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Envisioning the Ecological Future: Three Perspectives off the Beaten Track

ABSTRACT

With few truly hopeful visions currently emerging from mainstream academia or from established science concerning humanity's collective environmental outlook, it might be necessary to go off the beaten track in order to see how we can maintain a sense of hope while realistically preparing for the gradual erosion of the world as we know it, therefore also leaving some psychological and emotional room for a sense of the tragic. This essay considers three lesser-known but, in our eyes, important contemporary perspectives on the ecological future: Ernest Callenbach's "ecotopia," John Michael Greer's "catabolic descent" and William deBuys's "hospice for Earth"—all three of which aim to challenge the currently still dominant focus on the binary of "progress or apocalypse" that flows from modern thought. We critically examine these visions and argue that, when combined, they offer an approach to the ecological future that is both more realistic and more inspiring. In essence, Callenbach's ecotopian vision still has significant traction—and an almost "erotic" appeal—today, but needs to be adapted to contemporary ecological realities through Greer's and deBuys's insights into decline, grief and the tragic.

Keywords: ecological future, critique of modernity, critique of progress, apocalypse, ecotopia, catabolic decline, hospicing Earth, eco-grief, Ernest Callenbach, John Michael Greer, William deBuys.



An alternative title for our essay could have been: "The Future Is No Longer What It Used to Be." In fact, this was almost to the word the title of a book by Jörg Friedrichs, published a decade ago, in which he set out in great scientific detail how climate change and resource scarcity combine to make the outlook rather unsavory (see Friedrichs). As we write these lines, the IPCC's latest *Assessment Report* (see Intergovernmental Panel on Climate Change) sounds one more round of alarm about our planet's climate system and how humanity's ecological future is in jeopardy unless drastic mitigation measures are taken. It is by now a common occurrence, almost a ritual that takes place in salvos every few years: environmental scientists the whole world over warn of "dire predictions" for the future (Mann and Rump), and although that future is unlike anything any human alive on Earth today has ever had to envision, we somehow cling—certainly in the wealthy, industrialized Western parts of the planet—to the future as it once was: not comfortable, certainly, but not *like that*.

Many who were born in the twentieth century grew up with the assumption that the future would resemble some sort of techno-modernist fantasy with flying cars and robot servants quietly whooshing around our fully automated houses (see e.g., Lem). Some of us may have also grown up with a fear of some sort of Cold War armageddon, but overall, the outlook was one of constant improvement: the world was generally "getting better" over time thanks to ingenuity and innovation—epitomized by slogans such as Dupont's famous advertisement for "Better Things for Better Living . . . Through Chemistry," which was used from the 1930s to the 1980s, and by the so-called "green revolution" of mechanization and chemical fertilization that led to modern, fossil-fuel-driven agriculture (or rather agribusiness). Nowadays, however, when either one of us asks our university students how they see the future, we get pinched looks of anxiety and uncertainty. This is possibly the first modern generation to be facing a future that either looks depressingly bleak to those who are realistic and informed or, to the more avoidant, feels like an uncanny hologram of the present projected indefinitely forward (but with the emotional price tag of nagging anxiety that accompanies any willful act of denial or repression). Despite the narratives of progress that continue to shape our society (Norberg; Pinker; Wright), cognitive dissonance is creeping up on many of us, and the recent literature has been following suit (Allen; Maxton; Norberg-Hodge; Ryan).

Moreover, many scholars of literature and popular culture are also very aware of the predominance of narratives of dystopia and apocalypse in the culture at large. Some of us may have been intrigued or fascinated

by The Road, whether as a book (McCarthy) or on film (Hillcoat), have read the dystopian MaddAddam series (Atwood), or have seen the climatecatastrophe film The Day after Tomorrow or the more recent Don't Look Up (which was not directly about climate change but was clearly aiming to serve as a satire on climate denial and its catastrophic consequences). Stories of environmental apocalypse permeate our cultural landscape, but to no avail. Some sense of impending doom may initially have been effective in sparking awareness and action on climate change (as Lawrence Buell observed in 1995, calling the apocalyptic narrative "the single most powerful master metaphor that the contemporary environmental imagination has at its disposal" [285])—one may think of Rachel Carson's Silent Spring and its galvanizing effect on the Earth movement in the late 60s and early 70s (see Carson), and even more so of the alarming scenarios of collapse set out in the Limits to Growth report of 1972 (Meadows et al.). However, the impact of apocalypse stories has long since passed the point of diminishing returns and entered the realm of counter-productivity, as dire visions of cataclysm compound with unwelcome news stories and drive many people into denial, dismissal and avoidance (Washington and Cook).

In fact, cognitive studies have shown that we have a wide range of psychological mechanisms that work against taking climate change seriously. In his book *Don't Even Think About It: Why Our Brains are Wired to Ignore Climate Change*, George Marshall reviews and examines the various cognitive reasons for why we do not believe and/or do not act—including the "optimism bias," the tendency to minimize risks to ourselves, the "temporal bias," the tendency to avoid making short-term sacrifices to mitigate potential long-term consequences, and many others (see Marshall). In addition, recent studies have shown that ideology and worldview have a far greater impact on our predisposition to take climate change seriously than does the fact of being informed or not—and, unfortunately, ideology, worldview and belief systems do not usually change because of facts; they reject or ignore facts that do not fit their paradigm (Czarnek, Kossowska and Szwed).

Just as alarmingly, going back to the plethora of dystopian scenarios present in popular culture, we notice that many of them also smuggle in a very specific myth about human nature—what we can call the Hobbesian myth of war of all against all in a context of scarcity, of which *The Road* is the epitome (but very recent TV series such as *The Last of Us* are partly following suit). Although the protagonists are mostly good and sympathetic, the general post-apocalyptic order has devolved to a chaotic state where the more violent and unscrupulous prey on the weak. This Hobbesian myth is, so to speak, the de-civilized flip side of neoliberal capitalism and its ideology of the "free" market. The myth of predatory

human nature has also been projected into narrative scenarios known as "survivalist" stories. In all these different versions, humans—especially male ones—are like proverbial "wolves" to one another (either in the forest or on Wall Street) and social "progress" can only be salvaged through a mixture of self-centered accumulation, NRA-driven gun culture and international militarized power-mongering. The myth is not borne out by cognitive, psychological, historical, evolutionary or archeological data (Chapelle and Servigne), but in its survivalist form it remains very present in American society and keeps spreading via Hollywood's culture-industry productions: in the last twenty years there has been an explosion of this type of story in popular culture, including two separate films explicitly titled *The Survivalist* (Fingleton; Keeves). The Hobbesian narrative and its inherent pessimism about human nature potentially represents another significant obstacle to a more widespread willingness to take action in order to forestall ecological degradation. After all, if people are naturally selfish and predatory, why bother trying to create a more just, compassionate, and sustainable world? It is no accident that the Hobbesian myth is the favorite political fairy tale of the right wing and is often invoked as a counterargument to progressive politics more generally (Graeber and Wengrow 17).

In short, there is a wide range of reasons one can identify and examine for why alarms about global warming and the destruction of ecosystems, forests, oceans and habitats have been rung for decades now, but denial, dismissal and inaction nevertheless remain the predominant attitudes, especially in the most "developed" and therefore most extractive, destructive and polluting nations. It is not surprising that eco-anxiety and eco-despair are on the rise among activists, scholars and people at large (Rieken, Popp and Reile; Vakoch and Mickey), as one window of opportunity after another closes and we realize that the best we may be able to do is brace for impact. And the fact that the image of alarm we just spontaneously reached for because it is so pervasive in our vernacular language—"bracing for impact" is a metaphor linked to vehicular transportation is perhaps just one more sign of how deeply rooted our dependence on oil, motor vehicles and, more broadly, industrial modernity is in our consciousness (B. Johnson; Miller; O'Reilly). We know that we cannot or at least should not live with modernity's rapidly failing notions of progress much longer, and we also feel that we cannot or do not know quite how to live without these outdated notions. The future, indeed, is no longer what it used to be . . . and yet, our (still) modern societies seem to be trapped in the sterile dualism of either infinite progress and growth or the apocalyptic end of the world.

Against this backdrop, how can one lead one's daily life with a balance of lucidity about vanishing opportunities, a clear sense of the tragic, as well as a modicum of optimism, or at least hope, about the future? Over the past

years, combining our expertise in economic anthropology, sustainability science and cultural studies, we (the two authors) have encountered three US-American thinkers we have found useful as intellectual partners with whom to think differently about the ecological future: the ecologist and novelist Ernest Callenbach, author of the 1975 novel Ecotopia; the independent scholar of post-peak oil civilization, John Michael Greer; and the nature writer and philosopher William deBuys. Their perspectives and ideas differ from each other in significant ways, leaning towards optimism, realism and grief, respectively, but we believe that a creative combination of them may offer a promising way of envisioning our ecological future what most likely lies ahead, what the future could be, and what we can do to make it better. While we are cognizant of the fact that these are not the usual go-to thinkers of the environmental humanities today—a select group which includes scholars such as Bruno Latour, Timothy Morton, Donna Haraway and Ursula Heise—we nevertheless believe that these lesser-known (and less "academic") figures provide an interesting path forward. We will argue and try to show that they offer an approach to the ecological future that is both more realistic and more inspiring than the standard "progress-or-apocalypse" scenarios of popular culture and much eco-literature. In essence, Callenbach's ecotopian vision still has significant traction—and an almost "erotic" appeal—today, but it needs to be adapted to contemporary ecological realities through Greer's and deBuys's insights into decline, grief and the tragic.

ERNEST CALLENBACH AND ECOTOPIA

We begin with Callenbach, partly because he comes first chronologically, but also because his is the most optimistic vision—an optimism which was warranted in the 1970s, but which now needs some serious updating and qualification. Ernest Callenbach was a film scholar and one of the founders of *Film Quarterly*, published by the University of California Press, as well as the series editor for their nature and science books. In this dual role he came to be aware of the urgent nature of ecological issues and was able to propose a very detailed and concrete vision of what a more rational and ecological society would look like. Although set twenty years in the future from his time, and based on the plot premise that the northwestern states of the USA have been able to secede and

¹ Each of these figures occupies a place of honor in issue 12 of *Text Matters*, which we co-edited in 2022 (see Soltysik Monnet and Arnsperger). The present article is an extended, and extensively re-worked, version of the address we gave at the University of Lodz in March 2023 on the occasion of the issue's official launch.

form their own sustainable republic, his 1975 novel *Ecotopia* was far from being science fiction. In fact, over several years he meticulously researched the science and the policy issues that he used in order to imagine this sustainable society, and nothing in the novel was physically or technologically impossible (Callenbach, *Ecotopia*).

Indeed, many of the ideas proposed by Callenbach, some of which seemed farfetched in 1975, have become completely normalized—like largescale recycling, free public bikes, local organic farming and increasingly, in our post-Covid and climate-aware world, teleconferencing as an alternative to travel. Other ideas, like the abolition of inherited wealth, the reduction of the work week to twenty hours and universal basic income, are not likely to be implemented anytime soon in our modern capitalist culture, but are regularly up for debate. The cornerstone of Callenbach's ecological vision—and the chapter he wrote first—is a circular food and waste system, in which waste is treated and used as fertilizer for food production, and of course chemical pesticides are removed from the cycle. This system is integrated into the larger context of what he called a "stable-state equilibrium," instead of constant growth and expansion. (In this regard. he was completely in tune with the approach of "ecological economics" that was developing at the time, most notably under the aegis of heterodox economists who felt that the Limits to Growth report had ushered in an epoch of post-growth, "steady state" thinking; see Daly.)

Not only was Callenbach's vision of an ecological future eminently feasible, but in writing this vision into the world of his novel, he was able to describe this alternative culture in great visual and sensual detail. The city scene depicted in the novel is a green urban space where people and nature co-exist, as music, birdsong and water from open creeks and fountains can be heard instead of cars; electric taxis and driverless minibuses purr quietly through streets full of bicycles and pedestrians; people are dressed in colorful and highly individualized clothing (which the narrator describes as "Dickensian"), and they stroll unhurriedly among kiosks, food stands and street performers. The scene is both bucolic and full of life, and Callenbach goes to great trouble to visualize it for readers. (It is certainly no happenstance that only a decade later the innovative and ecologically-minded architect and urbanist Richard Register envisioned ecotopian "ecocities," among them a model for an ecologically redesigned city of Berkeley, which is where Callenbach also lived until his death in 2012; see Register.)

Callenbach also thought hard about how the new economic and political conditions would impact people psychologically and emotionally. Based on his experience of the Bay Area hippie movement, he imagined that people living in a more sustainable society would also be more

emotionally expressive and uninhibited, more grounded in their bodies and animal selves, and that relations between men and women would be egalitarian, but that the two sexes would remain distinctly different and complementary, as was the ethos of the 1960s counterculture (Lemke-Santangelo). While some of his ideas about psychology, identity and gender definitely could use some updating and greater inclusivity, Callenbach tried to respond sensitively to the main cultural currents of his time, which included Black nationalism, cultural and countercultural feminism, and a neo-Freudian understanding of mainstream society as sexually and emotionally repressive. What is interesting, however, is his desire to think about society and culture as an integrated whole. This holistic integration process is unique to what literature is able to do—namely, in this case, to explore the inner life of people in an alternative world and stimulate readers to think about all the different possible aspects of an ecological transition, including the existential and affective dimensions.

The first-person narrator of the novel, William Weston, is a journalist from the United States who initially is very skeptical, ironic, suspicious and even mocking of Ecotopian ways. He finds their unpainted houses made of natural materials such as wood and cob ugly and unfinished, he deems their clothing eccentric and comical, and their unhurried and friendly ways are irritating to him when he is in a hurry (which, initially, is pretty much always). Yet as time goes by and he becomes accustomed and acculturated to Ecotopian places and mores, he not only changes his mind and his ideas, but also his eye and his sense of aesthetics. At the end of the novel, when he puts his old polyester suit back on to go home, he feels disgusted at the way it looks and feels on his skin. A classical conversion narrative, Ecotopia ends with the narrator choosing to stay in the Ecotopian Republic, and Callenbach hoped that readers would be similarly swayed by their experience of being inside the narrator's point of view for the duration of the novel, so that the initially utopian aspects of this fictional but technically feasible world could begin to feel not only desirable but "normal."

Although dated in some ways, *Ecotopia* remains in our opinion one of the most compelling examples of eco-fiction to offer a view of the future that is attractive and thought-provoking. An outlier in the mid-seventies, it has since spawned or inspired an entire genre of literature and art: the recent solarpunk movement, dating back to the early 2010s, credits the novel as one of its direct forerunners (Gossett; I. Johnson; Ulibarri). Solarpunk is a genre of eco-fiction that tries to think creatively about how people, nature and technology could co-exist in ways that serve human needs and regenerate nature (Freinacht; Hunting). It is explicitly a gesture against the nihilism of cyberpunk and the reactionary dimensions of

steampunk. Known mainly through anthologies of short stories (see e.g., Lodi-Ribeiro, Rupprecht et al.; Wagner and Wieland) but also, by now, a handful of novels (Corby; Gee; Tortorich), solarpunk defiantly performs and models an optimism that aims to fall squarely between the extremes of utopia and dystopia, and, instead, to suggest that perhaps we could be innovative and compassionate in our hopes and dreams for the future while acknowledging the destructiveness of our industrial past and the need to simplify our ways—whether through technological prowess, through material downscaling, or both. Solarpunk is a rather loose assemblage of very different kinds of stories, many of which are quite fantastic and speculative—far more so than Callenbach's—but it is driven by the same desire to imagine a future that has adapted creatively and cunningly to the imperatives of the biosphere while treating all people as equally worthy of care and support.

Yet, one of the paradoxes of Callenbach's influence on solar punk fiction is that anyone envisioning the ecological future today needs to take stock of five additional decades of fierce destructiveness and global failure to address, much less resolve, environmental degradation and human denial. At the time, Callenbach skillfully wove the idea of cultural, social but also technological "progress" into a narrative that could rest on the hopeful and sometimes radical assumptions of the 1960s counterculture—ideas such as voluntary simplicity, going back to the land, appropriate technology, indigenous knowledge and bioregionalism, collaborative economies, etc. Many of these ideas were thwarted and all but annihilated by the fierce neoliberal backlash of the 1980s and 1990s. Industrial extractivism and "growthmanship" have reigned supreme since then, emerging economies have added massively to the burdens created by Euro-American capitalism, and the biosphere has been brought close to collapse in many dimensions (Rockström and Gaffney). In short, any thinker writing about the ecological future now must be much more explicit about the risk of global decline and scarcity, of resource-driven contraction (such as "peak oil"), and of the piecemeal breaking-down and frittering-away of the cherished "advances" of modernity.

JOHN MICHAEL GREER, CATABOLIC DECLINE, AND THE DE-INDUSTRIAL FUTURE

For such a dose of economic and ecological realism, we turn to John Michael Greer, both a novelist and a thinker of peak oil and contemporary society whose many non-fiction books interrogate our Western cultural shibboleths such as the myth of progress and what he calls the "apocalypse

meme" (Greer, Apocalypse xvii-xix; After Progress). He has argued convincingly, in our view—that the window of possible transition to a sustainable future has closed and that we are probably facing a prospect of catabolic decline, a long descent or slow collapse characterized by periods of decay and decline followed by periods of provisional stabilization, until the next wave of decay, and so on. As the tongue-in-cheek title of one of his books—Collapse Now and Avoid the Rush—suggests, Greer argues that we can perhaps still act to make the inevitable landing from our carbonfueled Icarian flight a soft one rather than a hard one. One of his key ideas is that collapsing deliberately and early is much better than waiting until the very last minute by hanging on—through power plays, resource wars and institutionalized denial—to zombified ways of producing, consuming and living. Himself a certified Master Gardener, a proponent of lowtech living and of what he calls—in another title of one of his books— "green wizardry," he forcefully argues that reviving the technological and spiritual heritage of the counterculture is essential and that we should all possess a library of works from the 1970s about self-sufficient living and do-it-yourself technologies, in the tradition of the Whole Earth Catalog (Maniaque-Benton).

"Peak oil" is the hypothetical moment in historical time when the maximum amount of oil production is reached and begins not only to decline, but also starts to require more and more energy to extract and refine fossil fuel (Bentley). This is actually already the case: the "energy return on energy invested" ratio (EROI) is steadily declining across all currently available energy sources, which is why Greer-along with many other scholars—dates peak oil to a moment in the early twentyfirst century. One of the consequences of peak oil is that, technologically speaking, our ecological future is likely to have to be a less power-hungry one (Greer, Not the Future We Ordered). These last years have revealed, in the context of the Russian invasion of Ukraine, how precarious our energy supplies (in Europe) are, and although we have avoided major power outages, we are becoming increasingly aware of the fact that we may have to reduce our energy use. This has up to now been the great taboo of the ecological debate—even many ecologists shrink from having to speak of *reduction*—and politicians are positively allergic to this word. It simply sounds too negative to our modern ears: to use less, to have less, to consume less, is to be less—and this is truly the end of the world for some people. Indeed, it is the end of a world—one made of infinite growth, of constant material progress, of ever-increasing power over, and separation from, nature (Danowski and Viveiros de Castro). It is nothing less than the end of modernity as we have known it—so that, again, the future is no longer quite what is used to be.

Greer appears less sanguine than Callenbach about how relatively smoothly the end of modernity will arrive—and about how much of modernity can be salvaged along the way. (In Callenbach's case, the answer seems to be: quite a bit, technologically speaking—an optimism implicitly echoed by the solarpunk movement.) The "long descent," as he calls it. is bound to be messy and filled with anguish just as much as (and, in the early stages, more than) by rationality, optimism and hope (Greer, The Long Descent). He calls this process "catabolic decline." This means that key metabolisms and processes in nature, society and culture deteriorate and diminish, but then they can stay put for a while and may even bounce back a bit—so that, to take just the "peak oil" example, as the demand for petroleum decreases after a phase of economic contraction, oil prices drop and the demand for oil can increase again. This leads to the "zombified" survival of technologies that momentarily seemed on the verge of being superseded, thus thwarting the hopes for a smooth and rational transition to post-oil technologies.

Still, Greer argues, while contraction and decline generate catabolic turbulence and instability, they do not need to spell the end of any meaningful and livable human world—especially for those who deliberately let go of familiar industrial moorings and "avoid the rush" by heading consciously into a de-industrial future. Reaching back to the Appropriate Technology movement of the 1970s and adding a novel idea of his own, which he calls "technological choice," Greer suggests that we can choose older and less energy-intensive ways of life right now (by disconnecting as much as possible from mainstream networks and cultivating a lowtech, DIY attitude to everything from clothing to the internet) and live satisfying, comfortable and meaningful lives with older, more efficient and resilient technologies (Greer, *The Retro Future*). Progress is no longer what it used to be, either, and one place where Greer shows this and makes it palpable is in his fiction work. His emblematic short story "Winter's Tales," for instance, takes place over the course of an entire century and shows the changing nature of Christmas in a context of decline, which no longer looks like decline after a generation or two, but simply like change and a new normal for those who never knew anything else (Greer, "Winter's Tales").

An even more compelling fictional foray into catabolic decline, and into how it could be possible to adapt creatively to a context of reduced fossil fuel supplies and a damaged natural environment which needs regeneration, is his novel *Retrotopia*—which, as can be gathered already from its title, is partly inspired by Callenbach's novel. Also featuring a skeptical visitor coming from a dystopian and fragmented post-civil-war United States in 2065, traveling to an independent republic located along the Great Lakes and called Lakeland, which has managed to become fully self-sufficient,

Retrotopia depicts a society that allows people to choose from a "menu" of five different regimes of technological sophistication. There are five counties of Lakeland which offer infrastructures and technologies ranging from roughly the 1830s to the 1950s. People in the more advanced counties pay higher taxes to support this greater luxury, while people in the more low-tech areas pay less for their more rugged amenities. The narrator in Retrotopia, initially just as dismissive as the journalist in Ecotopia, starts out unable to imagine getting along without his electronic devices, but gradually comes to see the intelligence and pleasures of analog and low-tech life.

By vividly portraying this future world which has scrutinized its technological past to find creative solutions to contemporary problems, Greer is able to illustrate a number of points that are central to his whole œuvre.² First of all, he is able to challenge the myth of progress by depicting a functional future society that adopts technologically and socially feasible solutions (just like in *Ecotopia*) from the past century and a half, and is neither utopian nor dystopian, but something in between—a stance we might call eco-realism (or ambitopian, to use a word that is gaining traction in contemporary fiction). Secondly, the novel allows Greer to illustrate his contention that collective change to mentalities and ideologies usually follows changing circumstances, rather than the other way around:

The belief that economic growth is as inevitable as it is beneficent, the central ideology of twentieth-century industrialism, was not the cause of the great petroleum-fueled economic boom of that century—it was one of the effects of that boom . . . Human beings figured out how to extract fantastic volumes of cheap energy from the planet's store of fossil carbon, and therefore ideologies that celebrated the consequences came into fashion. (Greer qtd. in Arnsperger and Soltysik Monnet 87, italics in the original)

Retrotopia engages with this critical insight by depicting the inner life of a post-peak society where infinite growth is simply no longer an option, as fossil fuel supplies dwindle and the natural environment has been seriously damaged, and so the ideology of infinite expansion has quietly disappeared. Greer is as interested in processes and trajectories as in end-points, and catabolic decline with its stages and thresholds, its starts and stops, is indeed a useful way of envisioning our ecological future: it allows us to accept the possibility of a de-industrial future and to brace ourselves for the turbulences and hardships of the decline, while gradually coming to terms (as does the narrator in Retrotopia) with the fact that

² These are points he also makes in our interview with him in issue 12 of *Text Matters* (see Arnsperger and Soltysik Monnet).

irreversibility has its virtues. Once we have left industrialism for simpler and less luxurious times, what our descendants have never known cannot be an object of regret or resentment for them—and new beginnings are made easier by this existential realism.³

In this sense, Greer appears as far less utopian than Callenbach, in that he believes in the meanderings of ecological "succession." According to this view, history is, as the expression goes, "one damn thing after another," which also means that time is not so much linear as it is *successive*. Put another way, from a Greerian perspective the ecological future will be the result of multiple forces of experimentation, constraint, destruction and adaptation, and Greer presumes that we can find solace in this fatalism while retaining the desire to make our lives good, i.e. to make them as good as they can be within constantly changing circumstances (Greer, *The Ecotechnic Future*). There is no such thing as "progress"; there is only "progression" from one "successive" metabolic and ecosystemic configuration to another. Everything passes eventually, and in the very long scheme of deep time, he seems to suggest, this is no big deal (see also Arnsperger).

GRIEF AND THE ECOLOGICAL FUTURE

One of the issues that Greer (like Callenbach) minimizes is grief and, more generally, existential anguish in the face of ecological degradation. He shares with Callenbach (by whom he was inspired but whom he never met, as he mentions in an interview with us; see Arnsperger and Soltysik Monnet 92) the characteristic of being both ecologically-minded and optimistic to the point of bypassing the sense of the tragic that pervades *human* dealings with decline and decay.

However, their optimism is of a rather different nature. Greer's relationship to the 1970s counterculture is profoundly more pessimistic: he is dealing with many decades of additional neglect of countercultural

³ Interestingly, another book titled *Retrotopia* was published in 2017 (just one year after Greer's novel) by the Polish-British sociologist Zygmunt Bauman. Despite the similarity in titles, the two works could not be more different. Bauman argues that, because of decades of onslaughts on existential meaning by capitalism and by military conflicts—and, more generally, because of the complexification, acceleration and "liquification" of postmodern life—many people nowadays are yearning in nostalgic ways for older forms of community and belonging, which they tend to idealize. This makes them blind to the dangers of inequality, discrimination and particularism, and makes them susceptible to the lures of communitarianism, nationalism and traditionalism. "Retrotopia," then, is for Bauman a cause for concern and alarm. He does not view "looking to the past to reinvent the future" (to quote Greer's words) as positive or at least potentially fruitful.

issues, and he also seems to be more cynical about large-scale changes being possible in a fully positive, coordinated and forward-looking way. His optimism is, if anything, *more ecological* in the sense of adhering to scientific ecology. He sees human endeavors as fully engulfed by ecological succession, so that decline is just as likely as progress, and at the same time there is a sort of tautological optimality to any change that does occur: it could not have occurred any differently given the ecosystemic parameters. Callenbach, too, was deeply cognizant of ecological thinking. In fact, he authored a book on scientific ecology in 1998, in which he displays the same hard-nosed environmental thinking as Greer, seeing humans as but one species within the web of life and making no difference between a virus and the entire populations (including humans) that it can wipe out (Callenbach, *Ecology* 150).

Yet, in his novel Callenbach does not carry the succession reasoning if it is present at all—nearly as far as Greer later will. While Callenbach was never an idealist or a wide-eyed New-Ager, he seems to have believed in the possibility of a more conciliatory approach to human inhabitation of natural ecosystems. While he joins Greer in recognizing that "[w]e will achieve a stable, secure world of sustainability only if we give up our unquestioning faith in material growth" (Ecology 78), in the 1970s he seemed to be a bit more optimistic about the possibility of this renunciation. The protagonist of Ecotopia ends up staying in the breakaway republic because it is so deeply successful in offering a sustainable and fulfilling way of life; in contrast, the protagonist of *Retrotopia* does not stay, even though he no longer cares much for his own country of origin. The Lakeland Republic, while certainly incorporating some interesting technical and institutional ways of arranging de-industrial parameters, does not quite have the powerful erotic force of attraction of the sensuous, gregarious, countercultural Ecotopian Republic. At five decades' distance in terms of writing, the perception that a genuinely exhibit ating new alternative is there, compelling the reader and making them want to immerse themselves in it, seems to have waned.

Strikingly, as mentioned above, neither Callenbach's nor Greer's protagonist is inhabited by any grief at all: they simply exist in a future world—one which is (although differently in both cases) necessarily the result of the succession of past transformations that took place many decades earlier. They inhabit, for better or for worse, re-stabilized universes in which adaptations to ecological demise have occurred and in which past hardships, as bad as they were, have given way to a new steady state and, therefore, to a new *modus vivendi*. There may still be conflicts and tensions, but they are now part of a current situation to be dealt with. The Ecotopian protagonist stays behind and secedes from his old home;

the Retrotopian protagonist leaves again, hoping to import the Lakeland model at home. In Lakeland as in Ecotopia, ruined landscapes have already been regenerated, or there is hope that they can be rebuilt.

Not so, for instance, for the characters of Starhawk's ecofeminist novel The Fifth Sacred Thing (1993)—written a whole generation after Callenbach (and a generation before Greer), and also credited with coinspiring the solarpunk movement—who are still in the midst of dealing with the immediate aftermath of a deadly catabolic collapse. In Starhawk's story, which is clearly inspired by Callenbach's novel and also takes place in a future San Francisco, Northern California has broken off from an oppressive Los Angeles-based police state. Her ecotopian Bay Area is going a low-tech, shamanic and bottom-up tribal way while Southern California hangs on to militarism and dictatorship. Pandemics rage, people die by the thousands, and northern inhabitants' relatives are imprisoned in the south and thought to have disappeared forever. From the beginning of Starhawk's novel, even as a beautiful nature-based culture has emerged in the rebellious North, the protagonists' feelings of grief and loss are overwhelming and the lapses into hopelessness are frequent as we follow the lives of mostly female healers in a community which, by choice, has eschewed modern technology and medicine, and suffers bacteriological warfare at the hands of its dystopian southern neighbor. The newly born world is still profoundly destabilized and fragile, haunted by memories of war, torture and repression, and anxious about the future. We are shown what it is like to live in the vicinity of a catabolic collapse that has just occurred, and we are made to feel the all-encompassing grief that comes from that proximity.

It seems that the closer one is to a phase of catabolic collapse, the more intense the component of grief. All the more so if, as many indicators suggest, one is as in our current period at the threshold of such a catabolic collapse—living one's life not some time afterwards, but right before it. In such moments as we are witnessing nowadays, denial and grief coexist, manic optimism and sorrow clash, ecomodernists and terraformers quarrel with eco-anxious downshifters—making for a highly polarized culture with wildly disparate visions of the ecological future. As ecopsychology has abundantly demonstrated (Canty; Macy and Brown; Omaha), failure to work through ecological grief is one of the main factors explaining the lack of collective will to embrace coordinated descent solutions and scenarios.

What exactly is the object of this grief? In the present time of peak oil, imminent climate collapse, rising consumption aspirations and the emergence of new economic powers, what people are grieving is a complex mixture. To simplify, for some there is grief for the modern way of life of luxury and privilege made possible by ecological depredation—a grief that often goes unformulated and appears as denial or the aggressive doubling-

down on worn-out habits. For others, the grief is for the biosphere we are collectively destroying, for the beauty irretrievably lost and the species forever gone—a grief that often gets covered up by paralyzing anxiety or by unproductive anger (Weber Nicholsen). And for many moderns, one must admit it is both—and this makes it all the more complicated, because grieving a way of life that is made possible by the disappearance of a biosphere that one is also grieving is bound to make one feel rather unhappy and very hypocritical. This, too, tends to breed denial or avoidance. At the heart of the problem of our difficulty to lucidly envision our ecological future, then, is *unacknowledged and unaddressed grief*.

WILLIAM DEBUYS, COMPLEX GRIEF AND HOSPICING EARTH

This is where our third intellectual partner, William deBuys, offers a very helpful metaphor, as he wonders

if the time ha[s] come to apply the ethics of hospice to the care of Earth. The idea of *hospice for Earth* is easily misunderstood. Of course, Earth is not dying. It has supported life for billions of years, and no matter what we do, our planet will generate life in myriad forms for billions more. But aspects of Earth are passing away... there will be a lot of death, a lot of "patients" breathing their last. And the emotional and spiritual toll on the caregivers who attempt to mitigate those losses and on others who consider themselves family to the ailing world will tap our deepest levels of fortitude. (xiii)

For someone like him, deBuys says—born in 1949 in the United States at the heart of industrial privilege and Cold-War destructiveness—grief for the world encompasses the natural world as well as his own human world: "Hospice is a compassionate triage. So is Earthcare. You balance a dedication never to quit with the discipline to recognize endings. You pause to honor the passing of whatever is lost: mobility, autonomy, life itself; wildness, species, ecosystems" (202). The key term here is compassion, for it undergirds the basic notion that understanding where today's situation comes from is essential: understanding what has made modern humans, the wealthy minority in the West, so utterly and mindlessly destructive. Indeed, according to deBuys, one of the (often forgotten) virtues of Western rationality is that understanding ought to breed compassion. And this combination of compassion and understanding is precisely what leads him to adopt what we could call a kind of "epistemic Stoicism" concerning our ecological future, an attitude that almost dovetails with Greer's fatalism:

Perhaps the long genesis of human nature could have led nowhere else except to the clamoring, possibly incurable, melee of unrestraint now tipping the world into environmental freefall. But where might such an understanding take us, to despair, to forgiveness, to some state where heartbreak and wisdom dwell together? The answer lies beyond my grasp. (deBuys 202)

If one judges from deBuys's writings overall, he is clearly partial to the third of the above choices: "some state where heartbreak and wisdom dwell together." Such a state, however, is not easily accessible; it can only be hard-won. It requires that we face squarely one of the most difficult emotions that can exist for humans: the feeling that one is forever unable to resolve a terrible situation that one has (or believes one has) caused and that one feels deep sorrow for. When explaining why he is going on a Himalayan trek with a team of doctors to bring help to poor, isolated mountain populations, he writes:

My... purpose is to make peace with the sorrow that dogs me. I know it will never leave me alone, for it arises from a circumstance of the world that is as durable as any other. My delight in the beauty of the natural environment must coexist with grief at its destruction. These emotions are like cellmates who cannot get along. They dwell in my head and my heart, and their constant argument creates a moral ache, piercing at times, that frequently sours the taste of life. (8)

DeBuys's great courage consists in not covering up this difficult, painful emotion with aloofness, intellectualism, denial or a righteous doubling-down on consumerist excesses. Avoiding all of these maneuvers is, indeed, our only chance to become "good ancestors" (to borrow Roman Krznaric's book title) and to be *participants in our descendants' ecological futures*, rather than mere purveyors of that future in the worst possible form. To be able to carry both heartache and wisdom, as deBuys says—or, perhaps even more accurately, to be able to transmute heartache *into* wisdom—we need to painstakingly learn, as Vanessa Machado de Oliveira has recently written, "how to gradually part with habits of living that are harmful to [ourselves], to other human and nonhuman beings, and to the metabolic movements of the planet at large" (xxiii).

Machado de Oliveira's book is entitled *Hospicing Modernity*. She published it in 2021, the same year that deBuys's book *The Trail to Kanjiroba: Rediscovering Earth in an Age of Loss* came out, apparently without knowing of the "hospicing Earth" metaphor he sets out in that text. Despite this mutual ignorance, however, their ideas converge. Time is not oriented towards some providential omega-point; it is merely the

support that makes visible the changes that occur, and so it merely—but always generously, supportively—ambles along to wherever these changes move next. Modernity may have been an inevitable stage in the continued and open-ended self-shaping of human nature, but it is now no longer the fountainhead of "progress." Succession requires what Machado de Oliveira calls the hospicing of modernity itself, because it is now holding us back "in an immature state" (xxi). Hospicing modernity means "acting with compassion to assist [it] to die with grace, and to support people in the process of letting go—even when they are holding on for dear life to what is already gone" (Machado de Oliveira xxii). The amount of contradictory grief involved in "letting go" both of the parts of the Earth that are dying and of the modernity that has made them die is bound to be enormous and immensely confusing for many of us. This is of course why Machado de Oliveira, like deBuys, insists on compassion and mutual support.

An important aspect holding people back from acting is the familiar collective-action problem—the feeling of "having to go it alone" while others are continuing the binge (Hourdequin). Intense and multifarious community support is essential if we are going to be "good ancestors" who are capable of letting go of the mortiferous structures that have caused the damage we are bequeathing to our descendants—and while community lies at the heart of Callenbach's Ecotopia, of Starhawk's The Fifth Sacred Thing, and of more recent post-apocalyptic fictions such as Emily St. John Mandel's Station Eleven, it is precisely absent from more familiar narratives such as The Road or The Day After Tomorrow, which are in that sense still deeply "modern" because of the Hobbesian and/or atomistic and neoliberal manner in which they portray people's desperate attempts to navigate catastrophic (rather than catabolic) collapse. As a result, in such narratives, an ecotopian ecological future will most likely never be reached—or if it is, the amount of needless hardship involved in an uncompassionate, callous succession will be unspeakable.

FROM GRIEF AND RUGGED REALISM TO AN EROTIC DESIRE FOR THE FUTURE

What is needed to make our ecological future one of *catabolic* rather than *catastrophic* collapse in Greer's sense is partly, or even largely, the presence of deBuys's compassionate wisdom born of heartbreak. Ironically, Greer himself, with his own brand of rugged individualism and what he calls "Burkean conservatism," is decidedly unsympathetic to what appears to him to be useless complaints about loss:

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As the Long Descent unfolds, some people will adapt to it, changing their thinking to fit the new reality of contracting energy and resource supplies, and some will not. On average—there will doubtless be exceptions—those who make that adaptation will be more likely to thrive than those who refuse it. Now that belief in limitlessness is no longer adaptive, it will begin to lose its grip on our collective imagination and be replaced by other ideas better suited to new conditions. That's the way human culture adapts to changing times. Shrieking "Humans are the masters of this rock!" was an exercise in absurdity even at the peak of the industrial age . . . Now that we no longer have the resource base to keep prancing around pretending to own the planet, such attitudes will be even less helpful than they were. (Greer qtd. in Arnsperger and Soltysik Monnet 90–91)

When envisioning the ecological future, as we saw, both Callenbach and Greer are basing their stance on an ecological worldview, and this should normally involve a good dose of the uncaring, callous brutality with which natural ecosystems and the biosphere generally regulate life within themselves. (For a disturbing but insightful discussion of Earth as Medea rather than Gaia, see Ward.)

However, a too single-minded focus on deBuys's and Machado de Oliveira's hospice metaphors risks leading us into an exceedingly onesided sense of the tragic. It is a fact that all the compassion and community support championed by these authors is not supposed to merely accompany a never-ending sense of heartache and . . . endings. And this is where the critique of the notion of progress finds its existential limit: as humans we need a sense that something new and good will eventually emerge from the endings our ignorance has forced us through. This is not at all the same notion of progress that modernity has been distilling and that Greer and many others have rightly dismissed. It is also not merely the unemotional, drab "succession" of states of being that Greer's scientific-ecological outlook puts forward. There is going to be disappearance, succession and emergence, but for human cultural and affective purposes it needs to be imbued with the emotions associated with the emergence of something wondrously new-as Machado de Oliveira writes, what we need is an approach "related to modernity dying, and what would be necessary to hospice it and assist with the birth of something new" (xxiii). In Starhawk's The Fifth Sacred Thing, the female healers we follow are literally midwives, and that's what makes their struggle with the hardships of catabolic collapse all the more emotionally touching. In the HBO Max series version of St. John Mandel's Station Eleven, one of the main protagonists, who briefly trained to be a doctor before the modern world ended, ends up stranded in a makeshift women's clinic set up in a defunct department store (the epitome of the consumerism that ate up the Earth) and assists multiple women in giving birth—again, a powerful if old-fashioned symbol of the renewal the character is on the way to experiencing in the ruins of a "Before" that will never again be.

At least as important as the literal emergence of new life in these novels and television series that try to imagine hope in a context of a post-collapse world is the emergence of new forms of social life. In sharp contrast to the tired patriarchal tropes that run at the heels of the Hobbesian myth of predatory human nature, these recent solarpunk narratives reflect the social and scientific reality of the true diversity of human beings, and they model a radical acceptance and even affectionate nonchalance about non-heteronormative genders, sexualities and social relationships that emerge from the ruins of the collapsed capitalist order. In Starhawk's novel, love between men, between women, and between members of what would be called, in some circles, "polyamorous families" flourishes freely in ecotopian Northern California—a society which allows people to follow their natures in matters of love, and moreover allows nature a voice within the body politic, with each of the elements—fire, water, earth and air—having a human representative on the governing council to speak for it.

Similarly, in *Station Eleven* (both in the novel and in its television adaptation), the progressive post-apocalyptic communities of the Great Lakes region are characterized by a general acceptance of the many modalities of people's love lives and families. The only character who tries to resurrect exploitative patriarchal practices is the mad fanatic known as The Prophet, who "marries" young girls who are merely children, and models his family on the harem and the Old Testament. This type of predatory white male character is a staple of survivalist narratives, where he often appears in the context of the "default" type of human social and sexual practices—in sharp contradiction to what we know nowadays from evolutionary psychology, archeology, indigenous societies and many other non-patriarchal cultures (see Matthews; Picq and Tikuna). In short, popular culture is finally catching up—thanks to the emergence of solarpunk and other thoughtful forms of storytelling—with the contemporary realities of gender, sexuality and love.

While he minimizes the deep sense of grief and loss that accompanies ecological degradation in modernity, Callenbach is nevertheless the only one in our original trio of future-oriented thinkers to offer an integrally sensuous, erotic, emotional, nature-bound and "carnal" picture of human life in the ecological future—while avoiding any and all flights of technofantasy and remaining completely grounded and realistic. In the prequel, *Ecotopia Emerging*, the looming ecological crisis is averted by motivated eco-activists engaging in political struggle to overthrow power structures

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and to create a new nation. In other words, Callenbach's Ecotopian Republic does not emerge from catabolic collapse, but from standard—albeit violent and occasionally deadly—political struggles against corporate control, while what is left of the United States lurches towards ever greater pollution, inequality and crime. Thus, in the first novel, *Ecotopia*, when Weston visits the new republic, twenty years after independence, it has re-stabilized into what the eco-activists of the time sought: an ecological counterculture irrigated by what Chaia Heller calls "the Desire for Nature" in the broadest sense (see Heller), with the pervasive presence of desire—including erotic desire—in everyday political and relational life. Heller bases her ideas on a notion of erotic "mutual recognition," which "implies a differentiation within association, a desire to maintain individual identity while recognizing a connection to others," where "together, differentiative and associative desire can form an erotic dance between autonomy, community, individuality, and collectivity" (101).

In contrast, while Greer's Lakeland Republic is interesting and even fascinating for its institutions and the way it organizes economic and political life (like the anarchist, Kropotkinian planet Anarres in Ursula LeGuin's *The Dispossessed*, published just one year before *Ecotopia*), it is only Callenbach's counterculture-infused Ecotopian Republic that makes its character want to remain there, clearly because the human beings in that place relate to one another socially, physically and emotionally in a way that is tantalizing and consciousness-broadening. And if it makes its protagonists want to remain there in the present tense of their story, it has a good chance of making us here and now—despite the sorrow, grief and economic hardships of our catabolic present tense—want to go there in the future tense of our and our descendants' story.

Because the future is no longer what it used to be, we have no more use for worldviews and ideologies that haunt our present from a now dangerously outdated past. What we need instead is an attitude of tragic wisdom, creative sufficiency and radical inclusion of love and compassion in all their varied forms. This is why Callenbach's, Greer's and deBuys's ideas, together, form a worthwhile and important corpus to envision our ecological future outside the strictures of conventional "progress or apocalypse" modes of thought. It is crucial that we break the spell of "business as usual" on the one hand, and "the world is going to end," on the other—both of which serve to excuse and release us from the responsibility of thinking critically and acting decisively to change course from destroying the planet and our own habitats. What is urgently needed now is a willingness to face loss and grief while recognizing the possibilities of ecological regeneration in the context of human creativity, compassion, inclusivity and collective action.

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