literal and symbolic immortality laid out by our

worldviews [also] require us to feel that we are valuable members of our cultures. Hence, the second vital resource for managing terror is a feeling of personal significance, commonly known as *self-esteem*. . . . Self-esteem shields us against the rumblings of dread that lie beneath the surface of our everyday experience. Self-esteem enables each of us to believe we are enduring, significant beings rather than material creatures destined to be obliterated. (Solomon, Greenberg and Pyszczynski, *Worm at the Core* 9)

It is precisely this self-esteem which, in Greer's short story, we witness the businessman losing as the seer's successive visions deconstruct and annihilate his entire worldview of technological progress as a source of eternal salvation from cosmic insignificance. It is most probably also this threat to cosmic self-esteem that leads Ugo Bardi to present the computerized birthing of a planetary intelligence capable of terraforming distant planets *as if* humans still existed and *as if* they were directing it, as a secular-religious source of solace that, in his eyes, the mere succession of cycles of birth, growth, decline and death in nature cannot possibly provide.

In direct continuity with these insights, the Polish-British thinker Zygmunt Bauman connects this quest for death-denying self-esteem and worldview validation directly to the project of modernity, and most specifically the ambition of the eradication of death through modern, hyper-technological medicine as a precursor to the project of transhumanism:

The promise to conquer if not mortality, then each and any specific *cause* of death, fits the self-confidence, nay hubris, that marked the modern spirit from the beginning and through most of its history. Drawbacks seemed but a temporary nuisance, all evil but a relic of past human folly which triumphant civilization will eventually extirpate, all affliction but a side-product of ignorance soon to be replaced with foolproof knowledge. Libraries were written on the not-yet-realized, but certain to materialize, human omnipotence . . . (Bauman, *Mortality* 145–46)

According to Bauman, it is this very omnipotence that has become the content of modern rationality itself—almost as if modern reason were *defined* by its capacity to “kill death,” as he puts it (*Mortality* 152):

Once the diffuse and inhuman prospect of mortality has been localized and “humanized,” one need no more stand idle waiting for impending doom. One can do *something*, something “reasonable” and “useful.” One can be active, and act in an instrumentally rational fashion. Conforming to modern mentality, one can cast death and survival as “problems.” And then one can think seriously about the solution to these problems, and apply to the solution all the tested faculties and skills with which modernity armed its residents. (Bauman, *Mortality* 153)



As exemplified by Greer's frightened but enormously ambitious businessman who wants to build an immortal corporation, as well as by Bardi's transhumanist fiction of a planetary intelligence carrying forth into the deep future humanity's yearning for immortality, modernity itself turns out to be the project by which the denial of death turns into a culturally sanctioned biophobia which, in turn, parades as rationality and denies its own historicity.

In other words, the denial of death hides inside historical modernity, which itself hides inside the culturally rationalized denial of nature. This explains a rather disturbing fact—namely, that in his final book, published posthumously after he died of cancer at age fifty, Ernest Becker couches his theory of death-denying cultural heroism in a stark and extremely dark naturalism that seems to make biophobia all but inevitable, and even a hallmark of all genuine humanity. Greer appears to be resoundingly vindicated in his accusation, which we heard at the beginning of this section, that modern fantasies of eternal salvation through perpetual progress are inextricably bound up with (as he said above) “biophobia—the stark shivering dread of life's normal and healthy ripening toward death” (Greer, “The Next Ten Billion Years” [b] 290). To drive this point home in the most striking of manners, here is Becker's very Lovecraftian (much more than Darwinian) description of humanity's existential predicament within nature:

The only *certain* thing we know about this planet is that it is a theatre of crawling life, organismic life, and at least we know what organisms are and what they are trying to do. At its most elemental level the human organism, like crawling life, has a mouth, digestive tract, and anus, a skin to keep it intact, and appendages with which to acquire food. Existence, for all organismic life, is a constant struggle to feed—a struggle to incorporate whatever other organisms they can fit into their mouths and press down their gullets without choking. Seen in these stark terms, life on this planet is a gory spectacle, a science-fiction nightmare in which digestive tracts fitted with teeth at one end are tearing away at whatever flesh they can reach, and at the other end are piling up the fuming waste excrements as they move along in search of more flesh. . . . Each organism raises its head over a field of corpses, smiles into the sun, and declares life good. (Becker, *Escape from Evil* 1–2)

This vision of “nature, red in tooth and claw,” to quote Lord Tennyson (1850, canto 56) who opposes it directly to “love Creation's final law,” completes the trap into which Becker's dark naturalism locks us. This is because this mortality—which, if Becker is to be believed, humans are quite justified in denying as ferociously as it pursues them—now becomes,

in the next step, the basis for the quest for perpetual accumulation and growth through the pursuit of immortality-bestowing *economic heroism*: “Immortality power . . . came to reside in accumulated wealth” (Becker, *Escape from Evil* 87). True enough, Becker’s ultimate hope was that, once people have been made aware by “a world-scientific body” of the mystifications wrought by self-preservation, they “might struggle, even in anguish, to come to terms with themselves and their world” (*Escape from Evil* 168).

But what are the odds of such a struggle succeeding when it is set within an existential condition as overpowering *and universal* as the one he describes? Becker observes that

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[o]nce the organism is satiated, this becomes its frantic all-consuming task, to hold onto life at any cost—and the costs can be catastrophic in the case of man. . . . For man, . . . this organismic craving takes the form of the search for “prosperity”—the universal ambition of human society. Now, prosperity means simply that a high level of organismic function will be maintained, and so anything that works against this has to be avoided. In other words, in man the search for appetitive satisfaction has become conscious: he is an organism who *knows* that he wants food and who *knows* what will happen if he doesn’t get it, or if he gets it but falls ill and fails to enjoy its benefits. Once we have an animal who recognizes that he needs prosperity, we also have one who realizes that anything that works against continued prosperity is bad. (Becker, *Escape from Evil* 2)

This naturalization of the necessity of “continued prosperity” for incurably death-denying human animals who fear nature’s teeth and claws leaves precious little room, it seems, for anything else than the dreams and expectations embodied in Greer’s greedy and delusional businessman, and in Bardi’s transhumanistic and equally delusional fantasy of an A.I.-perpetuated human creative intelligence ruling the cosmos. In the short run, such an essentialization of biophobia makes growth, accumulation and aggressive resource extraction into rational behaviour, and modernity into the obvious response to mortality, even as Becker’s theory—and its empirical application in experimental and clinical psychology—deconstructs this biophobia as an unconscious mystification due to the denial of the very mortality that is presented as a realization, within the deathly theatre of nature, of pure Lovecraftian horror. The trap is, indeed, complete.

However, we have gained some clarity. We now see that in order for the evocation of a deep future peopled by post-human creatures recomposed from the atoms left over by the decomposition of our human descendants to trigger—to paraphrase Greer—consolation instead of horror, that is,

in order for the modern notion of progress and its many avatars such as growth, linear time and unchecked resource extraction to no longer rule our relationship to the future, we need to recognize that the industrial and consumerist economy we have constructed over the past three centuries is not an existential escape hatch, but is actually part of the trap. This is the main message of what I call *existential economics*, to which I now turn. Only once we have spelled out clearly the ways in which industrial and consumerist capitalism is rooted in a specific way of denying death—hence of denying nature—that can be overcome and changed, will we be capable of reconciling ourselves with our recent past (the past 5,000 or perhaps 10,000 years), as well as with our very distant, deep future (the next 100 million or the next billion years) and of spearheading a genuine ecological transition.

## AN EXISTENTIAL PERSPECTIVE ON ECONOMIC LIFE

Existential economics seeks to understand the role played by existential factors in economic phenomena. Existential factors are whatever plays a key role in people's search for the meaning of their lives. This covers what is usually known by the expression "human condition." A basic assumption of existential economics is that every single agent in the economy carries their existential anxieties into their actions. The basic question asked in existential economics is what role key aspects of our human condition play in economic phenomena.

Existential economics is based on two key ideas which we discussed in the previous section. First, a very basic feature of the human condition is the all-pervading fear of death, and of finitude more generally. This implies that almost all human action in society is unconsciously coloured by death terror—*both* for those who are fragile and precarious *and* for those who appear to be successful and solid. Second, a very basic feature of cultural and social life is the all-pervasive denial of death. This implies that social life, and hence also economic life, has to be understood as a more or less sophisticated device for the repression of death terror—more precisely, a collective device by which each individual is rendered able to manage his subliminal fear of death. As we saw, Becker calls this the hero system: all cultures aim to offer up and impose in socialization certain models of heroic existence by which individuals can reassure themselves as to their cosmic significance.

These two key features have implications for the observable behaviour of both individuals and corporate entities within the economy. For instance, it has been shown that "mortality salience" (the fact of making participants

in a psychological lab experiment acutely aware of their mortality) played a significant role in the cautious and even outright hostile reactions of the German population to the introduction of the euro currency (Jonas, Fritsche and Greenberg). Terror management theory practitioners Sheldon Solomon, Jeff Greenberg and Tom Pyszczynski claim that “the historical record and empirical research provide convergent support for the proposition that the denial of our mortality is at the root of humankind’s feverish pursuit of wealth” (“Lethal Consumption” 139). What would an existential-economics analysis of the current overall economic and social situation look like? Let us simplify the picture as much as possible by dividing the population into three categories: consumers, businesses and the government.

Consumers spontaneously translate the basic existential anxiety into an addictive search for cosmic significance through the acquisition of goods—material commodities, but also immaterial images and purchasable virtual realities—as well as through the pursuit of the financial wealth that will expand their access to such goods. Consumerism, the systematic use of material goods in order to fill the “hole within,” is one of the main contemporary results of this dynamic (Bauman, *Consuming Life*; Turley). The thirst for material and financial wealth is one of the main implications of consumerism (Kasser; Solomon, Greenberg and Pyszczynski, “Lethal Consumption”).

Businesses, which are structured sets of individuals, function according to a logic in which each member feels they must contribute as much as possible to the firm’s growth and profitability—even when the firm is a “psychopathic” corporation (Bakan) which, by design, is immortal and has the legal duty to maximize surplus value for its shareholders. Management methods are created which “enrol” individuals by creating enthusiasm for profit-generating activities—sometimes to the point of obsession, especially for higher-ranking white collar workers, but increasingly for blue collar workers as well (Sennett; Boltanski and Chiapello). Here too, the underlying causality is existential: we participate in the antics of profitability and growth because we believe (or have been educated to believe) that they will give our precarious life some meaning and stability by being a source of self-esteem. This enrolment logic is accentuated by the consumerist thirst for financial wealth, which since the 1990s has led an increasing number of consumers to become shareholders as well, playing on financial markets in order to supplement labour incomes which stagnate due to ferocious competition between firms.

Moreover, the fear of old age and death has led more and more very wealthy individuals to elect public officials who have, over the past four decades, pushed for increasing liberalization of financial flows, and this

has led to the increased “financialization” of pensions, especially in Anglo-Saxon regions (Blackburn) and some Eastern European countries. The reason why governments have become increasingly sensitive to the voices of the rich (Formisano) is, among other things, because the fear-driven ideology of growth has become so widespread that politicians, themselves seeking existential meaning and cosmic significance through reputation and re-election, buckle to mainstream incentive arguments of the “trickle-down” type according to which death-denying economic growth can only be generated through the death-denying enrichment of the already well-off.

There is a twofold causality going from the system towards our human condition, and from our human condition towards the system. Both causal directions are essential to a full understanding of what the capitalist market economy is about. Existential economics fully heeds the two directions of the system-to-human causality and roots the questioning within the basic idea that this system-to-human causality is driven by the response of the system to the human fear of precariousness, suffering and death, which takes on very different hues and colours, and translates into very different behavioural patterns, depending on where one is located within the system.

It is the desperate quest of the Western industrial ego for “cosmic significance” through extraction, possession and accumulation that renders our economic system so utterly unsustainable from an ecological point of view. This does not mean that existential economics neglects political power relations and the abuse of wealth asymmetries and inequalities—in fact, these very phenomena themselves are rooted in the same anxious, ego-centred quest for significance and fear of insignificance (Strenger) that also drives ecological destruction. All these mechanisms are locked together into one huge systemic logic, driven invisibly by modernity’s alliance with men’s and women’s quest for death-denying self-esteem and worldview validation through a belief in technological “progress” and economic growth (Greer, *After Progress*).

How can human beings live with the inner tension between the desire for immortality and the knowledge of mortality? Part of the answer, says Ernest Becker, lies in the search for a *conscious life* lived without existential lies. In the existential perspective, individuals are to develop what I have called “critical acceptance” (Arnsperger, *Critical Political Economy* and *Éthique de l’existence post-capitaliste*). It is a way of living in which we still play along with the mystifications of the hero system of culture and social life, but we stop projecting our denial of death outward through the economic decisions we make in search of self-esteem. We accept that we are still caught in an industrial and consumerist capitalist game ridden with death denial—ours and others’—but we begin to gain some critical distance from it. We see how our “success” inside the game is mainly a reflection

of a skewed arrangement by which our quest for self-esteem has trumped others' similar quests, and we see how our "failures" have been mainly due to power asymmetries connected, once again, to the unequal systemic pathways through which others' quests for self-esteem have been able to trump ours. Moreover, we realize how the whole bulk of these frantic quests for industrial-consumerist self-esteem, in the service of the denial of death, has had a disastrous impact on nonhuman species, as well as the biosphere in general.

Such a realization does not come easily within the modern Western mindset. It requires opening up to an internal force, a creative energy directed not at false, death-denying heroics but at the search for a life that accepts death while at the same time accepting not to be free of the fear of death—a life, in other words, in which there is a *conscious fear of death*, a lucid consciousness of death as the centre of life and thus, at the same time, a life in which the burden of death—on oneself and on others—becomes lighter, not heavier (Brown). Is industrial and consumerist capitalism conducive to such a path? In my view, which is informed by existential economics, it is not. Instead, industrial and consumerist capitalism makes the individual burden of death ever heavier—and *less* conscious—by creating a hero system that focuses on a materialistic way of satisfying the drive-to-defend through the drive-to-acquire.

### “JOYFUL INSIGNIFICANCE”: DEEP TIME, COSMIC INDIGENEITY, AND THE FUTURE OF THE ECOLOGICAL TRANSITION

It is not wealth, consumption, status or recognition which are problematic in themselves; what is detrimental—and can be seen only through the lens of existential economics—is the fact that wealth, consumption, status and recognition are being hijacked by people's death-denying aspirations to an infinity which neither wealth nor consumption nor status nor recognition can ultimately bestow. As a result, as I have argued at length elsewhere (Arnspurger, *Critique de l'existence capitaliste*), modern Western humans have come to *confuse material goods for spiritual resources*, in the deeply rooted belief that the former can offer what the latter used to promise: a respite from finitude, a forgetfulness of death and a certainty of finding refuge from one's precarious existence.

Therefore, it is also not existential heroism in itself that is the problem; we cannot help trying (and needing) to push death awareness out of our day-to-day consciousness in order to focus on the tasks and aspirations at hand. What we can and should avoid is *death-and-destruction-amplifying*

existential heroism. What we could and should reject is *misplaced* existential heroism which misleads us into locating the object of our yearning—cosmic significance, a sense of meaning and purpose in an evolving natural universe—where it cannot possibly be found: in finite, perishable goods and in a blind faith in technological progress and economic growth which (as the anguished businessman in Greer’s story exemplifies) will never satisfy us, because it *can* never satisfy us.

The key task—and in late modernity it has become an arduous one, to be sure—is to uproot biophobia by recognizing that it splits us down the middle, psychologically and existentially speaking, because it makes us deny two crucial facts: from the viewpoint of our objective mind, we are natural parts of nature and the cosmos; from the point of view of our subjective mind, nature and the cosmos are a spiritual part of us (Greer, *The Way of the Golden Section* 3–4). The first fact is the linchpin of scientific modernity and is, by that token, very familiar to us, but without the second fact—which flies in the face of all forms of modern rationalism and reaches back into Western humanity’s relatively recent past, from the Renaissance backwards into tribal and indigenous times—it is so conducive to existential angst that it is no wonder modern Western humans, who live fully immersed in object relations, amputated of their subjective mind, have developed the specific death denial syndrome diagnosed by Becker and his successors.

If nature and the cosmos are not subjectively part of us—to be more exact, of an “us” that is much larger and more omnipresent than each of our Western industrial egos—then the deep-future visions of Greer’s seer are, indeed, unbearable. The “skin-encapsulated ego” (Watts), if persuaded it is the be-all and end-all of a human subject who is a mere object in an objective cosmos, cannot possibly rejoice in the spectacular, eon-long cycles of birth, decay, death and regeneration that will preside over the succession of worlds throughout the next ten billion years. The anxious quest for cosmic significance so keenly put forward by Becker stems from the fact of having lost our subjective minds—the part of our individual minds that is, as myriad spiritual and mystical traditions throughout history testify, fully capable of perceiving, and feeling at home in, the entire “hierarchy of heaven and earth” in which the objective human animal is but a point of passage between the outer expanses and the inner depths (see e.g., Hall, Harding, or Singer). It is only once this metaphysical but also very concrete capacity has been recovered that the frantic demand for cosmic significance can be relinquished in favour of what I would call a “joyful insignificance.” To the anxious objective mind, this sounds precisely like what needs to be avoided at all costs; within the millennia-old traditions of humanity—which some will wish to call “esoteric” or “occult”—it is

what needs to be developed by all means possible. Joyful insignificance is a way of settling into the twin immensities of inner consciousness and outer materiality, rejecting neither and inhabiting both in the knowledge, which at this point can only be called *wisdom*, that both immensities are welcoming instead of hostile. To go back to Greer's earlier question, only by this sort of momentous shift in consciousness towards a reconciliation with our cosmic insignificance as a matter of fact, can horror at the sight of the seer's visions be replaced by consolation—and perhaps even joy. Heroism, in Becker's sense, needs to be de-coupled from the quest for cosmic significance and re-coupled with the age-old veneration of deep time: the deep past of our cosmic origins (see e.g., Swimme and Berry), as well as the deep future of our vaster self's evolution not just in but *as* the cosmos itself, unfolding, dying and being reborn (see e.g., Stager).

This rather staggering (for the modern objective mind) change in perspective implies that making it possible to settling into and inhabiting these twin immensities in a way that will allow us to *joyfully reinhabit the Earth in radically non-destructive ways* is the signal task for any spiritual practice worth its salt in these waning decades of the industrial world. This entails all the concrete implications that come with the “long descent” towards a de-industrial future, i.e. living with significantly fewer resources on much smaller geographical areas and making many of the—illusory and death-denying—material comforts and luxuries of the industrial present a thing of the past (Greer, *The Long Descent*). It also entails, however, a radically new form of being in the world, which I will call “cosmic indigeneity”: if Earth science and geology have taught us one thing at the existential level, it is that just like older Indigenous peoples were and still are quietly and joyfully—but also frugally—connected to a place or a land as their meaning-giving area of inhabitation, de-industrial peoples will be connected, indeed *indigenous*, to the entire cosmos. They will be “geologically human” (Wood) and, from that consoled and reconciled vantage point, they will become capable of truly embracing new forms of de-industrial heroism—in particular, for the modern West, the quiet and joyful heroism of voluntary simplicity (Grigsby) and of the transition town movement (Hopkins).

From the vantage point of the Western industrial objective mind, these forms of heroism are linked to imaginaries of self-sacrifice and self-deprivation. To the cosmically indigenous subjective mind, however, they are among the best available forms of planetary reinhabitation. For as the seer asks the anguished businessman at the end of Greer's story (*10 Billion*): “You think that because nothing lasts forever it means that nothing matters? Every person dies. Every civilization dies. Every species dies and eventually so does the Earth and the universe itself. So? The question is what we do while we're here.”



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**Christian Arnsperger** is Professor of Sustainability and Economic Anthropology at the University of Lausanne and coordinator of the Master’s program in Foundations and Practices of Sustainability. He specializes in the existential and ecological critique of capitalism, post-growth economics and sustainable counterculture, the transition from circularity to “permacircularity,” and the systemic links between money and sustainability.

<https://igd.unil.ch/ChArnsperger/en/publications/>

<https://arnsperger-perma-circular.com/>

<https://orcid.org/0000-0002-9451-5405>

**christian.arnsperger@unil.ch**