

CREATIVE PIETY AND NEO-UTOPIANISM: CULTIVATING OUR GLOBAL GARDEN

Robert Hanna and Otto Paans

ABSTRACT: This essay is the third in a trilogy. In the first two essays, ‘This Is The Way The World Ends: A Philosophy of Civilization Since 1900, and A Philosophy of the Future’, *Cosmos & History*, 16, 2, 2020, 1-53, and ‘Thought-Shapers’, *Cosmos & History*, 17, 1, 2021, 1-72, we outlined a broadly and radically Kantian neo-organicist thought-shaping, world-shaping, and life-shaping philosophy of the future. But precisely *how* can this neo-organicist project be realized? That’s the burning question, upon whose answer the interlinked fates of the Earth and humankind jointly depend. In what follows, by presenting and then practicing the fundamental meta-cognitive capacity we call *creative piety*, we sketch and then strongly recommend a near-future, neo-utopian global society that’s organized according to broadly and radically Kantian dignitarian neo-organicist principles. In so doing, we elaborate and extend Voltaire’s justly famous *neo-Edenic* exhortation, the final sentence of *Candide*, ‘Il faut cultiver notre jardin’—we must cultivate our garden—by reformulating it as a *cosmopolitan neo-utopian* exhortation: ‘Il faut cultiver notre jardin *mondial*’, that is, we must cultivate our *global* garden.

KEYWORDS: Cosmopolitanism; Creative piety; Dignitarianism; Earth; Humankind; Kant; Life-shaping; Neo-organicism; Neo-utopianism; Thought-shaping; World-shaping; Voltaire

The natural piety I am going to speak of is that of the scientific investigator, by which he accepts with loyalty the mysteries which he cannot explain in nature and has no right to try to explain. I may describe it as the habit of knowing when to stop in asking questions of nature.... [T]hat organization which is alive is not merely physico-chemical, though completely resoluble into such terms, but has the new quality of life. No appeal is needed, so far as I can see, to a vital force or even an *élan vital*. It is enough to note the emergence of the quality, and try to describe what is involved in its conditions.... The living body is also physical and chemical. It surrenders no claim to be considered a

part of the physical world. But the new quality of life is neither chemical nor mechanical, but something new.... We may and must observe with care out of what previous conditions these new creations arise. We cannot tell why they should assume these qualities. We can but accept them as we find them, and this acceptance is natural piety. (Alexander, 1939: pp. 299, 310-311, and 306)

Modern ... society is ... an engine assumed to be designed for useful purposes, whose force is by a system of subtle mechanism augmented to the highest pitch, but which, instead of grinding corn or raising water, acts against itself and is perpetually wearing away and breaking to pieces the wheels of which it is composed. (Shelley, 2016: p. 639)

If there is any science humankind really needs, it is the one I teach, of how to occupy properly that place in [the world] that is assigned to humankind, and how to learn from it what one must be in order to be human. (Kant, 2005: Ak 20: 45)

Progress is the realization of Utopias. (Wilde, 1891)

INTRODUCTION

This essay is the third in a trilogy. In the first two essays, ‘This Is The Way The World Ends: A Philosophy of Civilization Since 1900, and A Philosophy of the Future’ (Hanna and Paans, 2020) and ‘Thought-Shapers’ (Hanna and Paans, 2021), we outlined a broadly and radically Kantian neo-organicist philosophy of the future (see also Hanna, 2022). More specifically, the first essay synoptically sketched a philosophy of human civilization since 1900, then worked out a critical analysis of the philosophical, scientific, artistic, sociocultural, and sociopolitical influences that have decisively shaped our current global predicament via the hegemony of *the mechanistic worldview*, and then presented and defended, as a diametrically opposed alternative, what we call *new wave organicism*, or *the neo-organicist worldview*. And the second essay presented and defended a corresponding *philosophy of human thinking*, by focusing on what we call *thought-shapers*, which are mental representations—including allegories, analogies, blueprints, catechisms, diagrams, displays, icons, images, lay-outs, metaphors, mnemonics, models, outlines, parables, pictures, scenarios, schemata, sketches, spreadsheets,

stereotypes, symbols, tableaux, and templates¹—that partially causally determine, form, and normatively guide thinking processes, in either *negative* (i.e., bad, false, and wrong) ways or *positive* (i.e., good, true, and right) ways. More specifically, *the theory of thought-shapers* (TTS) asserts that human thinking processes are either (i) shaped negatively by mechanical, *constrictive* thought-shapers, or (ii) shaped positively by organic, *generative* thought-shapers, although (iii) this shaping is often not either absolutely negative or absolutely positive, but instead a matter of degree, more or less, and (iv) sometimes both kinds of shaping can operate on the same processes of human thinking. In any case, TTS is empirically testable via scientific psychology (Maiese et al., 2022), and, if it's cogent and true, then TTS can be implemented in the manifestly real natural and social world, not only individually but also collectively, and indeed globally, for the *neo-utopian* purpose of positively shaping human minds-&-lives toward our creating and sustaining all and only the kinds of world-changing that are conducive to rational human and ecosystemic flourishing. This is what we call *life-shaping philosophy* (Hanna, 2022: section 00.1).

But precisely *how* can this world-shaping, life-shaping, neo-utopian project be carried out? That's the burning question, upon whose answer the interlinked fates of the Earth and humankind jointly depend. In what follows, by presenting and then practicing the fundamental meta-cognitive activity we call *creative piety*, we sketch and then strongly recommend a near-future, neo-utopian global society that's organized according to broadly and radically Kantian dignitarian neo-organicist principles. In so doing, we elaborate and extend Voltaire's justly famous *neo-Edenic* exhortation, the final sentence of *Candide*, 'Il faut cultiver notre jardin'—'we must cultivate our garden' (Voltaire, 1959: p. 120)—by reformulating it as a *cosmopolitan neo-utopian* exhortation: 'Il faut cultiver notre jardin *mondial*', that is, we must cultivate our *global* garden.

Ironically, partly by virtue of misleading, pedestrian English translations—for example, 'we must go and work in the garden' (Voltaire, 1947: p. 144)—Voltaire's

¹ This list isn't intended to be complete, but instead only to be a working list of paradigm cases we were aiming to connect to the nature of human thinking, and more generally, to explain, in (Hanna and Paans, 2021). After we'd provided a more precise characterization of thought-shapers in sections 1 and 2 of that essay, the list could in principle have been extended according to those criteria. Moreover, allegories, catechisms, and parables differ slightly from the other items on the list, in a way that we briefly described in section 1 of that essay.

neo-Edenic exhortation has been widely and indeed wildly misinterpreted as recommending the narrowly-focused, egoistic, and purely prudential pursuit of self-interest (Barnes, 2011; Hanna, 2021b). But on the contrary, for Voltaire *himself*, ‘il faut cultiver notre jardin’ almost certainly meant radically re-shaping the classical theological vision of a pre-lapsarian Eden, in an 18th century humanist dignitarian radical Enlightenment context, as our ‘human, all-too-human’ predicament in a world filled with natural and moral evil, and in which, therefore, God’s existence or non-existence should be regarded with *radical agnosticism*,² as being of no present or foreseeably future moral or sociopolitical use to us:³ so, if there is any moral and sociopolitical progress to be made by humankind, if there is any kind of new Eden to be created, then *we must do it for ourselves*. Correspondingly, updating Voltaire’s neo-Edenic exhortation to the 21st century, we believe that humankind’s only way forward from here is to undertake a cosmopolitan or worldwide *do-it-for-ourselves* project, in order to cultivate our *own* radically-enlightened, broadly and radically Kantian dignitarian neo-utopian garden.

Nevertheless, and tragically, the *high-modernist* mechanistic worldview, postulating endless scientific, technological, and capitalist progress, locked firmly in place since the early decades of the 20th century (Hanna and Paans, 2020), has made, and continues to make, any authentic existential, moral, and sociopolitical progress for humankind exceptionally difficult if not downright impossible:

[High modernism] is best conceived as a strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and, above all, the

² André Maurois *almost* formulates this point correctly when he writes: ‘What is Voltaire’s positive philosophy? It is an agnosticism tempered by a deism’ (Maurois, 1959: p. 5), and then goes on to argue that ‘the moral system of Voltaire is not actually based on his deism.... [i]t is a purely human morality... [a] deist in name, a humanist in fact—that is Voltaire’ (Maurois, 1959: p. 6, translation modified slightly). For an exposition and defense of radical agnosticism from a broadly and radically Kantian point of view, see (Hanna, 2018c: part 1).

³ In this context, for simplicity’s sake, we’re leaving aside religious experience or spirituality, intentionally directed towards the “holy” or the “numinous”—i.e., we’re leaving aside the existential-mystical dimension of human life and its irreducible human value—since this operates independently of all ontological assertions or denials (Otto, 1936). But this same dimension will play a significant role in our discussion of creative piety.

rational design of social order commensurate with the scientific understanding of natural laws. (Scott, 1998: p. 4)

The high modernist mechanistic worldview, with its precursors in 17th and 18th century deism and deterministic physics, epitomized by the *universe-as-clockwork* thought-shaper (Riskin, 2018), and in 19th century Darwinism and materialism, epitomized by the *human-animal-as-steam-engine* thought-shaper (Huxley, 2002), fully matured and was explicitly framed during the early decades of the 20th century, via relativity physics, quantum mechanics, and above all via the theory of the Turing machine and its operations, epitomized by the *universe-and-human-animal-as-digital-computers* thought-shaper (Turing, 1936/1937, 1950; Hanna, 2022: esp. section 0.1). Since the end of World War II, moreover, this high modernist mechanistic worldview has been *massively* influential, in effect becoming the ultimate hegemonic ideological narrative, by promising an eternal world enabled by engineering. (Paans 2018). It has thereby also induced a profound and widespread existential-spiritual *Angst* about *reductive nihilism*, to which the mid-20th century Existentialists passionately responded with a heady antidote of meaning-creating affirmation (Camus, 1955, 1956). Nevertheless, without any serious neo-Existentialist pushback in sight since the 1950s, this profound and widespread existential-spiritual *Angst* has returned again with a vengeance during the early decades of the 21st century (Dammbeck, 2003; Burkeman, 2021; Hanna, 2022: esp. section 0.0). Aggravated by the prospect of widespread ecological degradation, disastrous climate change, increasingly oppressive consumer culture, and the rise of autocratic, neofascist governments, these developments have resulted in what we call *the politics of fragmentation* (Paans, 2020). This fragmentation, encoded in an all-pervasive sociocultural system of mechanical, constrictive thought-shapers and their corresponding shaped thoughts, and then writ large as an endemic set of perniciously false beliefs in contemporary destructive, deforming neoliberal coercive authoritarian nation-States and other State-like social institutions, effectively functions as a system of what we call *ultimate nocebos*. By a *nocebo*, we mean anything X, the mere belief in which causes people to be *morally worse, or worse off*, than they would have been without having that belief in X (see also Bregman, 2020: pp. 8-9, 17, 37, 134, 228, 249, 258, 270, and 395); and by *an ultimate nocebo*, we mean a nocebo that's built axiomatically into the very idea of some social institution that's also all-encompassing and all-

pervasive for those who belong to it, tightly bordered, highly regimented, and virtually inescapable, thereby shaping the minds and lives of all, most, or at least a great many people who belong to that social institution, in such a way as to be morally worse, or worse off, than they would have been without having that belief (Hanna, 2021b). This system of ultimate nocebos, in turn, is rooted in the thought-shaping templates of early modern Hobbesian classical liberal coercive authoritarian nation-States, and advanced capitalist neoliberal social institutions, since the end of monarchic absolutism and the beginning of the Industrial Revolution, through the 19th and 20th centuries, especially since the end of World War II, and through the first two decades of the 21st century, right up to 6am this morning (Hanna, 2021c). All of them most urgently need to be radically devolved and creatively reshaped into organic, generative thought-shapers and into sustainable forms of human community and new social institutions that are radically more dignitarian, ecologically enactive, and above all more conducive to the livable future of Earth and humankind.

This radical devolution and creative reshaping/sustaining can be achieved, we strongly believe, by nurturing and exercising the fundamental, innate meta-cognitive capacity of *creative piety*. Anticipating our exposition in section 2, we define ‘creative piety’ as the meta-cognitive acknowledgment of how organic, generative thought-shapers radically restructure some or another determinate and inherently limited domain of representational content, thereby revealing new rich structures in that domain, as represented from a higher-order perspective, and producing correspondingly shaped human thoughts that are original insights with respect to that domain; moreover, (i) these new rich structures cannot be represented in any way *other than* from this higher-order perspective, and (ii) acknowledging them results in a *Gestalt*-shift with powerful theoretical, affective or emotional, moral-practical, existential, and/or sociopolitical implications and resonances.

Therefore, if we can actually begin to *practice* creative piety, individually and collectively, wholeheartedly, and with self-discipline, then we’ll be able to realize a *Gestalt*-shift that we could never have anticipated or imagined from within the confines of our current cognitive situation, precisely because it’s so effectively and pervasively mechanically and constrictively thought-shaped by the contemporary worldwide sociocultural system of ultimate nocebos. This *Gestalt*-shift would

enable us to *devolve* and *exit* the contemporary neoliberal nation-State, and at the same time *enter*—in the rich sense of creating-and-practically-sustaining—the *Cosmopolis*, a resolutely Earth-oriented universal human ethical community that lies beyond all States and State-like institutions (Hanna, 2018c: esp. parts 2 and 3), whose fundamental project is *a global garden* that’s actively and permanently cultivated by humankind.

So presented, this might initially seem to be nothing but yet another quixotic project *par excellence*, a philosophical, moral, and sociopolitical aberration that combines the worst kind of ‘utopian’ thinking with an unfounded alarmism about the present world-situation. This is a critical point to which we’ll return, since it’s certainly true that all-too-many revolutionary ‘utopian’ movements during the 20th century caused intense suffering, violence, murder, and massive sociopolitical and ecological damage, via their high modernist, ultra-zealous, morally fanatical, and catastrophically unsuccessful attempts to bring about some or another ‘brave new world’ by means of relentlessly implemented ‘schemes to improve the human condition’ (Scott, 1998). So, we fully reject ‘utopianism’ in this disastrous, negative, and pejorative sense—in two words, *bad utopianism*—and we therefore call our project *neo-utopianism* in order to distinguish it sharply from any version of bad utopianism. We also strongly believe that it’s infinitely better to create a worldwide society of broadly and radically Kantian dignitarian anarchist Quixotic ‘knights of sorrowful countenance’, tilting at the towering electricity-producing windmills of a globalized, technocratic system of neoliberal nation-States (Hanna, 2018d: esp. parts 2-3)—built on the vast heaps of abandoned oil rigs and oil tankers, and massive scrap yards filled with rusting hulks of junked automobiles, and discarded smartphones and laptop computers, lying underneath the high-modernist mechanistic worldview as landfill, driven and reinforced from above by what we call *The Hyper-State*, i.e., the global network constituting *the military-industrial-university-digital complex* that determines or at least strongly shapes the decision space of contemporary neoliberal governments (Hanna, 2021c, 2022: esp. section 0.1)—than passively and silently to accept our fate, by performing the ultimate half-hearted and double-minded cynical gesture: simply letting the Earth and humankind go to hell in a handbasket.

Therefore, this essay undertakes a neo-utopian *cosmopoiesis* that has a long and variegated pedigree in, for example,

-
- (i) philosophy and the design sciences alike, ranging from Plato's *Timaeus* and *Republic*, to Thomas More's *Utopia*,
 - (ii) the deeply personal and existential anarchisms, libertarianisms or socialisms of Mikhail Bakunin, R. Buckminster Fuller, Peter Kropotkin, H.D. Thoreau, Leo Tolstoy, Josiah Warren, and Oscar Wilde,
 - (iii) the grand architectural vision of, for example (iiia) Ludwig Hilberseimer's *Metropolisarchitektur*, but also equally drawing inspiration from (iiib) the emancipatory aspects of modernist utopian conceptions in the work of critical artists and architects like Frank Lloyd Wright, Constant Nieuwenhuys, and Archigram, (iiic) Kevin Lynch's urban thought experiments, and also (iiid) some architectural manifestoes of the early 20th century.

Why should we envision a new utopia? —The answer is: simply because we have lost the art of dreaming about future worlds that can *also* be realistic alternatives to the present-day neoliberal, Hyper-Statist, mechanistic world-order that's now inevitably headed towards irreversible climate change, resource depletion, the widespread degradation of ecosystems, widespread digital surveillance, moral blackmail via massive mechanical, constrictive thought-shaping, and autocratic or neofascist coercive authoritarian government oppression. The fundamental mistake of our present predicament is that we traded in envisioning and enacting new utopias for either breathless alarmism or consumerist cynicism. Without creative piety, new forms of utopian thought merely reiterate common responses to the latest trends that are presented to us in the guise of new crises. In effect, we either ambulance-chase or blithely normalize these crises and emergencies of the present, just insofar as we effectively occluded the neo-organicist worldview by clinging to the high-modernist mechanistic worldview and uncritically affirming and embracing ubiquitous digital technology. Paulo Freire accurately called this 'activism' in the pejorative, scare-quoted sense of the term—that is, ceaseless and ineffective busy-busy activity that degenerates into exactly that which it claims to replace (Freire, 1996: p. 69). So, given our current moral, sociopolitical, ecological, and existential-spiritual predicament, what we most desperately require is not some new digitally created and hallucinogenic technocratic 'transhumanist' fantasy, or some Ray-Kurzweil-inspired digital 'singularity'. Instead, we most desperately need to accomplish a

radical turn in how we shape our thinking, our essentially embodied minds, and our lives. In doing so, we can radically devolve the worst tendencies of the high modernist mechanistic worldview, and replace them with broadly and radically Kantian dignitarian neo-organicist thinking, affect or emotion, and acting, and with *constructive, enabling* social institutions (Maiese and Hanna, 2019), thereby not only preventing humankind from going to hell in a hand-basket, but also redeeming the Earth by means of a permanent global gardening project -- i.e. a permanent global regeneration project. This broadly and radically Kantian dignitarian neo-organicist and neo-utopian dual process of humankind's-descent-into-hell-prevention-and-Earth-redemption is what we call *saving the world*.

In what follows, we argue from the abstract, ideal-world, and general, to the concrete, real-world, and particular.

In section 1, we present a compact synopsis of our basic philosophical commitments, so that they're sitting in plain view on the analytical table for critical examination, and also so that we'll be able to use them as working assumptions or presuppositions that we'll need as we go forward in our argument.

In section 2, we characterize the notion of creative piety more precisely. Our core thesis is that our individually and collectively *practicing* creative piety, wholeheartedly and with self-discipline, radically re-orient and re-shapes our essentially embodied processes of first-personal human thinking, caring, and acting. Thus creative piety radically re-orient and re-shapes our lives *so that*, in turn, we can radically re-orient and re-shape our manifestly real, thoroughly nonideal natural and social-institutional world itself, *thereby* turning it into an organic, broadly and radically Kantian dignitarian anarchist process toward the peaceful, renewable, and sustainable cultivation of our global garden, Earth. The absolutely unacceptable alternative is our current downward-spiralling, decision-theoretic, neoliberal, mechanical lockstep-march into a permanent static equilibrium state that's at once the physical heat-death of Earth and also the existential-spiritual *huis clos* or 'no exit' for humankind.

In section 3, we look analytically, critically, and constructively at some significant earlier attempts to envision utopias—not only classical but also 20th century—in order to ground our neo-utopian project.

And finally, in section 4, we attempt to give all these broadly and radically Kantian dignitarian neo-organicist insights actual friction, purchase, and testability, by providing a concrete, real-world, and particularized neo-utopian action-plan for simultaneously devolving-&-exiting the State, creating-&-sustaining the Cosmopolis, and permanently cultivating our global garden.

1. A COMPACT SYNOPSIS OF OUR BASIC PHILOSOPHICAL COMMITMENTS

In this section, we present a compact synopsis of our basic philosophical commitments, formulated in nineteen single-sentence theses, together with references to other texts that provide detailed presentations and defenses of those theses. Taken together, they provide the foundation upon which we'll argue for creative piety.

1. Human minds are necessarily and completely embodied, and identical to the complex dynamic, spontaneously activating, intentional-action-guiding, global structures of suitably complex living organisms belonging to the human species, i.e., human animals (*the essential embodiment thesis*) (Hanna and Maiese, 2009; Hanna, 2022: sub-sub-section 2.4.2.1).

2. As essentially embodied and inherently dynamic, human minds are also inherently enactive and environmentally embedded (*the enactivity-and-embeddedness thesis*) (Hanna and Maiese, 2009; Hanna, 2022: sub-sub-section 2.4.2.1).

3. Human animals are, necessarily, sociable social animals (*the sociable sociality thesis*) (Maiese and Hanna, 2019; Hanna, 2021d).

4. Social institutions partially causally determine, form, and normatively guide our essentially embodied minds—our thoughts, affects/emotions, and actions—and typically do so without our being self-consciously aware of how, or even that, we're being significantly affected in these ways (*the mind-shaping thesis*) (Maiese and Hanna, 2019: ch. 2).

5. There's a fundamental distinction between (5.1) *destructive, deforming* social institutions that frustrate and warp true human needs, and (5.2) *constructive, enabling* social institutions that satisfy and sustain true human needs (*the two-kinds-of-social-institutions thesis*) (Maiese and Hanna, 2019: esp. chs. 2-3 and 6-8).

6. Enacting salient changes in the structure and complex dynamics of a social institution produces corresponding salient changes in the structure and complex dynamics of the essentially embodied minds of the participants, for better or

worse (*the enactive-transformative thesis*) (Maiese and Hanna, 2019: esp. chs. 2-3 and 6-8).

7. Although destructive, deforming social institutions shape human minds in an inherently bad/oppressive, unhealthy, and enslaving/heteronomous way, nevertheless it's also possible to devolve such institutions and also simultaneously to create constructive, enabling social institutions that are inherently good/non-oppressive, healthy, and emancipatory/autonomous (*the social devolution-social creation thesis*) (Hanna, 2018c: esp. parts 2-3).

8. All human thinking is really possible only insofar as it's partially causally determined, formed, and normatively guided by either (i) mechanical, constrictive thought-shapers in a bad, false, and wrong way, or (ii) organic, generative thought-shapers in a good, true, and right way, although (iii) this shaping is often not either absolutely negative or absolutely positive, but instead a matter of degree, more or less, and (iv) sometimes both kinds of shaping can operate on the same processes of human thinking (*the thought-shaper thesis*) (Hanna and Paans, 2021; Hanna, 2022: ch. 4).

9. Because all human thinking⁴ is mediated by language—whether outer speech or inner speech—and because language is a fundamental social institution, the thought-shaper thesis falls directly under the mind-shaping thesis: therefore, ubiquitous mind-shaping in human social institutions and ubiquitous thought-shaping in human thinking are the essential forms of human life-shaping (*the life-shaping thesis*) (Hanna, 2006a: chs. 4-6, and 2022: section 00.1; Maiese et al., 2022).

10. Everything in the world flows, grows, reposes, and repurposes; more specifically, the cosmos is essentially non-mechanical, processual, purposive, and self-organizing, hence *organic*; and mechanical facts and processes logically or nomologically strongly supervene on the fundamental organic facts and processes (*the neo-organicist thesis*) (Hanna and Paans, 2020; Hanna, 2022: ch. 1, section 2.4, section 3.5, and ch. 4).

11. Minds of any kind are the essentially embodied, mechanically irreducible, and spontaneously activating global dynamic forms of suitably complex

⁴ By 'thinking' we mean *conceptualizing, judgment-making or proposition-forming, inferential, and theorizing activity, such that it's essentially connected with our rational human innate logico-linguistic capacities and also with categorical logical and moral normativity* (Hanna, 2006b, 2006c). Of course, the term 'thinking' is often used in a broader sense that doesn't necessarily entail rationality, language, logic, categorical normativity, or morality.

organismic—aka animal—life (*the neo-Aristotelian hylomorphism thesis*) (Hanna and Maiese, 2009; Hanna, 2022: sub-sub-section 2.4.2.1).

12. Free agency is the essentially embodied, mechanically irreducible, and spontaneously activating global dynamic form of rational human minded animal life (*the natural libertarian thesis*) (see Hanna, 2018a; Hanna, 2022: sub-sub-section 2.4.2.3).

13. You have freedom-in-life, and you are identical to your life (*the deep-freedom- $\&$ -real-persons thesis*) (Hanna, 2018a).

14. Human knowledge is sufficiently justified true belief, the fully activated and saliently perfected global dynamic form of human cognition (*the categorical epistemology thesis*) (Hanna, 2015a).

15. Logic is the set of categorically normative, innately specified first principles of human theoretical rationality—a universal a priori minimally non-contradictory proto-logic—when taken together with all the supplementary humanly-constructed *ceteris paribus* principles of an open-ended plurality of logical systems, just as morality is the set of categorically normative, innately specified first principles of human practical rationality—a universal a priori dignitarian proto-morality—when taken together with all the supplementary humanly-constructed *ceteris paribus* principles of an open-ended plurality of moral systems (*the morality-of-logic thesis*) (Hanna, 2006a, 2006b, 2015a: ch. 5).

16. Human dignity (*Würde*) is the absolute, non-denumerably infinite, intrinsic, objective value of all human persons—i.e., rational human animals, from the pre-natal emergence of their consciousness to their deaths—no matter how well or badly they have chosen or acted: therefore, we all ought to choose and act in all and only those ways that sufficiently respect everyone’s human dignity, everywhere and everywhen, whatever the consequences (*the humanist dignitarian thesis*) (Hanna, 2021f).

17. The meaning of human life is the wholehearted pursuit and partial realization of principled authenticity, in moral solidarity with all other people, and with moral concern for all minded animals, in a thoroughly nonideal⁵ natural and social world (*the existential Kantian ethics thesis*) (Hanna, 2018b).

⁵ By ‘nonideal’ in this context, we mean ‘far from optimal or wholly perfect’. Something can be nonideal in this sense—indeed, even *thoroughly* nonideal—and *also* be (i) necessarily connected with the human mind and (ii) saliently even if not wholly perfectible: e.g., human free agency, human knowledge, the natural world, and human social institutions.

18. Cosmic dignity is the proto-dignity of a thoroughly nonideal natural world that, by necessarily conforming to the innately specified structure of the rational human animal mind, not only makes us really possible, but also actual: therefore, the natural world ought never to be treated as a mere means or a mere thing, and ought always to be treated in all and only those ways that are consistent with sufficient respect for human dignity (*the cosmic dignitarian thesis*) (Hanna, 2022: section 4.5).

19. We all ought to exit the State and enter the Cosmopolis, the universal human cosmopolitan dignitarian ethical community that's beyond all neoliberal, coercive authoritarian nation-States and State-like social institutions (*the dignitarian anarcho-socialism thesis*) (Hanna, 2016, 2017a, 2018c, 2020c).

By way of concluding this section, we emphasize that by 'human dignity' we mean the absolute, nondenumerably infinite, intrinsic, objective value, aka *the transcendental value*, of all real human persons (Hanna, 2015b, 2021f), and *not* some or another *ersatz*, debunking, or deflationary conception of human dignity that reduces it to honor, identitarian multicultural pride, relative social status, or some other conventional communitarian property (see, for example, Etninson, 2020). In turn, the total system of transcendental values for humankind is what we call *the highest good*, without any necessary Christian or other theological implications whatsoever, any more than Cantor's discovery of non-denumerably infinite, aka transfinite, numbers, per se, carries any necessary Christian or other theological implications whatsoever.⁶ These presuppositions frame and ground everything

⁶ There are two historical subtleties here, however. First, with some rhetorical and stylistic cunning, in order to avoid censorship and persecution by Pietist religious authorities—which, in fact, he wasn't altogether able to do—Kant showed in *Religion Within the Bounds of Mere Reason* (Kant, 1996), that it's philosophically possible to transform the Christian theological conception of the highest good into a purely moral and sociopolitical conception. Second, Cantor himself did sometimes associate transfinite numbers with the medieval Scholastic conception of the "actual infinite," and with God, which unfortunately exacerbated his intellectual run-in with Leopold Kronecker and slowed down the scholarly acceptance of Cantor's theory of non-denumerable infinity. The first important philosophical lesson to be learned from these historical examples, is that broadly and radically dignitarian moral theory inevitably faces a certain measure of dogmatic critical resistance from self-proclaimed atheists, hard secularists, and anti-Kantians (Hanna, 2020c). And the second important philosophical lesson is that people committed to a wide variety of faiths, religions, and spiritual practices might *implicitly* agree with the views presented here, although they would

that follows. If one's moral theory and axiology/theory of value were egoistic/self-interested, identitarian-multiculturalist, utilitarian-instrumental, or more generally consequentialist, or if one were a moral or axiological individualistic or communitarian relativist, a moral or axiological anti-realist, or a moral or axiological skeptic, then all philosophical bets would be off.

Of course, we've also explicitly *argued against* those views and *argued for* our views, as per the references appended to our nineteen theses. But as The Theory of Thought-Shapers, aka TTS, tells us, even *sufficiently* good reasons for belief might *not* convince 'human, all-too-human' thinkers, who are all-too-often mind-manacled by basic and entrenched, hence persistent or 'resilient', false beliefs (Nyhan and Reifler, 2010; Lewandowsky et al., 2012), not excluding philosophers, and *especially* including professional academic philosophers, who are also all-too-often dogmatically locked into 'bad philosophical pictures' by mechanical, constrictive thought-shapers (Hanna and Paans, 2021: sections 4-6). In fact, in order to convince thinkers of any kind, unsophisticated or sophisticated, and move them all the way to belief, *thought-shapers* are also required; and truly changing people's minds with respect to their basic and entrenched—especially false—beliefs is far more akin to a *religious conversion-experience* than it is to idealized models of 'rational assent'. These facts are a source of self-interested satisfaction to purveyors of mechanical, constrictive thought-shapers, including advertising companies, cynical hucksters, demagogues, ideologists, propagandists, and sophists more generally; and they're equally a source of deep disappointment, frustration, or even despair to critical-thinking intellectualists. But from the alternative standpoint of TTS, the theory of creative piety, and broadly and radically Kantian dignitarianism, these facts also provide a *genuine opportunity for the creation and dissemination of new organic, generative thought-shapers*: hence this essay.

To be sure, however, precisely *how* human dignity, other transcendental values for humankind—for example, truth, necessary truth, core logical laws including the minimal law of non-contradiction (Hanna, 2006a: chs. 2 and 5, 2006b), artificial and natural beauty, core principles of nonideal dignitarian moral theory, including the minimal universal obligation to treat all people with

doubtlessly frame its core ideas in saliently different ways and not self-consciously recognize this implicit convergence of views.

sufficient respect for their innate human dignity (Hanna, 2021f), principled authenticity, etc.—and the highest good more generally, are conceptualized, enacted, and internalized, via language, as beliefs and belief-systems or theories, varies widely across different human communities and social institutions, at different times and in different places. Correspondingly, as a matter of empirical fact, there have been and are a great many—indeed, a plethora of—different moral or axiological concepts, beliefs, and theories, more generally, held across different human communities and social institutions, at different times and in different places. Nevertheless, it's an obvious fallacy to infer directly *from* the manifestly real anthropological empirical facts about the *plurality* of historical and sociocultural *differences* between moral or axiological concepts, beliefs, and/or theories, *to* moral or axiological *pluralism*, *relativism*, *anti-realism*, and/or *skepticism*. All the anthropological empirical facts about historical and sociocultural differences and plurality *can be held fixed*, and yet moral and axiological absolutist generalism, objectivism, realism, and anti-skepticism *could all still be true just the same*. Hence, appealing to these anthropological empirical facts, and then making this fallacious direct inference, *cannot* be legitimately used as an objection to, or as a counterargument against, broadly and radically Kantian dignitarianism—no matter how popular and widespread this fallacy is among contemporary non-philosophers and philosophers alike. Manifest reality and truth, whether in science, philosophy, or any other human cognitive domain, are *not* to be decided by popularity polls and voting, but instead *only* by the four classical rational methods and modes-of-cognition of *induction* (i.e., projective generalizations from sets of contingent, empirical facts), *deduction* (i.e., necessary inference according to rules, often from axioms), *rational intuition* (i.e., immediate, non-inferential, self-evident knowledge of a priori truths) and *abduction* (inference to the best explanation of a set of given contingent or necessary facts)—precisely when and insofar as they're also necessarily taken together with and transformed by *creative piety*, the fifth and most fundamental rational method and mode-of-cognition.

2. WHAT IS CREATIVE PIETY?

So, what is creative piety? In the late 18th and 19th century, Goethe (especially in *The Metamorphosis of Plants*), the British Romantic poets, Henry David Thoreau, and the Impressionists all made the excellent point that being *truly* able to see

what already lies right before one's eyes in the fundamentally organic cosmos requires a special kind of cognitive humility, cognitive openness, and cognitive self-discipline. In other words: one must be adequately receptive to the depth and sheer existential impact of lived experience. Wordsworth, Shelley, and Samuel Alexander aptly call that special cognitive attitude or standpoint *natural piety*:

My heart leaps up when I behold
 A rainbow in the sky:
 So was it when my life began;
 So is it now I am a man;
 So be it when I shall grow old,
 Or let me die!
 The Child is father of the Man;
 And I could wish my days to be
 Bound each to each by natural piety. (Wordsworth, 1807)

Earth, ocean, air, belov'd brotherhood!
 If our great Mother has imbued my soul
 With aught of natural piety to feel
 Your love, and recompense the boon with mine. (Shelley, 1816)

I do not mean by natural piety exactly what Wordsworth meant by it—the reverent joy in nature, by which he wished that his days might be bound to each other—though there is enough connection with his interpretation to justify me in using his phrase. The natural piety I am going to speak of is that of the scientific investigator, by which he accepts with loyalty the mysteries which he cannot explain in nature and has no right to try to explain. I may describe it as the habit of knowing when to stop in asking questions of nature.

[T]hat organization which is alive is not merely physico-chemical, though completely resolvable into such terms, but has the new quality of life. No appeal is needed, so far as I can see, to a vital force or even an *élan vital*. It is enough to note the emergence of the quality, and try to describe what is involved in its conditions.... The living body is also physical and chemical. It surrenders no claim to be considered a part of the physical world. But the new quality of life is neither chemical nor mechanical, but something new.

We may and must observe with care our of what previous conditions these new creations arise. We cannot tell why they should assume these qualities. We can but accept them as we find them, and this acceptance is natural piety. (Alexander, 1939: pp. 299, 310-311, and 306)

Leading 20th and 21st century examples of natural piety in the natural sciences—all of which involve taking a broadly-speaking *biological* and *non-reductive* approach to physics and cosmology—can be found in A.N. Whitehead’s *Concept of Nature* (1920), *Science and the Modern World* (1925), and *Process and Reality* (1929) (Whitehead, 1967, 1971, 1978); in C. Lloyd Morgan’s *Emergent Evolution* (1923); in Erwin Schrödinger’s *What is Life* (1944); in David Bohm’s ‘hidden variables’/‘pilot wave’ interpretation of quantum theory (Bohm, 1952; Bohm and Hiley, 1975; Goldstein, 2017); in non-equilibrium thermodynamics and complex systems dynamics, as developed by Ilya Prigogine and his associates, and by J.D. Bernal (Bernal, 1967; Nicolis and Prigogine, 1977; Prigogine and Stengers, 1984; Prigogine, 1997); in the autopoietic approach to organismic biology worked out by Francisco Varela and his associates during the 1970s (Varela, Maturana, and Uribe, 1974; Varela, 1979); in Bohm’s theory of a cosmological “implicate order” (Bohm, 1982); in Evan Thompson’s ‘mind-in-life’ theory, directly inspired by Varela’s work on autopoiesis (Thompson, 2007); in new applications of intuitionist mathematics to modeling ‘time’s arrow’, i.e., its asymmetrically forward flow from the past to the future (Wolchover, 2020); in new processual approaches to biology (Nicholson and Dupré, 2018); and in new work towards the unification of biology and physics (Torday, Miller Jr, and Hanna, 2020).

And corresponding to natural piety in *the natural sciences*, there’s an analogous, parallel phenomenon in *the formal sciences* that we call *formal piety*. Formal piety is exemplified, for example, by Georg Cantor’s mathematics of *non-denumerably infinite*, *transfinite*, or ‘*transcendental*’ numbers, which bears witness to higher-dimensional infinities (Cantor, 1891, 2019); by Kurt Gödel’s *incompleteness theorems*, which bear witness to the inherently non-logical character of mathematical truth in *Principia Mathematica*-style systems that formalize Peano arithmetic (Gödel, 1967); by Alonzo Church’s *undecidability proof for classical first-order predicate logic*, which bears witness to the inherently non-recursive character of logical proofs and truths involving polyadic predicates and quantifiers (Church, 1936); by Thoralf Skolem’s discovery of *primitive recursive arithmetic* as a specially-restricted fragment of Peano arithmetic that’s consistent, complete, sound, and decidable, which bears witness to the fact that decidability is necessarily restricted to logical domains that lack polyadic quantifiers (Skolem, 1967); by Leopold Löwenheim’s and Skolem’s discovery of *the Löwenheim-Skolem Theorem*, which says that every

consistent set theory has an only-denumerable model, *including* set theories with non-denumerably infinite models, which bears witness to the necessary containment of only-denumerable sub-models in non-denumerably infinite, transfinite, or transcendental models (Löwenheim, 1967; Skolem, 1967; Boolos and Jeffrey, 1989: ch. 15); by Alfred Tarski’s *semantic conception of truth*, which bears witness to Gödel-incompleteness and the Liar Paradox alike (Tarski, 1943, 1956); and by Ernst Zermelo’s and Abraham Fraenkel’s *well-ordered set theory plus the axiom of choice*, aka ZFC, which bears witness to the paradoxes of naïve set theory and also to Cantor’s *power set operation*, when it’s applied to denumerably infinite sets like the natural numbers, thereby yielding the first transfinite number, \aleph_1 , aka “aleph-one” (Zermelo, 1930, 1967a, 1967b, 1967c; Potter, 1990: ch. 7).⁷

Corresponding to natural piety in the natural sciences and formal piety in the formal sciences, there’s another analogous, parallel phenomenon in *the fine arts*—exemplified in literature, for example, by what T.S. Eliot calls ‘finding the objective correlative’ (Eliot, 1920: p. 58)—that we call *artistic piety*.

Similarly, there’s another analogous, parallel phenomenon in the social sciences and political anthropology—exemplified, for example, by Wilhelm Dilthey’s notion of *Verstehen* (Makkreel, 2021: esp. section 2.3), by what Wittgenstein calls ‘agreement (*Übereinstimmung*) ... in form of life (*Lebensform*)’ (Wittgenstein, 1953: , §241, p. 88^c) and by what James C. Scott calls *mētis* (Scott, 1998: pp. 309-341)⁸—that we call *social piety*.

We can also identify an analogous, parallel phenomenon in ethics—exemplified by our recognition of the concepts and facts of *human dignity* and *the highest good*—that we call *moral piety* (Hanna, 2021e).

Perhaps most obviously, there’s also another analogous, parallel phenomenon in religious experience and spirituality, that we call *existential-mystical piety* (Hanna, 2018c: part 1, 2022: section 4.5).

And finally, the correlate of all these in neo-organicist metaphysics is what we call *metaphysical piety*.

⁷ Choice is logically equivalent to *the power set operation*, which generates the set of all subsets of a given set; and correspondingly, the axiom of choice says that every non-empty set has a set of subsets that’s larger than the membership of the original set.

⁸ ‘Metis’ is Homer’s term in the *Odyssey* and the *Iliad*, used to describe Odysseus’s capacity for essentially non-conceptual and non-discursive social and political insight.

For convenience, we'll group all these modes of piety together under the general term *creative piety*. As we've already anticipated its definition in the Introduction, creative piety is the meta-cognitive acknowledgment of how organic, generative thought-shapers radically restructure some or another determinate and inherently limited domain of representational content, thereby revealing new rich structures in that domain, as represented from a higher-order perspective, and producing correspondingly shaped human thoughts that are original insights with respect to that domain; moreover, (i) these new rich structures cannot be represented in any way *other than* from this higher-order perspective, and (ii) acknowledging them results in a *Gestalt*-shift with powerful theoretical, affective or emotional, moral-practical, existential, and/or sociopolitical implications and resonances.

More generally and simply, however, creative piety *bears witness* to the essentially rich structures of organic formal systems, organic natural systems, organic artistic systems, organic moral systems, organic sociopolitical systems, organic existential-mystical systems, and organic metaphysical systems.

Perhaps the most widely-known and vivid example of creative piety in the contemporary world, is the 'overview effect' (White, 1987; Siegel, 2021), a meta-cognitive insight that's generated by thoughtfully experiencing views of the Earth from outer space:



Figure 1: ‘The Blue Marble’, i.e., the Earth as seen by the crew of Apollo 17 in 1972

[In 1987,] Frank White coined the term “Overview Effect” to describe the cognitive shift in awareness that results from the experience of viewing Earth from orbit or the moon. He found that, with great consistency, this experience profoundly affects space travelers’ worldviews—their perceptions of themselves and our planet, and our understanding of the future. White found that astronauts know from direct experience what the rest of us know only intellectually: we live on a planet that is like a natural spaceship moving through the universe at a high rate of speed. We are, in fact, the crew of “Spaceship Earth,” as Buckminster Fuller described our world. (AIAA, 2014)

This insight also provided the inspiration for Carl Sagan’s ‘pale blue dot’, thereby yielding a thematic backdrop for our exploration of the complexity of lifeforms on Earth (Sagan, 1994). Likewise, it found its way into the field of environmental ethics, most recently in the compelling slogan ‘there is no planet B’ (Berners-Lee, 2021).

In each of its modes, creative piety constitutes a meta-cognitive Gestalt-shift and a ‘Copernican revolution’ in human thinking, affect or emotion, and acting.

Indeed, creative piety is not only the ultimate human cognitive source of all *Denkkollektiven*, *epistemic breaks*, *paradigm shifts*, and *scientific revolutions* (Kuhn, 1970; Fleck, 1982; Bachelard, 2002; Rheinberger, 2013) in the formal or natural sciences, but also the ultimate human cognitive source of *all* such revolutions in *every* mode of human thinking, affect or emotion, and acting *whatsoever*.

The conversion-stories of St. Paul on the road to Damascus and in St. Augustine's *Confessions* (Saint Augustine, 1961) are archetypical narratives of the radical impact of creative piety in its existential-mystical mode. Paul and Augustine both enact radical transformative turns in their lives that they could never have anticipated or imagined beforehand. But it's equally true that creative piety can develop gradually over time. For example, now switching over to creative piety in its fine-artistic mode, the Dutch painter Piet Mondrian started out as a figurative painter, before switching over to the visual vocabulary of Expressionism, and then transitioning into one of the most radical forms of modernism in painting. While staying true to his self-expressive drive to explore the limits of painting, he pushed the boundaries of the imaginable in a series of works that became increasingly radical.

As we've noted, in each of its modes, creative piety constitutes a meta-cognitive *Gestalt*-shift and a 'Copernican revolution' in human thinking; and if we're correct, then creative piety is the ultimate human cognitive source of *all* 'paradigm shifts' and 'scientific revolutions' in Thomas Kuhn's senses of those terms (Kuhn, 1970). Therefore, creative piety belongs with induction, deduction, rational intuition, and abduction, as the fifth and *most basic* rational method and mode-of-cognition in the formal and natural sciences. It's most basic, and provides a cognitive foundation for the other four rational methods and modes-of-cognition, precisely because the applications of any of the other methods or modes presuppose the establishment of some or another overarching Kuhnian cognitive framework or paradigm that thought-shapes *those* applications.

Nevertheless, although we're drawing on and therefore endorsing these classical Kuhnian ideas, there's an important contrast to be made between *Kuhn's own* view about paradigm shifts/scientific revolutions (Kuhn, 1970), and *our* conception of creative piety. Kuhn drew heavily (i) on Gestalt psychology and in particular on the phenomenon of *multistability*—as manifest, for example, in human subjective experience of the spontaneously 'visually flipping' aspects of

the Necker Cube and Jastrow's Duck-Rabbit, (ii) on conventionalist social psychology as applied to the institutional organization of scientific communities, which Kuhn called 'disciplinary matrices', and (iii) on Wittgenstein's notion of a 'language game' (Wittgenstein, 1953: §7, p. 5^e), as analogies for the change in worldview that characterizes paradigm shifts. Correspondingly, Kuhn regarded paradigm shifts/scientific revolutions as brute, non-rational, social-conventional, and untranslatable *jumps* from one incommensurable conceptual scheme/disciplinary matrix/language game to another (see also Foucault, 1972). By sharp contrast, and looking back now to our metaphysics and our theory of mind-&-knowledge as we stated them in section I, we're committed to the neo-organicist worldview, manifest realism, weak transcendental idealism, the essential embodiment theory of the mind-body relation, essentialist content non-conceptualism, and The Theory of Thought-Shapers, as grounding presuppositions for our conception of creative piety. So, we reject Kuhn's psychologism, social conventionalism, and empiricism/anti-rationalism.

Moreover, whenever someone is practicing creative piety, it's not necessarily the case that—like the visual flip of the two-dimensional version of the Necker Cube diagram from front-side forward to back-side forward (or conversely), or like the visual flip of the Duck-Rabbit diagram from duck-image to rabbit-image (or conversely)—the world literally *looks* radically different to them: sometimes it does, but sometimes it doesn't, and in any case, it needn't *necessarily* look radically different. Instead, when someone is practicing creative piety, their entire manifest-realistic, essentially embodied, essentially non-conceptual, and complex dynamic *orientation* to the determinate domain of representational content that creative piety is working with, *radically changes*.

And this in turn brings about a radically new 'orientation in thinking' in Kant's sense of that phrase (Kant, 1996b). But at the same time, creative piety also brings about a radical reorientation that's much more than *merely* a new orientation in *thinking*, that is, much more than *merely* a new orientation in *conceptualization* or in *intellectual activity* more generally. Once people practice creative piety, henceforth they literally *feel* differently, *desire* differently, have different *enteric/gut-based* experiences, *sleep- $\&$ -dream* differently, and above all, *act* differently, including *talking* differently, *writing* differently, *drawing* or *sketching* differently, *painting* differently, *composing music* or *playing music* differently, *humming*

or *singing* differently, and so-on.

To be sure, when people practice creative piety, *sometimes* their visual perception of the world *does* radically change; but since all sense perception, including visual perception, is essentially embodied, then the radical re-orientation via creative piety is just as likely to be found in hearing, touch, taste, smelling, and especially proprioception experienced in intentional body movement—as manifested, for example, in dance—as it is to be found in visual perception alone. Moreover, using Kant’s broad notion of *sensibility* (*Sinnlichkeit*), which includes (i) our first-order subjective experience, aka consciousness, (ii) our consciousness of variations in organic vitality in our own living bodies, which Kant calls ‘the feeling of life’ (Kant, 2000: p. 90, Ak 5: 204), (iii) ordinary sense perception, (iv) spatial consciousness and spatial cognition, (v) temporal consciousness and temporal cognition, (vi) memory, (vii) anticipation, (viii) other modes of imagination including fantasizing, etc., and especially schematizing, (ix) affect or emotion (i.e., feeling, desire, and passion, especially including the experiences of pleasure and pain), then we can say that the meta-cognitive Gestalt shift/paradigm shift experienced in creative piety is in fact a *radical reorientation in human sensibility*, that in turn radically re-shapes people’s thinking and thoughts, and more generally radically re-shapes the ‘human, all-too-human’ minded animal *lives* of those who practice it.

More precisely now, and briefly summarizing what we’ve been saying about creative piety so far, in every one of its modes, practicing creative piety involves taking a *critical, reflective standpoint on some or another determinate domain of content*, a standpoint that’s at once

- (i) *higher-dimensional* or *higher-order*—for example, generating a ‘transcendental’ third-dimensional point-of-view out of an array or spreadsheet of that content that’s otherwise merely ‘flat’ or two-dimensional,
- (ii) *synoptic* with respect to the entire determinate domain of content—for example, seeing a landscape as a dynamic three-dimensional contour map from the vantage point of an airplane flying over it, and
- (iii) fully critical cognizant of the inherent *boundaries* or *limits* of that determinate domain of content, but also and above all, it
- (iv) provides direct cognitive access to *a new, inexhaustible, and essentially*

richer—in structural and informational terms alike—domain of content over and above the ‘old’ content available in the ‘flat’ or two-dimensional determinate domain of content.

The properly *creative* feature of creative piety, arising from the interplay of its four basic elements, is that even though, as per element (iii), it always involves a critical recognition of the inherent boundaries or limits of some determinate domain of content, nevertheless, in view of elements (i) and (ii), it also yields a new kind of *unbounded* or *unlimited* cognition of that bounded or limited determinate domain, together with direct cognitive access to what Wittgenstein in the *Tractatus*, under the rubric of ‘the mystical’—which for our purposes we’ll interpret as a synonym of ‘creative piety’ in its existential-mystical mode—calls ‘the intuition of the world *sub specie aeterni*’:

6.45 The intuition (Anschauung) of the world *sub specie aeterni* is its intuition as a limited (begrenztes) whole.

The feeling (Gefühl) of the world as a limited whole is the mystical (das mystische). (Wittgenstein, 1981: p. 187)

Moreover, and most importantly, as per element (iv), direct cognitive access to ‘the mystical’ in Wittgenstein’s sense is *also* a direct cognitive access to a new, inexhaustible, and essentially richer domain of content.

Each of these four basic elements of creative piety can be elaborated further.

Element (i). Creative piety expresses our innately specified meta-cognitive capacity to generate a higher-dimensional, transcendental viewpoints. As such, it’s the epitome of non-reductive representationalism. Creative piety is broadly similar to Kant’s notion of ‘reflecting judgment’ (*reflectierende Urteil*), in that it allows an observer spontaneously and often pre-reflectively to ‘connect the dots’ of two-dimensionally represented, only-denumerable contents, and then imaginatively generate—via an ‘an aesthetic idea of the imagination’ (Kant, 2000: p. 192, Ak 5: 314)—an essentially richer three-dimensional or four-dimensional representation, or even a non-denumerably infinite, transfinite, or transcendental representation, for example, of ‘the mathematically sublime’ (Kant, 2000: pp. 131-143, Ak 5: 248-260), from it. A clear everyday example of this from the applied arts would be a series of architectural maps that jointly tell a coherent spatial story, but that as a series cannot be reduced to a one-to-one correlation with respect to the individual representational contents depicted in the drawings. Even

if we were to catalogue every piece of depicted content, the story itself exceeds the collection of individual contents, because it consists in the holistic relationality between them and the sequence in its entirety.

Element (ii). The inherently synoptic character of creative piety implies a form of embodied, spontaneous ‘perspective-taking’. For instance, if someone observes a landscape, then they can represent certain specific things in it. They might focus on the interplay of mass and space, the water system formed by lakes and rivers, ecological gradients that can be identified, etc. For each of these perspectives, (aesthetic) attunement or (artistic) sensibility is required. It takes attention and aesthetic/artistic knowledge to ‘dwell in’ or ‘inhabit’ a given perspective. Anyone can train themselves to see the landscape *from the point of view of a certain species*, as it were. For example, imagine that we look at a landscape with an eye to whether there are migration barriers for a given species, and then try to remove these barriers in imagination, so that this species would be able to migrate freely. This exercise involves a perspectival and meta-cognitive leap that can be performed by naturalists, and that also simultaneously interacts with one’s existing knowledge of the landscape. We must, after all, be able to propose sensible solutions that benefit the landscape as a whole, not just one aspect of it at the expense of another. This perspectival shift can also be made in time. To stay with the same example, we can represent a landscape as a dynamic, four-dimensional entity that develops over time—say, as a result of meteorological factors, including climate change—and that will continue to develop in the future, long after we are gone. It’s possible to construct a representation of a certain prior process of genesis involving certain elements (such as geological, biological, and chemical factors) and to relate those elements to an overall narrative that infuses one’s perception with the ‘multistable’ content we mentioned above (Kimbell, 2009; Michlewski, 2008; Louridas, 1999). Finally, these perspectival shifts lead up to a new and deeper appreciation of the landscape as such. By making enough of these shifts, one creates a ‘thick’ representation, one that is structurally complex and semantically rich, and also that—due to its overall ‘thickness’—repeatedly generates new perspectives and ideas (Suwa and Tversky, 2003). This, in turn, is why we can perceive a metaphysically profound, sublime, existential-mystical quality in the landscape: our representation of it is suffused with structural complexity and semantic richness, and inherent boundaries and limits are fused

with a higher-dimensional, transcendental standpoint; very often, we perform such meta-cognitive perspectival shifts pre-reflectively and unself-consciously. Feelings like awe, wonder, and respect for the proto-dignity of nature also originate in these performances, and they vividly express an attitude of natural piety (Scruton, 2012). This sort of perceptual and imaginative awareness takes time to develop, once one truly attends to the particular details, basic structures, and inherent boundaries or limits of a certain domain of representational content. In this context, we've used the example of how a landscape artist views a landscape; but the same line of thinking generalizes over an indefinitely large set of different contexts and representational contents.

Element (iii). Creative piety inherently recognizes boundaries or limits, and therefore it can move well beyond what any individual well-constructed logico-mathematical system can describe, define, or refer to. Any form of perspective-taking implies a boundary or limit. The perspective itself is valuable only insofar as the person taking it is self-consciously aware of the limits that essentially circumscribe and constrain it. It's characteristic of creative piety to accept and work constructively with these boundaries or limitations as such, and to 'switch perspectives' whenever one encounters them, *as opposed to* falling into logical or non-logical vicious circles, vicious feedback loops, and vicious regresses. Under the aegis of high modernism, the State, in a deadly symbiosis with the formal and natural sciences, and technocratic advanced capitalism—'scientific statism' (Hanna, 2021a: section XVII.1.7)—relentlessly imposed and indeed still imposes the mechanistic worldview, with all *its* inherent boundaries and limitations, onto all facts or phenomena, *as if there were no essentially richer structures or higher-dimensional standpoints*. In doing so, it *not only* falls into logical or non-logical vicious circles, vicious feedback loops, and vicious regresses, *but also* systematically stunts and violates the human capacity for creative piety. As a consequence, in particular, it systematically undermines our capacity for *social piety*, by insisting on 'the scientific image of Man' (Sellars, 1963) or "the view [of humanity] from nowhere" (Nagel, 1986), both of which are ultimately *mechanical, constrictive thought-shapers*, purged of all context-sensitive, cultural-historical features. This fully applies to the sociopolitical realm in particular: the nation-State typically projects an idealizing grid on human society as such—hence J.C. Scott's critically damning evaluation of high modernist Statist measures to improve the human condition

(Scott, 1998). Contrariwise, a neo-organicist approach always and necessarily involves *social piety*, and therefore expresses an inherent sensitivity to bottom-up communal practices and ecological connections. More generally, creative piety takes the given facts or phenomena in any representational domain, together with their inherently bounded or limited structure, as *the meta-cognitive point of departure*. Indeed, *not* to be critically of such boundaries or limits, as a meta-cognitive point of departure, is *precisely* what it is to be ‘mind-manacled’ (Blake, 1794: line 8), whether by hegemonic ideologies or by any other bad, false, and wrong mechanical, constrictive thought-shapers. For example, let’s consider the all-too-familiar thought that we can somehow avoid facing up to the Earth-destroying consequences of endless advanced capitalist technocratic expansion, by escaping the Earth in gigantic rockets and spaceships, and then relentlessly exploiting *other* planets in exactly the same way. In the early 1970s, Kurt Vonnegut very aptly and with bitter sarcasm, called this mind-manacled shaped thought, ‘The Big Space-Fuck’ (Vonnegut, 1972). As such, this catastrophically mind-manacled shaped thought not only *can*, but *should*, be critically compared-&-contrasted with ‘the overview effect’ (White, 1987). Thus creative piety, by acknowledging the application of organic, generative thought-shapers, by recognizing inherent boundaries or limits on domains of representational content, and by enacting a meta-cognitive *Gestalt*-shift precisely in order to accommodate and comprehend those inherently bounded or limited domains of content from a higher-dimensional or transcendental perspective, *opens up the world*, by accepting the facts and phenomena it encounters *on their own terms*.

Element (iv). Creative piety inherently provides a direct cognitive access to a new, inexhaustible, and essentially richer domain of content that’s accessible only through a higher-order perspective on some or another bounded or limited domain of content. Kant famously captured this feature in a single schematic spatial thought-shaper at the end of the *Critique of Practical Reason*, when he described the necessary complementary inverse relationship between his double-sided existential consciousness of the starry heavens *above* him (the unbounded domain) and the moral law *within* him (the bounded domain):

[T]wo things fill the mind with ever new and increasing admiration and reverence, the more often and more steadily one reflects on them: the starry heavens above me and the moral law within me. I do not need to search for

them and merely conjecture them as though they were veiled in obscurity or on the transcendent region beyond my horizon; I see them before me and connect them immediately with the consciousness of my existence. (Kant, 1996d: p. 269, Ak 5: pp. 161-162)

In this way, creative piety enables an enhanced and indeed suffused meaningfulness, allowing us not only to have infinitely more degrees of cognitive freedom, but also to make new and essentially better practical decisions. For instance, once one understands the intricacy of an ecological system and the role it plays for different species, for adjacent systems, and for our survival chances, it becomes all of a sudden infinitely less attractive to treat it like a mere mechanism and to exploit it or exhaust it.

As we've been arguing, practicing creative piety achieves a meta-cognitive acknowledgment of organic, generative thought-shaping, that in turn necessarily brings along with it an existential *Gestalt*-shift in thinking, affect or emotion, and/or acting. This shift has had many names over the millennia, some of which are 'nirvana', 'conversion', 'being born again', 'seeing God', and 'radical enlightenment'. From the standpoint of The Theory of Thought-Shapers, we can see that the core idea of *organic, generative thought-shaping* is vividly exemplified here. When we acknowledge ceaseless change as the only constant, the cyclical development inherent in life itself, and this underlying processual, purposive, and self-organizing character—and, more generally, the highly structured but also highly fluid impermanence of formative processes (in Japanese: *mu*)—as the defining features of reality, we see that everything is shot through with a complex Nothingness or inherent impermanence: as if you were seeing the underside of a beautiful carpet, whereby the stitches schematically repeat the pattern on the topside.

This shift goes by widely varying names in religious traditions, as we've noted already. It has been described as 'seeing God' (Malherbe and Ferguson, 2006), 'performing the work of love' (Spearing, 2001), 'participating in the Kingdom' (Maloney, 1992: 241–244; Luibheit, 1987: 135–141) or as perceiving our innermost self, and therefore realizing the hidden core of our rational human agency. The Dominican monk Meister Eckhart (1260–1328) describes it as follows:

[G]od is not a Spirit, according to the words of St. Gregory (...) Therefore he says 'He [Jacob] came to a place'. The place is God, Who gives position

and order to all things. I have said before that all creatures are full of the least of God, and grow and flourish therein, and His greatest is nowhere. (Walshe, 2018: p. 222).

For Eckhart, God is necessarily equivalent with the target of a form of human sense perception that goes well beyond our ordinary capacities for sense perception, although it remains essentially embodied and sensible, and also self-conscious, in a way that's not dissimilar to Kant's notion of pure formal sensibility, aka pure *formal intuition* (*formale Anschauung*) (Kant, 1997: p. 261, B160n.), especially when we juxtapose it with Newton's speculation in the *Queries* to his *Opticks* that space is 'the sensorium of God' (Henry, 2021). Indeed, for Eckhart this mode of creative piety amounts to a human sensible awareness of the ordering principle that's present throughout the universe, from the molecule to the amoeba and the galaxy. But it takes a self-consciously targeted effort, and creative piety, to realize this with a 'force and vivacity' that sets it radically apart from ordinary sense perception. We glimpse some of this intensity in Keiji Nishitani's discussion of Dostoevsky's experience in exile on the Kirghiz steppes:

As Dostoevsky himself tells us, [on the Kirghiz steppes] is the only spot at which he saw "God's world, a pure and bright horizon, the free desert steppes"; in casting his gaze across the immense desert space, he found he was able to forget his 'wretched self. (Nishitani 1983: p. 8)

But for such commonplace things to become the focus of so intense a concentration, to capture one's attention to that almost abnormal degree, is by no means an everyday occurrence.... things that we are accustomed to speak of as real forced their reality upon him in a completely different dimension. (Nishitani 1983: p. 8)

In fully embracing our capacity for creative piety, the objects of our sensible awareness self-consciously strike us as intensely alive and vital. When the world around us becomes 'more real than real', we see all things around us in their 'suchness'. They *are*, in a certain way and with a certain force and vivacity, that transcend the mundane character of everyday life. Every object is seen in a new light, uncovering an entirely different qualitative level of perception and experience. Dostoevsky describes how, in such experiences, even the smallest things reflect the eternal order that gives rise to life itself: the cry of a baby, the rising sun on a leaf, fern leaves unfolding, the patterns on a butterfly's wing: all

these things communicate ‘a mystical order that rules over all things, so that God can be seen in any of them’ (Nishitani 1983: p. 9). The *topos* of God is everywhere, reflected as eternity in a drop of water.

We find similar conceptions of our sensible awareness of the immanent universal interconnectedness and eternity of the world in the works of many Eastern Orthodox theologians. For instance, Symeon the New Theologian (949–1022) stressed that ‘the Kingdom of Heaven’ is not a future world located in the afterlife, but a state of affairs that is attainable here on Earth. Symeon describes his conversion as ‘being pulled suddenly out of the mud and being shown the beatitude of the Kingdom’ (Meyendorff, 1983: p. 75). Likewise, he argues that the idea of resurrection refers to being brought to life again in a new mode of being. And in one of his *Discourses*, he argues that the true nature of creation must be ‘unveiled’ before it becomes perceptible to us (Bond, 1980: p. 264). In other words, Symeon refers to a radically existential *Gestalt*-shift that changes one’s relation to the world forever. It is our finitude and fragility, registered with creative piety, that shows us ‘the beatitude of the Kingdom’.

By fully and self-consciously experiencing the finitude and fragility of our existence in the world, the world’s true nature becomes apparent, opening up towards the non-conceptual (Paans, 2021). By sharp contrast, once we treat the world in merely instrumental terms, we impoverish or even destroy its ephemeral, fleeting, and wondrous character (Scruton, 2012). An entire domain in the world—i.e. the undecidable and uncomputable, non-denumerably infinite, transfinite, and transcendental—retreats from us. But once we voluntarily open up to it, we realize that it had been accompanying us *immer schon*, ‘always already’. To practice creative piety is therefore simultaneously a meta-cognitive, aesthetic, and existential experience. The transformative potential of this experience is such that it leads to a radical thought-shaping, affect-&-emotion-shaping, and action-shaping change in attitude (Paans and Ehlen, 2022). Creative piety is an innately specified capacity that grows naturally in minded creatures like us, just as our form of life grew naturally in the material or physical universe. As such, and not unlike the utopian futures and alternative social-institutional universes we’ll discuss in section 3, it’s within reach, even if it’s not always clearly and distinctly perceptible.

From all this, it follows that we must practice creative piety on an individual,

collective, and *global* scale if we wish to effect a fundamental change that isn't dependent on the so-called 'good will' of States and other sociopolitical organizations, especially including corporate capitalist interests. Since the capacity for creative piety is innate in every rational human individual, it also follows that 'cultivating our global garden' means that we ought to create and sustain a world *that's inherently conducive to creative piety*, the Cosmopolis. Moreover, and as we've argued in the two earlier essays in this trilogy (Hanna and Paans, 2020; Hanna and Paans, 2021), we're increasingly thrown into a world that is in fact systematically debilitating and stunting our capacity for creative piety: the world of ultimate nocebos. Before discussing the salient characteristics of historical and contemporary utopias, we can draw inspiration from some shining examples of formal and artistic piety that showcase its transformative potential.

First, let's look back now at some of the leading exemplars of formal piety that we listed earlier in this section, against the backdrop of our exposition of the four individually necessary and jointly sufficient features of creative piety. Via his diagonal (aka topological) proof, Cantor revealed to us the existence of the new, inexhaustible, and essentially richer field of non-denumerably infinite, transfinite, or transcendental numbers, and more specifically the field of real numbers, over and above the 'old' and 'flat' only-denumerably-infinite array of the rationals. Via his incompleteness theorems, Gödel revealed to us the existence of the new, inexhaustible, and essentially richer non-logical source of mathematical axioms, over and above the 'old' and 'flat' sources of mechanical, Turing-computable decidability and also over and above the non-mechanical, but still 'relatively old' and 'relatively flat' sources of rule-determined provability.⁹ Via their Theorem, Löwenheim and Skolem revealed to us that only-denumerably-infinite or finite

⁹ (Church 1936) bears witness to the categorical difference between (i) decidability and (ii) provability, which turns on the categorical difference between (i*) monadic quantification and (ii*) polyadic quantification, and therefore on the categorical difference between (i**) monadic or non-relational predicates and (ii**) polyadic or relational predicates. Truth in monadic logic is decidable, therefore computable, therefore mechanical—whereas truth in polyadic logic isn't *any* of those things (Boolos and Jeffrey, 1989: chs. 10, 22, and 25). One crucial factor here is the irreducibly normative, intuitional, and therefore non-mechanical character of *following a rule* (Wittgenstein, 1953: p. 81e, §201; Hanna, 2006b: ch. 6), when carrying out proofs in polyadic logic. A Kantian way of making the same point is to say that decidable truth in monadic logic is *analytic a priori*, whereas provable truth in polyadic logic is *synthetic a priori*. Indeed, recognizing the Kantian synthetic a priori *always* requires practicing creative piety, whether it's in mathematical logic, mathematics, physics, or metaphysics.

models of consistent set theories like ZFC necessarily contain within themselves the implicit existence of the new, inexhaustible and essentially richer non-denumerable or transfinite models of the same theory, over and above the ‘old’ and ‘flat’ only-denumerably-infinite or finite models considered in themselves, independently of set theories like ZFC. Via his semantic conception of truth, Tarski revealed to us the existence of the new, inexhaustible, and essentially richer non-logical, material, or semantic ontology of models or truth-makers, over and above the ‘old’ and ‘flat’ logical, formal, or syntactic ontology of Turing-computable algorithms/recursive functions and non-mechanical rule-determined proof-sequences. And via their well-ordered set theory plus the axiom of choice, Zermelo and Fraenkel revealed to us the existence of the new, inexhaustible, and essentially richer non-paradoxical Cantorian hierarchy of non-denumerably infinite, transfinite, or transcendental sets, all generated by benignly impredicative or self-containing means, via the power set operation, over and above the ‘old’ and ‘flat’ domain of naïve set theory.

Second, and correspondingly against the backdrop of the four individually necessary and jointly sufficient features of creative piety, here are three examples of fine-artistic piety that realize all these features.

1. Perhaps most obviously and literally, Rembrandt and other 17th-century Dutch School artists’ highly naturalistic, humanistic, perspectival painting reveals the new, inexhaustible, and essentially richer field of figurative painting, simply by abstaining from the heavily symbolic content of Medieval and aesthetic perfectionism of Renaissance paintings, and by embracing the fullness of everyday objects. However, by carefully setting the stage on which these objects appear, they become objects of intense vitality. The fruits and objects in the still lives of this period appear often as microcosms, and every detail is depicted with such intensity that the object itself seems to point beyond its figurative content. Likewise, Rembrandt’s portraits take this strategy one step further, and show not only details, but also imperfections, but in such a carefully choreographed manner that they depicted figure is not a mere person, but becomes a veritable life story. The richness that we perceive in these paintings is non-conceptual, and we can only aesthetically apprehend its presence, without being able to pinpoint exactly where it resides.

2. We must also consider the development the tradition of non-figurative

painting that followed Expressionism in the opening decades of the 20th century, and replaced Romantic realism and figurativity in general. A classic case here is the career of Piet Mondrian, who started his career painting figurative work, only to move on to Expressionist vocabulary, and subsequently to a radically non-figurative form of painting. In contemporary art, we can see how this developmental arc in painting continues with the work of Peter Krauskopf or Sigmar Polke. In particular, Krauskopf's more recent work is evocative in the sense that it upturns the classic categories of painting:

Following his earlier minimalist wall pieces without painterly strokes, somewhere between picture and object, he began to experiment with the layering and scraping of paint. The resulting approach is both technically sophisticated and distinctive. (Heiser, 2015)

Indeed, Krauskopf's work hovers somewhere between a three-dimensional object and two-dimensional representation. Due to his technique of using layers and different types of (metallic) paint, the painting itself seems to acquire a depth that cannot be grasped entirely, and that opens up a new, interpretive domain that suggests a kind of layered structure or extended spatiality, but that remains curiously out of focus, and that we can describe as 'the diaphanous': a visual characteristic that is open-ended, yet also opaque, inviting creative exploration. (Kuch, 2019).

3. We can bear witness to the essentially-embodied-mind-broadening potential of creative piety in listening to and studying the musical works of the late Polish composer Henryk Górecki (1933–2010). After working within the modernist musical idiom that characterized the 1960s, such as the twelve-tone technique and serialism, Górecki gradually developed a style that united elements from religious music, minimalism, and the radical modernism that he shared with some other composers of his generation, for example, Witold Lutosławski (1913–1994) and Krzysztof Penderecki (1934–2020). The resulting auditory vocabulary is characterized by the vivid contrast between insistent, driving motives, often built from simple harmonies, and introspective, almost silent episodes, interspersed with sardonic and almost vaudeville march-like tempi. The vivid contrast between insistent repetition, violent outbursts, and meditative sections is often magnified by the religious character of many of Górecki's compositions. But above all, the tone world of Górecki is disorienting

when one is used to traditional classical music. There are structural elements that sound familiar and even traditional, but the overall context in which they appear rattles and shakes the customary confines of musical language. Górecki's (posthumously published) fourth Symphony Op. 85, his 2010 'Tansman Episodes,' is a particularly good example. The composition starts out with a theme that seems to be hewn from granite, repeated time and again, only to be interrupted by violent outbursts of the brass and percussion sections. At the end of the first movement, Górecki includes a hallmark of his style: suddenly, the orchestration changes, and the robust main theme becomes fragile once it's played *pianissimo*. This sudden shift auditorily captures the disruptive and existential potential of creative piety with near-perfection. Similar techniques are deployed in the remaining parts of the symphony but can be found throughout Górecki's oeuvre (Thomas, 1997). Another example of the shocking shift in intensity can be witnessed in the 1993 composition *Kleines Requiem für Eine Polka*, Op. 66. Its four movements balance the melancholic with the insistent and remind one somewhat of the later works of Dmitry Shostakovich due to their sparse, bleak instrumentation. But no sooner has the melancholy and meditative mood set in, or an almost absurdist march-like rhythm imposes itself, shattering the prevailing mood and forcing one to confront its ceaseless drive.¹⁰ Górecki takes the listener on an emotional as much as on an auditory tour, artfully throwing the listener off-balance, and forcibly recalibrating his mood and emotional state. Our creatively pious meta-cognitive awareness of this musical existential *Gestalt*-shift is, as it were, enacted by the stringencies of the musical idiom itself, giving Górecki's a strange and profoundly attractive, but also profoundly destabilizing character.

In view of the examples we've provided, it's clear and distinct that creative piety can and should be sharply distinguished from the merely Turing-computable, recursive, rote generation of higher-order levels of content from

¹⁰ The almost vaudevillian shift between musical atmospheres was deployed to great effect by Gustav Mahler (1860-1911), but can also be found in an entire generation of composers who worked under the Soviet regime. Examples include the works of Alfred Schnittke (1934-1998), in particular his *March for an Imaginary Play* and the *Gogol Suite*, the composition *Credo* by Arvo Pärt (1935), 5th, 8th and 14th Symphonies, the late String Quartets of Dmitry Shostakovich (1906-1975), as well as his *Seven Romances on Poems of Aleksandr Blok*, the 5th and 6th Symphonies of Sergei Prokofiev (1891-1953), and many compositions by Giya Kancheli (1935-2019).

lower-order levels of content, that we'll dub *mechanical meta-cognition*. A very good and indeed famous example of mechanical meta-cognition is *Russell's theory of types*, which was specifically designed to solve Russell's Paradox of sets, but which in fact permits the construction of a precise analogue of the original version of the Paradox in terms of Russellian propositions (Russell, 1971; Potter, 2000: ch. 5, esp. section 5.5).

Practicing the meta-cognitive act of creative piety brings about theoretical, affective or emotional, moral-practical, sociopolitical, and existential-spiritual radical reorientations in our 'human, all-too-human' lives, in this thoroughly nonideal and often deeply tragic world. For genuine progress in human thinking, human affect or emotion, and human agency to occur, in any domain—formal-scientific or natural-scientific, applied-artistic or fine-artistic, moral, sociopolitical, existential-mystical, or philosophical—we must emancipate ourselves from the high-modernist, mechanistic worldview and what William Blake evocatively calls 'the mind-forg'd manacles' (Blake, 1794: line 8) of mechanical, constrictive thought-shapers and their corresponding shaped thoughts in the form of bad, false, and wrong beliefs, and thereby achieve the higher-dimensional/higher-order meta-cognitive standpoint of creative piety, by acknowledging organic systems and organic, generative thought-shapers and their corresponding shaped thoughts in the form of good, true, and right beliefs, according to all or any of the modes of creative piety.

3. ENVISIONING UTOPIAS: EIGHT LESSONS FROM THE PAST

Most utopian proposals lose track either of space or of society. (Lynch 1984: p. 293)

We now turn from creative piety to neo-utopianism, which, according to our view, is creative piety as specifically applied to sociopolitical thinking, affect or emotion, and action.

But before we can advance to neo-utopianism, we must consider classical utopianism. There have been many attempts to envision a world that's radically different from and better than its current condition. Not all these attempts are sociopolitical utopias, however. Some of them, like the cosmological narrative presented in Plato's *Timaeus*, serve to recount the emergence of a world out of the primordial forces of chaos. Such accounts are not just stories for making sense of

the world, but narratives to account for the divine order that pervades the world. As such, they lay down thought-shaping constraints on our worldviews; but simultaneously, they generatively shape our thoughts by making the ideal appear immanently within the confines of the real (Nelson and Stoltermann, 2014).

It's not our aim to provide a comprehensive overview of the history of classical utopias and utopian thinking. Instead, we'll distill eight hard-won lessons from a selected few of them, and then analyze the conceptual and thought-shaping tools they provide us with. Nevertheless, we must acknowledge from the outset that each version of classical utopian thinking conjures up something that extends infinitely beyond their descriptive contents and/or pictorial contents considered in abstraction from one another, an aesthetic fact characteristic of all human cognition that Kant calls 'the free play of the imagination and the understanding' in the First Introduction to the *Critique of the Power of Judgment* (Kant, 2000: pp. 13-20, Ak 20: 208-216).

First, let's consider Plato's *Timaeus* (Plato, 1961). Here we can see that this cosmological, utopian narrative recounts the emergence of a fundamental world order that explains the relationships and physical phenomena that structure the cycles of the world. As such, the world is imbued with a divine purpose or at least an ideal of intelligibility. The point is that there is a connection between the human intellect and its capacities to interpret and understand the world. This is of tremendous importance, brings the world to some degree under human control, and the element of unpredictability is warded off. Moreover, it makes the world appear as a place pervaded by design and teleology.

The hegemonic mechanistic worldview that's been in place since the early 20th century has locked all too many of us into thinking that life has no purpose or value over and above what can be reduced to mechanical principles, fundamentally physical facts, and strictly instrumental, egoistic or self-interested values—indeed, this is the *reductive nihilism* of the uncritical and unformed formal and natural sciences, when they're interpreted according to the mechanistic worldview (Hanna, 2022: section 0.0)—which, in turn, naturally shapes people and their lives toward hedonistic and selfish consumerism. But in the *Timaeus*, the connection between divine order and human order anchors humanity at a certain

place in the cosmic order.¹¹ In other words: *we* have an irreducible role to play. In various religions, we see that this idea has been translated into stewardship or the injunction to treat our bodies (and those of others and in effect our entire physical environment) as sacred objects (Scruton, 2012; Attfield, 2014; Jenkins, 2008; Kearns and Keller, 2007). The 20th century urban theorist Kevin Lynch insightfully described how this imaginative quality is a feature of even the earliest urban settlements:

The physical environment plays a key role in this unfolding. It is the material basis of the religious idea, the emotional stimulus that binds the peasantry to the system. The city is a “great place”, a release, a new world, and also a new oppression. Its layout is therefore carefully planned to reinforce the sense of awe, and to form a magnificent background for religious ceremony. Built with devotion and also with conscious intent, it is an essential piece of equipment for psychological domination. (Lynch, 1984: p. 9)

The polis opens up a new vista onto reality, embodying a ‘world beyond the everyday’. Yet, such a world is not without its control mechanisms that channel, thought-shape, and organize perception. In particular, the new world must exemplify a fundamental connection between the divine and the natural, or the sacred and the profane:

This urban tradition is continuous in China from 1500 B.C. almost to the present, and the concept of the idealized Chinese city was gradually codified in writing. It should be square, regular and oriented, with an emphasis on enclosure, gates, approaches, the meaning of directions, and the duality of left and right. Creating and maintaining religious and political order was the explicit aim. Ritual and place were fitted together. They expressed, and were believed actually to sustain, the harmony of heaven

¹¹ One can see the connection between planned environments and a fundamental, and supposedly ‘cosmic’, concept like justice very clearly worked out in Dante’s *Divine Comedy*, where the ‘planned’ structure of hell is a spatial template that enables ‘just deserts’ for various crimes. There are many examples like this throughout religious myths and narratives, but the underlying idea is nearly always that some god-like creative intelligence has planned and executed a cosmic order. In turn, this cosmic order is intended to explain why certain core concepts (Truth, Justice, Right, Beauty, Holiness...) are fundamental to human civilization. But equally, we can find the relation between fundamental concepts in the imaginary world worked out in St. Augustine’s *City of God*, and even earlier, in the description of heaven in the Book of Revelation.

and men, which was disastrous to disturb. (Lynch, 1984: p. 13)

Thus, heaven and earth are essentially connected in classical utopia. The divine order is reflected in the physical layout, and consequently in the organization of society. Unavoidably, the organization of society organizes sense perception. It determines who is seen as superior, and who as inferior, what proper behavior looks like, how the year is divided, which rituals take place and when, and which customs are accepted or unacceptable. This feature of classical utopias is not only discernible in the city layouts of antiquity or so-called primitive societies. Such features can also be found in modern classical utopias as well, where they can be experiential, immersive and imaginative world that usher reality itself into a new era. Naturally, the idea of the polis as a form of ordered society informs the topic of communal life and the roles that individuals play in it. And this is the topic dealt with by Plato's *Republic*. In fact, Plato clearly relates the divine world order directly to the structure of government. After all—and this point has been made repeatedly by anarchist writers—the State must make itself appear as a force of nature, a natural and unavoidable necessity (Bakunin, 1882/1916).

Second, let's consider Thomas More's *Utopia* (More, 1516/2000). It's an immensely influential work that captures not only the very best but also very worst of classical utopian thinking, all wrapped up in one visionary package. On the one hand, More describes the utopian society as centered around mutual aid, tolerance, and a remarkable leniency on topics such as euthanasia and equality. But on the other hand, the State is in effect an all-powerful institution, including privileged treatment for administrators, while social institutions such as slavery are maintained as an ultimate punishment. Moreover, privacy is distrusted, and everyone is 'kept in full view' in order to prevent or at least suppress subversive ideas and conduct. Ironically, More thereby anticipates the insidious 21st century world of ubiquitous CCTV cameras and 'surveillance capitalism' (Zuboff, 2019) via social media and the internet, in which digital technology empires like Google and Facebook claim that they help humanity by fundraising and sponsoring research, but in fact produce a global system of mechanical, constrictive thought-shaping and constant spying, under grandiose, ominous labels like 'the Metaverse' (Ludlow and Wallace, 2007; Muldoon, 2021).

Therefore, from classical utopian thinking, we can derive a first moral and

sociopolitical lesson for all rationally justified and morally acceptable broadly and radically Kantian dignitarian neo-utopian thinking: (*lesson 1*) the values that underlie the-brave-new-world-to-come must not be based on an unconstrained communitarianism. Especially instructive in this context is a remark by Noam Chomsky in discussing the collectivization of a village in Spain during the 1930s. After recounting how everyone in the village was effectively dispossessed of their property, work was collectivized, and everyone was subjected to a strict regime in order to prevent bourgeois capitalist privilege from arising again, Chomsky notes that

[a]n account such as this, with its concern for human relations and the ideal of a just society must appear very strange to the consciousness of the sophisticated intellectual, and it is therefore treated with scorn, or taken to be naive or primitive or otherwise irrational. (Chomsky, 2005: p. 73)

Chomsky asserts that such ‘prejudices’ must be weeded out first in order ‘truly to understand the revolutionary nature’ of such collectivizing tendencies. But, as so many of the radical Left have done in the 20th and 21st centuries, Chomsky runs headlong into the very problems he attempted to solve. If disowning, collectivizing, and policing are the main means of bringing about the new world, then one must first explain why that is an actual departure from precisely the hierarchical authoritarian and coercive, and/or advanced capitalist, society that one is passionately attempting to overcome? Why is it better for someone to be dispossessed of their property by a communist than by an advanced capitalist? Projects for bringing about new moral and sociopolitical order not only reveal their core values, but above all their coercive authoritarian, and coercive moralist, blind spots.

(*Lesson 2*) Now, it’s also highly instructive to take a look at the degree to which many self-described classical utopian schemes merely reflect, repackage, and magnify already accepted ideas and mechanical, constrictive thought-shapers, and therefore do not in fact present a “utopia” in the two authentic senses of that word:

1. an imagined perfect place or state of things. 2. [name of an imaginary island, governed on a perfect political and social system, in a book of that title by Sir Thomas More (1516)...] (Hawkins and Allen, 1991: p. 1594, numbering of senses added)

A particularly good example is a series of renderings made by Vincent Callebaut, in which we see a green and sustainable future version of Paris, for example:



Figure 2: ‘Paris Smart City 2050’, by Vincent Callebaut (2014).

Note the stylized emphasis on technological solutions to ecological problems, reflecting the unshakeable, high-modernist belief in progress through the application of engineering solutions.

What this image represents is an uneasy compromise: we would like to have our cool, technologically advanced, undulating, sterile, white, machine-like, parametrically-designed cityscapes, but now with some green added to it, just to give ourselves the feeling that we are not damaging the environment in producing cities of this kind. As became clear at the Oslo Triennale Conferences on the sustainability of the architectural profession, this type of “greenwashing” has been going on for years, ever since technocratic business corporations realized that sustainability was becoming a compelling reason for customers to purchase a product (Devlieger, 2014). But we must ask the critical question: where does all that steel, all that white paint, all that glass, and all that high-quality concrete come from, and what damage do their production processes cause to the

environment? To base future visions on extrapolations from the current situation simply repeats mechanical, constrictive thought-shapers in a different format. Here, as in the case of More's *Utopia*, the new political vision that is supposed to serve as replacement for the existing one hides as much as it reveals.

This is why we can re-read Marx's statement that history repeats itself first as tragedy and then as farce, in the light of thought-shaping. Mechanical, constrictive thought-shapers, especially those that function as ultimate nocebos, inevitably lead to tragedy; but then subsequently, they're promulgated as the amazing new solution to the very problems they cause, and are therefore repeated as farce. For example, the 2nd Amendment to the US Constitution, which entrenches people's right to own, carry, and use guns, inevitably leads to a shockingly high prevalence of daily gun violence, to which the farcical 'solution' is—of course!—owning, carrying, and using *more and more guns*, in order to protect yourself, your loved ones, or (if you're the police) society at large, from all the *other* people who are already owning, carrying, and using guns (see also Hanna, 2021g).

Another, but non-violent, example in this category is the vision of urban life as presented at the 2016 International Architecture Biennale Rotterdam (IABR), entitled *The Next Economy*. In this exhibition, visitors could enter a VR environment that purported to show how the life of an ordinary urban citizen in 2050 would unfold. It merely extrapolated from current trends and beliefs about digital technology and promoted the ultimately ideological idea that we would be continually making decisions on our life choices, dutifully and benevolently informed by AI and algorithms (see also Hanna, 2022: ch. 5). Simply put, the idea that human agency is flawed, dangerous and in need of endless (digital technological) improvement is amplified into the megawatt range, condemning the future citizen to an equally endless re-enactment of 'the theory of communicative action' (Habermas, 1981), in which one's entire life hinges on 'informed decision-making'. The idea that life consists in decision-making is directly connected with the high-modernist conception of decision-making and effective practical action. Based on early theories of cybernetics and the emerging information sciences, every human cognitive activity whatsoever is framed in terms of mathematical logic and the mechanistic worldview (Hanna and Paans, 2020). Since the end of World War II, this thought has been omnipresent and protean, and constantly taking on new forms, as new generations of digital

technology enable its application across vast areas of formerly private individual lives. In this respect, the social science of ‘nudging’ (Thaler and Sunstein, 2008), social credit systems, immersive VR environments, and the widespread commercial tactic of offering services and goods based on the accumulation of digitized information about earlier preferences, all relate directly back to More’s *Utopia*: everyone is constantly ‘kept in view’, in order to maximize the potential for authoritarian and moralistic coercive control.

So far, then, we have derived two lessons from classical utopian thinking: (*lesson 1*) from a broadly and radically Kantian dignitarian moral and sociopolitical point of view, it must not be based on ideals of unconstrained communitarian surveillance and coercive authoritarian and/or moralistic control, and (*lesson 2*) it must not simply uncritically extrapolate current trends endlessly into the future, because this inevitably leads to a repetition of earlier mistakes in a superficially new format.

In a modern, non-theological context, an illuminating vision of an imaginary future world that heeds both of these lessons is Kevin Lynch’s urban phantasy, ‘A Place Utopia’, his prescient sketch of a future city, in which many of the problems of modernist planning were made explicit (Lynch, 1984: ch. 17, pp. 293-318). Lynch envisions a future in which contemporary modes of transport are improved and refined; recycled material is more common than new material; spatial planning departs from the landscape structure; the well-being of a community is measured by the well-being of all living organisms in it; regions have plans for growth and decline; energy is produced on custom demand and on small scale; and material possessions are no longer a sign of wealth. A typical section of Lynch’s narrative reads as follows:

Recycled material is more often used than raw material. Wastes are converted, or their breakdown is accelerated. Structures are designed to be reused, or to be wrecked and reconstituted easily. The testing and evaluation of a design or a material includes a consideration of how it can be rebuilt or destroyed. The whole process of waste, elimination, and conversion is seen as interesting and useful, as worthy of celebration as production. (Lynch, 1984: p. 306)

Here, Lynch provides an important insight into the nature of utopian thought: its constitution is so complex that only a synoptic vision described in

spatiotemporally asymmetric, processual, purposive, self-organizing terms, can adequately how an authentic utopia could possibly function. By making these assumptions explicit and connecting them to the overall storyline, these necessary complementary relationships are prefigured, and they hereby acquire a concrete, realistic sense.

Narrated as parts of an overall vision, individual assumptions then make sense against the backdrop of the larger organic story. This method provides a surprisingly effective vehicle for making progress on contemporary design problems. In describing a detailed scenario, Lynch creates an explanatory format in which it's relatively easy to switch between actions of people, everyday routines, spatial features, economic models, and social hierarchies, all in one integrated storyline. This makes the story plausible, easy to follow, and compelling on many levels. It deals not just with abstract ideals or strict guidelines, but equally with situations that citizens of the future city encounter. Such utopian visions effectively overcome what is called the 'resilience' or intransigence of mechanical, constrictive thought-shapers and shaped thoughts that have been socioculturally entrenched (Hopkins, 2001: p. 33). Conceptually-formulated utopian visions presented in clear and rhetorically effective prose, and robustly shaped by organic, generative images, show what the world *could* become: they're visual representations of the 'should-image' or '*Sollbild*' (Rittel, 1988), and, as such, they're powerfully thought-shaping and inspiring, and incite enthusiasm and passionate commitment.

In turn, they have a genuinely life-changing, reorienting effect on people's thoughts, especially including beliefs, their affects or emotions, and their actions. The ideal outcome of such a robustly life-shaping utopian vision, then, is a response that says, in effect, 'I truly believe in a perfected new world that could be like this!' A robustly life-shaping utopian vision is therefore a categorically normative forecast that modulates into inspiration and commitment: without working out all the details, the image taken together with the vision re-orient us and meta-cognitively open up a higher-order perspective on a new finite but unbounded *cosmopolitan future* that's really possible and within our reach when immediate actions are taken to realize it (Hopkins, 2001: p. 38). The prime virtue of the robustly life-shaping utopian vision, then, is to bring about a changed relationship between the present and the future. The future is shown to be

potentially realizable in accordance with that utopian vision, even despite widespread current defeatist beliefs to the contrary and the non-ideality of the present.

Moreover, *organic, generative creative design* is required, precisely in order to scale the robustly life-shaping utopian vision to the constraints of the real world (Nelson and Stoltermann 2014: pp. 37–38). And in this way, creative design is importantly different from the utopian vision itself. Unlike a utopian vision *per se*, creative design is the outcome of a subsidiary creatively pious meta-cognitive process that begins with certain axioms. The most notable of these axioms is a methodological one:

Design works by figuring out a result for many interdependent actions before acting. It thus avoids the problems of interdependence, indivisibility and irreversibility through a presumption of perfect foresight. (Hopkins, 2001: p. 40)

The methodological, provisional ‘presumption of perfect foresight’ makes it possible to treat a design problem as if the designer really had this foresight. This attitude towards the problem is a necessary condition for fully utilizing ‘epistemic freedom’ (Rittel, 1988: p. 5). To work creatively through a design problem, a degree of control (even if only provisionally assumed) has to be practiced in order to treat the problem as something graspable. It must be seen as a state of affairs that’s already located within a representational domain falling fully within the scope of the design process, and therefore on which a reasonable degree of manipulation, experimentation, and adaptation can be exercised. Creative design schemes are idealizations in the sense that they propose a solution that has been formulated under the methodological, provisional ‘presumption of perfect foresight’. Such schemes are gradually organically and ontogenetically refined and updated in the face of real-world limitations and possible or actual objections (Paans, 2022). The whole sequence of schemes, refinements, and updating is necessary to arrive at a coherent design that’s adequately adapted and configured to the real-world conditions and constraints in which it must operate for the time to come. The knowledge accumulated in this planning process is embodied in plans. Shortcomings can be resolved by making a new plan, and by making plans the focus of deliberation. (Hopkins, 2001: p. 42)

Hence, the third lesson we can derive from classical utopian thinking is (*lesson*

3) that on pain of inevitable failure, a utopian vision must not restrict itself to high-level abstractions and top-down proposals, especially including ‘seeing like a State’, because doing so will inevitably impose a destructive, and deforming ‘idealizing grid’ on social institutions and individuals alike (Scott, 1998). The best example in this category is undoubtedly the governmental organization of classical Marxist-Leninist communism. Notoriously, Lenin was fully committed to adopting coercive authoritarian and indeed totalitarian measures in order to bring about a Marxist communist paradise (Scott, 1998: ch. 6; Sartwell, 2008). Or, as Bakunin put it:

The general idea is always an abstraction and, for that very reason, in some sort a negation of real life. I have stated ... that human thought and, in consequence of this, science can grasp and name only the general significance of real facts, their relations, their laws—in short, that which is permanent in their continual transformations—but never their material, individual side, palpitating, so to speak, with reality and life, and therefore fugitive and intangible. Science comprehends the thought of the reality, not reality itself; the thought of life, not life. (Bakunin 2010: p. 50)

Here, Bakunin issues a double warning: one against abstraction and thinking in generalities, as many States or State-like structures have done; and a second warning about the coercive implications of using instrumental reason (“[s]cience”) as foundational principle for organizing societies. As we will see, Bakunin was highly prescient here, because his warning was echoed even within the modernist movement later in the 20th century.

One way to avoid dogmatic, rigid, coercive authoritarian, and ultimately totalitarian sociopolitical programs is to think about social-institutional *devolution* and *creative evolution*,¹² instead of *burn-it-to-the-ground revolution* in the Marxist-Leninist sense. The idea of a burn-it-to-the-ground revolution finds its archetypal model in the overthrowing of one dynasty or social order by another. To an important extent, we can see this pattern in the French and American Revolutions, and perhaps most fully and vividly in the 1917 Russian Revolution. After a smouldering, long-suffering, excruciatingly slow build-up of sociopolitical

¹² It is not altogether coincidental that our terminology owes much to Henri Bergson’s 1907 book of the same title. Above all, Bergson, emphasized that evolution is not only about selection and survival, but about an immanent creative force that gives it a certain generative impetus as well.

and economic forces, the situation suddenly erupts and in a very short timespan, the instability of an existing order is taken as an opportunity violently to overthrow it. To think that every important moral and sociopolitical change *must* therefore follow this explosive, burn-it-to-the-ground pattern is a highly dangerous mechanical, constrictive thought-shaper, because it funnels all sociopolitical visions into an excessively narrow conduit—in effect, a gun barrel—that always leads to coercive authoritarian violence in the end.

On the other hand, it should also be recognized as a fourth lesson to be learned from classical utopian thinking of the specifically “gradualist” school, (lesson 4) that an endless postponement of effective measures, and an uncritical, quietist belief in inevitable, step-by-step progress must be avoided as well, especially for the sake of those who are now oppressed and suffering. Creative design in the form of an organic, generative action-schema can avoid this problem by operating according to a method (i) whereby decisions are made during an evolutionary process, influenced by factors that are at that point determining the various real possibilities and real limitations, and (ii) each member of the total set of goals or aims to be achieved relativized to current real-world circumstances. The genuine virtue of an organic, generative action-schema is that it takes the contingencies, constraints, and interdependencies as given facts, and each action-oriented decision arises from flexible deliberation (Hopkins, 2001: p. 42). Above all, it is not a prudential acting-in-the-heat-of-the-moment, but instead the processual, purposive, self-organizing unfolding of a set of decisions and actions based on categorically normative principles. We find this organic, generative action-schematic approach well exemplified in the anarcho-socialist writings of Mikhail Bakunin, Peter Kropotkin, and Josiah Warren (see also Hanna, 2018c: esp. parts 2-3).

The fifth lesson in thinking about utopia can be derived from the sympathetic feature that the authors mentioned above share, is that they remain true to one dictum, (*lesson 5*) that the collective demand for conformity or cooperation has absolute limits and cannot be used as an excuse to coerce, harm, or otherwise oppress people. But apart from and prior to this political point, they highlight another core tenet of their thinking, namely, the absolute value of the individual human person regarded as an end-in-itself, even if we all inevitably display the flaws of the ‘crooked timber of humanity’. Warren even went so far as to maintain

that ‘responsibility must be individual or there, is no responsibility at all’ (Warren, 2011: p. 60). Clearly, Warren believed that collective responsibility is an all-too-easy excuse not to exercise one’s own individual capacity for creative piety.

We find this thought once again expressed by Bakunin:

The milliards of individuals who have furnished the living and suffering materials of this history at once triumphant and dismal—triumphant by its general results, dismal by the immense hecatomb of human victims “crushed under its car”—those milliards of obscure individuals without whom none of the great abstract results of history would have been obtained—and who, bear in mind, have never benefited by any of these results—will find no place, not even the slightest in our annals. They have lived and been sacrificed, crushed for the good of abstract humanity, that is all. (Bakunin, 2010: p. 56)

Situations in which the collective is prioritized over the individual human person, and the abstract over the concrete inevitably lead to coercion and to imposing a ‘State-like’ face on society as such. This does not mean that for figures like Warren or Bakunin, the collective isn’t relevant, but rather simply that the order to which they gave ontological and political priority started at the individual-human-person level. The point that surfaces again and again is that true change is not achieved by mobilizing large masses or classes in favor of a dogmatic doctrine or abstract ideal, but instead achieved by means of a true, wholeheartedly embraced, and authentic ‘revolution of the heart’, where the term “heart” can be broadly understood as the experience of being connected to and sustained by a larger movement of like-minded individuals. It is precisely this conviction that we also find expressed in Kropotkin’s treatment of ‘anarchist morality’:

It is not only against the abstract trinity of law, religion and authority that we declare war. [W]e declare war against all this wave of deceit, cunning, exploitation, depravity, vice (...) which they have poured into all our hearts. We declare war against their way of acting, against their way of thinking. (Kropotkin, 2002: p. 99)

The mechanical thought-shaping potential that abstractions like Law, State, or Nation exercise on our minds is dangerous once it is used as a template to shape and stifle individual capacities and viewpoints. Thoreau cautions against it in his essay *Civil Obedience*: ‘I think that we should be men first, and subjects

afterward. It is not desirable to cultivate a respect for the law, so much as for the right' (Thoreau, 2021). All too often, following the rules becomes a goal in itself. Likewise, in *Life Without Principle*, Thoreau develops a creative-pious template for living in a non-conformist manner, realizing all too well that society at large imposes norms that stifle such ways of life. It is precisely the "creative" aspect of creative piety that is undermined by the process of (social-institutional) thought-shaping; for it expresses freedom, originality, and spontaneity: exactly those features that States cannot tolerate.¹³

The beginning of the 20th century witnessed a veritable explosion of classical utopian schemes, as modernist culture and the steadfast belief in the malleability of the world by technological means spurred an entire generation of planners, designers, and architects into action. In turn, these planners inherited a classical utopian strand of positivist architectural thinking that emerged in full force during the 18th century, for instance in the work of C. Fourier (1772-1837), É.-L. Boullée (1728–1799), in particular his 1784 *Cénotaph á Newton*. (Miles, 2008: ch. 3). Like his contemporary C. N. Ledoux (1736-1806), architects started to realize the potential of their discipline, and started to think about its society-shaping powers.¹⁴ Combined with technological advances during the latter half of the 19th century, architectural thought became a potent tool for thinking about new world orders. Whereas the European strand of thinking initially departed from the inherited, Neoclassical building orders, the American branch of modern architects had a different point of departure. In particular, in Frank Lloyd Wright's *Broadacre City*, the twin ideas of the horizontal prairie house and the self-sustaining family played instrumental roles. Wright was adamant that a new society should be egalitarian, and if possible, entirely without an imposing State apparatus. This led him to emphasize decentralization in almost all aspects of his proposals (Fishman, 1982: p. 136). The idea was that the national government

¹³ Even as regards terminology, there is a remarkable overlap between the ideas developed by Bakunin, Kropotkin, and Warren. Life itself is equated with creation, becoming, concreteness, development, originality, spontaneity, and vitality, whereas States and State-like structures are equated with mindless repetition, static being, abstractness, restrictive rules, petrification, stultification, and torpor, as well as the anonymous exercise of power.

¹⁴ To be sure, there had been architects who conceived ideal cities and utopian worlds during the Renaissance. Nevertheless, during the 18th century, the architectural discipline started to utilize this type of thinking in order to address the brute fact of the human condition and the possibility of a secular world that was not derived from a religious vision of Eden or Heaven.

should wither away in favour of small-scale regional governments. Wright was rightly suspicious of technology that enabled centralization and alienated people from their roots and from the immediate experience of working for their own self-maintenance. Above all, he believed in participation and self-reliance, and was critical of the emerging welfare state:

It is perhaps worth pointing out that most of the social and political theories Wright referenced in Broadacre ... originated in the late nineteenth century, not during the Great Depression when Broadacre was conceived. Wright insisted that citizens of his utopia must work and use their own faculties rather than 'sitting around waiting for their own government to feed them, think up jobs for them, pat them on the back or put them in the workhouse'. (Gray, 2018)

Wright was not alone in this suspicion.¹⁵ This ambiguous and often highly suspicious relationship to technology characterized the entire development of modernism during the 20th century, eventually developing into criticisms launched by the Frankfurt School and postmodernists alike, blaming instrumental reason and paternalistic tendencies of the (welfare) state for the basic evils of the 20th century. On the one hand, institutions like CIAM championed top-down planning based on data (in reality, it was often idealized selections of facts that they liked to emphasize). But on the other hand, especially after the 1950s, there was a movement that regarded unbridled trust in technology and engineering as a mistake. Positioned almost equidistantly between these two hands, the gigantic town schemes of Ludwig Hilberseimer, and the idea of 'world architecture' honestly tried to sanitize often-squalid living conditions of the past, heralding a new city where everyone had access to clean light, air and water (Frampton, 2008; Rifkind, 2014).

Indeed, Hilberseimer's proposals for the '*Großstadtarchitektur*' were aimed at overcoming the 'abuses of capitalism' that shaped the 19th century city. (Anderson, 2014: p. 89). So even Hilberseimer started to sound like an organicist thinker with Marxist tendencies:

Only in a socially ordered society, where production corresponds to the

¹⁵ Indeed, in 1945 Wright published a book entitled *The Disappearing City*. It was not urban life as such that was to disappear, but the polis and the governmental structures that had developed during the 19th century. For an elaborate overview of the development of the modern movement, see Banham 1970.

needs of the people, not the greed for profit of the privileged, can the metropolis become a purposeful organism, can it change from a destructive to a constructive entity. This depends on the spirit that builds the city, which is today, however, of a very comfortable mechanistic variety. (Anderson, 2014: pp. 89–90)

Without denying that the mechanistic approach to architecture and planning had improved building technology and had added to the comfort of the population at large, Hilberseimer looked further ahead and noticed—following Henry Ford—that the modern city could not be sustained forever. Despite his technological take on the problem, Hilberseimer already foresaw the tendencies that would lead to the formation of the ‘green movement’ from the 1970s onwards.

Hilberseimer was one of the few architectural thinkers of this period who could see both sides of the coin: most of his fellow modernists were more outspoken in either their rejection or affirmation of tradition. Nevertheless, the optimistic side of his vision was widely shared by his contemporaries. For instance, Erich Mendelssohn and Bernhard Hötger wrote in 1928 that

[c]ities will change into a shape that restores the sun and movement to the city dweller. This will be the beginning of a new world architecture. (Conrads, 1970: p. 106)

But while the moderate camp was looking at a combination of nature and technology and regarded an unbridled confidence in technology with suspicion, the radical camp held different views. In 1933, the CIAM noted in its *Athens Charter* that

[t]he city will assume the character of an enterprise studied in advance and subjected to the rigour of an overall plan. Wise foresight will have sketched its future, described its nature, anticipated the scope of its developments and limited their excess in advance. (Conrads, 1970: p. 141)

Nevertheless, even as early as 1947, Frederick Kiesler noted in his essay *Magical Architecture* that functionalism was dead, and that the modern enterprise had been based in the ‘mystique of hygiene’. This sentiment was echoed in no uncertain terms by Hundertwasser in his 1955 *Mould Manifesto against Rationalism*

*in Architecture.*¹⁶

By the 1960s, architectural minds were ready for a radical rethinking of the concept of utopia itself. And instead of centralized plans that created idealized, abstract, self-enclosed worlds, that would herald the brave new world to come (Miles, 2008: p. 71), views that closely resembled Wright's early ideas began to resurface.¹⁷ In particular, the idea of keeping freedom and nomadism from being confined to a 'urban zone' of some sort developed rapidly. Some of the most intriguing examples were formulated by Archizoom, a collective that invented a veritable mobile architecture; by Archigram, who championed the idea of a global 'grid' to which citizens could 'plug in' for basic resources, thereby anticipating the internet; and by Constant Nieuwenhuys's utopian cityscape *New Babylon*. All these proposals were self-consciously modernist, but they rejected the technocratic despotism that had begun to characterize CIAM. The following remark by Nieuwenhuys displays the crumbling status of a universalizing modernity:

The modern city is dead. It has fallen victim to utility. New Babylon is a project for a city in which it is possible to live. And to live means to be creative. New Babylon is the object of a mass creativity. (Conrads, 1971: p. 177)

Instead of a superstructure that enables the 'comfortable' life and the new metropolis, the emphasis of architectural modernism began to take up factors like creativity, participation, and engagement in action—all of a sudden, the Bergsonian notion of creative evolution emerged once again—this time enacted

¹⁶ Hundertwasser called the use of the ruler in architecture 'criminal', and asserted that humankind had imprisoned itself in a 'jungle of straight lines'. Here, again, we see the suspicion that arose against the idea of unlimited and exhaustive technological control and its accompanying aesthetic. The same rhetoric can be found in 'Towards a New Architecture', by Reinhard Giesemann and Matthias Oswald Ungers, where they criticize the anonymous, functional aesthetic associated with high modernism:

The result is apartment blocks that look like schools, schools like administrative buildings and administrative buildings like factories. An empty scaffolding is hung in front of them. Form becomes interchangeable through the use of a mathematical, hence nonartistic schematism. (Giesemann and Ungers, 1960: p. 165)

¹⁷ An interesting example that Miles discusses, is the Czech town of Zlín, planned and built by the shoe manufacturer Tomáš Baťa during the 1920s as a template for a universal worker town. Zlín has been particularly well preserved, but world-building initiatives like this were plentiful in the decades following the Russian Revolution.

by the population of the high modernist utopia. This was a far cry from the decades directly following the World War II, with its emphasis on the city as a neutral place for ‘the [anonymous] public’ (Paans, 2019). That being said, some have criticized plans like Broadacre City, or Soviet decentralization, as the undue return to an imaginary past, in which the organic community is taken as the model of urbanization (Tafuri, 1976: pp. 120–122).

The sixth lesson is one that we can derive from the tension within the high modernist utopian movement itself is (*lesson 6*) that good intentions often prioritize one feature or aspect of an overall vision or worldview over all others—sometimes quite unintentionally. In the case of the high modernist utopian movement, technology was viewed as the instrument to overcome the finitude of the human condition and the living conditions of the 19th-century metropolis. However, economic considerations privileged mass production, unlimited economic growth, and serial building over the sensitivity and societal ideals that we can find in the work of Howard and Wright. All too often, technology became the means to solve an economical problem, instead of helping to realize a broad societal vision. Hilberseimer’s contention that architecture should be about ‘real needs and defined by objectivity and economy; material and construction; and economic and sociological factors’ (Anderson, 2014: p. 264), was overturned in favour of profit, growth and development. Consequently, those features that were attractive in the high modernist utopian movement turned against it. And so, high modernist utopian became associated with the image of ‘urban blight’, brutalist grey concrete structures, depressing mass housing, lifeless neighbourhoods, and anonymity.

The seventh lesson to be learned from this historical analysis can be derived from the so-called “green movement” that emerged during the 1960s and 1970s, following the budding awareness that humanity was about to contribute to major ecological degradation, and it’s this: (*lesson 7*) that classical utopian thinking often repeats mistakes from the past, but commits them in importantly different settings and different cultural climates. In combination with the focus on participation and mass creativity, the 1970s witnessed the rise of Arcosanti, an experiment in creating a city in accordance with local climatic conditions, aspirationally leading the way towards new forms of community, as, for example, we can observe in Ricardo Bofill’s concept of the ‘city in a city’ (Feniak, 2022).

While Arcosanti was a bold, utopian project, it built on an earlier sentiment that had been an undercurrent in the high modernist utopian movement, namely a kind of biophilic design that derives its form from local climatic and ecologic conditions. The high modernist utopian interest in design of this kind can be traced back to the brothers Olgyay, but equally to figures like Lázló Moholy-Nagy, Alvar Aalto, Richard Neutra, and Christopher Alexander, and Ian McHarg, all of whom had a keen eye for the limits of technological solutions and the potentials of ecological systems (Mallgrave and Goodman, 2001: p. 227).

Whereas early 20th-century utopian high modernism was predicated on the endless availability of fossil fuels and resources more generally, early 21st century utopian high modernism is predicated on green technologies that still leave an ecological footprint. We have raised the question already with regard to Vincent Callebaut's vision for a future Paris: where does all that glass, steel and paint come from? Despite the realization of enormous "ecological" cities like Masdar, Caofeidian, or Dongtan (Qiang, 2009), the underlying question about the total ecological footprint of humanity is still unaddressed, as is the fact that populations of an increasing size are living in exactly those conditions that early 20th-century utopian high modernism sought to overcome, while everyone is threatened by the reduced carrying capacity of the global ecosystem. The awareness of ecological and environmental degradation has led to a change in the conditions of production and customer awareness, but not in its underlying, instrumental tendencies.

Not altogether surprisingly, the tendency of mechanical, constrictive thought-shapers to reproduce themselves across a variety of contexts leads to classical utopian visions that are underneath remarkably similar to each other. But in fact surprisingly, Constant Nieuwenhuys's *New Babylon* already anticipated this pitfall. Nieuwenhuys was a member of the Situationist International, a group of artists, activists and writers who developed a radical—perhaps *the* most radical—critique of modernism. Radically opposed to the authoritarian and stifling tendencies of high modernism in the arts and urbanism, the Situationists claimed forcefully that the art of life itself—and indeed the art of anti-authoritarianism—lay precisely in the deliberate creation of situations (Knabb, 2006: p. 178). Put concisely, 'situations' in the full-blown Situationist sense are real life circumstances that subvert, contextualize, overthrow, and surpass the everyday

state of affairs in a prototypical modern society. Their famous motto, ‘below the pavement, the beach’, encapsulates the disruptive potential of creating situations as opposed to giving in to the stifling, top-down demands of the modernist grid—the epitome of spatial orderliness, a reflection of post-war society with its emphasis on control, prediction, and regulation:

Both [Dadaists and Surrealists] wanted to release the anarchistic imagination of art into society and thereby disrupt the rigid separation of art, fantasy and everyday life. The Situationists wished to continue this project. They wanted to reject the capitalist-bourgeois world in favour of the reality and authenticity that found expression in radical subjectivity. (Rasmussen and Jakobsen, 2011: p. 86)

In line with their emphasis on spontaneity and a 1960s-style utopia that everyone could create for themselves, the Situationists defined the science of *psychogeography*: that is, the skill of traversing the modern environment and capitalizing on its potentials for play, spontaneity, and unpredictability.¹⁸ The Situationists saw the modernist city, and in particular its central concept of utility, as a thinly-veiled ideological instrument of control, aimed at controlling the middle class, and stupefying society into an uncritical acceptance of the socio-economic *status quo*. ‘We have to constantly defend ourselves from the poetry of the bards of conditioning—to jam their messages, to turn their rhythms inside out’, as Atilla Kotányi and Raoul Vaneigem put it in their *Program for Unitary Urbanism* (Knabb, 2006: p. 87)—thereby almost echoing Plato’s distrust of poets. The Situationists might seem to exaggerate occasionally, but according to their own methodology, it’s precisely exaggeration that’s required to stimulate and enable the *Gestalt*-shift required for creative piety. Merely responding to the demands of everyday life is not enough to overcome it, instead creation itself had

¹⁸ The group’s journal *Internationale Situationniste*, issue 9 (1964) included a completed ‘questionnaire’ of frequently asked questions. The response to the question ‘Are the Situationist positions utopian?’ is entirely typical of the mindset of the movement:

Reality is superseding utopia. There is no longer any point in projecting imaginary bridges between the wealth of present technological potentials and the poverty of their use by the rulers of every variety. We want to put the material equipment at the service of everyone’s creativity, as the masses themselves always strive to do in revolutionary situations. It’s simply a matter of coordination or tactics. Everything we deal with is realizable, either immediately or in the short term, once our methods of research and activity begin to be put in practice. (Knabb, 2006: pp. 179–180)

to take centre stage (Knabb, 2006: p. 452). Another core maxim of the situationist movement was the conviction that imagination is a capacity that must be conquered, but arguably, must also be cultivated and trained. The Situationists were adamant in their synoptic critique of modern life—including politics and art—and their analyses are today as relevant as they were in the 1960s. What the Situationists realized is that every form of organized activity has a strong and almost irresistible tendency to turn into rigid social hierarchy, professionalism, the apathetic acceptance of the *status quo* (Pinder, 2011: chs. 5 and 7; Plant, 2000: p. 22) and the death of genuine creativity. This line of thinking significantly overlaps with the views of Bakunin, Kropotkin, and Thoreau.

Certainly, many of the utopian proposals made during the 1970s and 1980s would have been rejected by the Situationists, because they unwittingly reproduced not only the mistakes of the past in a different context, but also the constricting thought-shapers and limiting beliefs that underlie these schemes. It's not so much that an outright mistake is replicated, but that the very beliefs and attitudes that gave rise to the mistake are left undiagnosed. And this constitutes the eighth lesson of our survey of classical utopias, (*lesson 8*), namely, that classical utopian ideas often do not question the *status quo* radically enough: they replicate the very thought-shapers that make the existing situation problematic. A clear yet tragic example can be found in the development of *the green movement*. As a response to widespread ecological degradation, the green movement took shape during the 1970s. We've mentioned Arcosanti already above; but as the urgency for new forms of living gradually became apparent, green building became a topic all by its own. Yet again, aided by the lure of newer building technology, the green movement developed along two tracks: one track was again technology-oriented, with an emphasis on LEEDS-certification or process-based approaches like Cradle2Cradle, while the other track was focused on inventing design principles for new forms of urbanism. The work of Timothy Beatley (Beatley, 2000) on new cities, Ecological Urbanism (Lehmann, 2010; Mostavafi, 2006; Duany, 2016; Register, 2006), Sustainable Urbanism (Farr, 2008), as well as Landscape Urbanism (Waldheim, 2016), all fall into this large, but divergent group. Contemporary visions of the city as, for example, presented by The Why Factory (Maas et al., 2009) can be included in this category as well. As an intellectual current, the green movement was and is sorely needed. But when it

comes to overcoming the situation that causes ecological degradation, it will not suffice to start driving electric cars, install PV panels, recycle construction materials, and make plantings that are bee-friendly. Valuable as such initiatives are, they are merely reactive and indeed reactionary. They do not address the global production system that causes damage at an unprecedented scale and speed. And in many cases, the production of high-performing materials is costly and uses often resources of which we have but a finite stock. The mechanical, constrictive thought-shaper that the green movement unwittingly accepted is an image of unchanging inevitability: that global advanced capitalism is here to stay, and that the best way to act is to balance or cancel its negative effects. A particularly notable example in this category is the 1995 masterplan 'Agronica' for Strijp, Eindhoven by Andrea Branzi. A proposal for a new, agrarian-urban landscape fuelled by automation, and loosely reminiscent of Broadacre City, it looks and indeed functions like one of Mondrian's painting come alive.¹⁹ But as the Situationists had already seen, this attitude means that one stops too early, and that a true 'revolution of the heart' is effectively undermined or endlessly postponed. All too often, classical utopian thought becomes another expression of the culturally dominant views and unquestioned presuppositions.

By way of a summary, here are the eight lessons we've extracted from our critical analysis of classical utopias, especially as proposed by visionary architects.

(Lesson 1) Utopian thought must not be based on ideals of unconstrained communitarian surveillance and coercive authoritarian and/or moralistic control.

(Lesson 2) Utopian thought must not simply uncritically extrapolate current trends endlessly into the future, because this inevitably leads to a repetition of earlier mistakes in a superficially new format.

(Lesson 3) Utopian thought must not restrict itself to high-level abstractions and top-down proposals, especially including 'seeing like a State,' because doing so will inevitably impose a destructive, and deforming 'idealizing grid' on social

¹⁹ The animation of Agronica in action can be viewed on YouTube, available online at URL = <<https://www.youtube.com/watch?v=VhfjHhhxSZc>>.

institutions and individuals alike.

(*Lesson 4*) Utopian thought must avoid an endless postponement of effective measures, and an uncritical, quietist belief in inevitable, step-by-step progress must be avoided as well, especially for the sake of those who are *now* oppressed and suffering.

(*Lesson 5*) Utopian thought must recognize that the collective demand for conformity or cooperation has absolute limits and cannot be used as an excuse to coerce, harm, or otherwise oppress people, thereby violating the obligation to treat people with sufficient respect for their human dignity.

(*Lesson 6*) Utopian thought must recognize that good intentions often prioritize one feature or aspect of an overall vision or worldview over all others—sometimes even unintentionally. In the case of the high modernist utopian movement, technology was viewed as the instrument to overcome the finitude of the human condition and the living conditions of the 19th-century metropolis.

(*Lesson 7*) Utopian thought often repeats mistakes from the past but commits them in importantly different settings and different cultural climates, thereby obfuscating the recognition of their presence.

(*Lesson 8*) Utopian thought often does not question the *status quo* radically enough, and unwittingly replicates the very thought-shapers that make the existing situation problematic.

Many of these lessons are closely interlinked with one another. For instance, cases in which current trends are uncritically extrapolated typically lead to the replication of mechanical, constrictive thought-shapers. Another point that's crucial to emphasize here is that all truly adequate utopian thought requires a very careful balancing between individual and collective interests. We propose to start with a revolution of the heart in every human person, enabled by the practice of creative piety. In the next section, we describe what kind of world this could lead us into.

4. ENVISIONING A CONCRETE, REALISTIC NEO-UTOPIA: THE COSMOPOLIS

I once heard an astronaut describe his trip to space. At first he saw individual countries, then continents, bound by oceans. When he went high enough, he could see only one world. Do we all need to go to the moon to understand that we live together in one interconnected world where peace can be found? (N'Simbo, 2016: p. 12)

To bring the sun, the wind, the earth, indeed the world of life, back into technology, into the means of human survival, would be a revolutionary renewal of man's ties to nature. To restore this dependence in a way that evoked a sense of regional uniqueness in each community ... would give this renewal a truly ecological character. (Bookchin 2018, p. 76)

From the *Timaeus* forward, there's been no shortage of classical utopian ideas and utopian sociopolitical visions—on the contrary, there's been a regular flow of them, era by era, coming and going—some of which we've just discussed. Hence we must not merely add yet another (neo)classical utopian vision to this already impressive, yet also already dated, list. In this final section, therefore, we apply the eight lessons learned in section 3, and provide an organic, generative action-schema, in the style of Bakunin, Kropotkin, and Warren, (i) that provides a do-it-for-ourselves revolutionary reorientation in our thinking, affect or emotion, and action, (ii) that's also a nonviolent, peaceful revolutionary reorientation, (iii) that everyone, everywhere can practice immediately, regardless of their identity-group characteristics—age, ability/disability, economic or social class, ethnicity/race, gender/sexual preference, language, nationality, etc., etc.—(iv) that's also fully grounded in broadly and radically Kantian dignitarianism, creative piety, and the neo-organicist worldview, and (v) that begins to create and sustain the Cosmopolis, our global garden.

As always, creative piety is triggered by our acknowledgment of a vivid organic, generative thought-shaper: for example, what we'll call *The Schematic Blue Marble*. By that, we mean that when the Earth is represented schematically *and also* as it would be viewed from outer space by any thoughtful person, its essential topology as an organic system is rationally self-evident: it's a finite but unbounded (i.e., borderless) spherical, unified, organic totality, with every part of its surface continuously and indeed complementarily and non-locally (in the quantum mechanics sense) related to every other part:

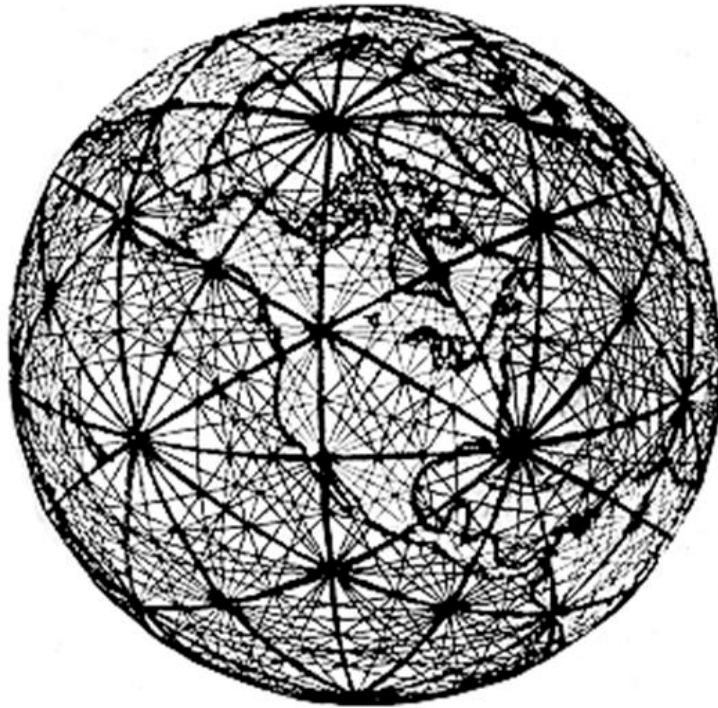


Figure 3: The Schematic Blue Marble (cf. Figure 1 above).

Humankind is *shaped* by that essential topology, although most people are not reflectively aware of this. But, when we're viewing The Schematic Blue Marble with creative piety, we can acknowledge the following triadic series of embedded macrocosmological \rightarrow microcosmological structures with broken symmetry. **First**, the cosmos as a whole is an *infinite*—according to Cantor's Continuum Hypothesis, not only non-denumerably and transfinitely infinite, with the cardinality of the real numbers, but also only-denumerably infinite, with the cardinality of the natural numbers, and no other kind of infinity in between—and *unbounded* rubber-sheet spatial continuum (Hanna, 2022: appendices 1-4). **Second**, the Earth is a *finite* but *unbounded* sphere, covered and filled with organismic living systems and other processual, purposive, and self-organizing nonequilibrium thermodynamic systems. And **third**, we're *finite* and *bounded* minded living organisms, by virtue of our essential embodiment. So for any thoughtful person who's observing the Earth from outer space, what's meta-cognizable by means of creative piety is *the Earth-shaped unity* of humankind, our languages, our climate, our common existence, and our common fate, and also how all of these essentially embedded in a spatiotemporally infinite and

unbounded rubber-sheet cosmos.

Nevertheless, our creatively pious acknowledgment of a vivid organic, generative thought-shaper like *The Schematic Blue Marble*, although necessary for neo-utopian thinking, feeling, and acting, is *not alone sufficient* for them:

Images of the Earth seen from moon exploration vehicles produced a new idea of the planet as a single, unified entity. This might be expected to produce holistic thinking about the environment of what appeared a rather beautiful, unique globe of blue and green, spinning in space. But this nice image does not assist the localized campaigns of activists in poor countries for whom the planet is not whole but divided into the property of those with wealth, and the habitat of those who lack it. (Miles 2008, p. 95)

In order to mediate between an organically-and-generatively thought-shaped ‘new idea of the planet as a single, unified entity’, as acknowledged by creative piety, and the localized campaigns of activists in poor countries for whom the planet is not whole but divided into the property of those with wealth, and the habitat of those who lack it, what’s needed are (i) a set of increasingly specific transitional organic, generative thought-shapers and shaped thoughts that lead us closer and closer to real-world contexts, and then (ii) a set of concrete organic, generative action-schemata that collectively yield a particularized neo-utopian action-plan for creating and sustaining the *Cosmopolis*.

As to (i)—i.e., a set of increasingly specific transitional organic, generative thought-shapers and shaped thoughts that leading us closer and closer to real-world contexts—let’s now imagine a near-future civilization where the continuity of the Earth is what truly ties us all together. Civilization itself is built around this maxim: what happens to one of us, happens to all of us. Our natural systems sustain us; the water, the soil, the vegetation, the resources and the ecosystems that they form are the substrate from which we evolved. The cosmos has a dignity of its own, and we are part of it. We teach people to look meditatively at the night sky, just as we teach them to be considerate when they buy new goods. Our cosmos is the metaphysical ground of all rational human animals, including our consciousness, our free agency, and our dignity; and, insofar as we’re unconditionally morally obligated to treat all people with sufficient respect for their human dignity, so too we’re unconditionally morally obligated to treat the cosmos, and especially our natural or physical environment here on Earth, with

sufficient respect for its proto-dignity, never treat it like a mere means or a mere thing, and always treat it in ways that are fully consistent with sufficient respect for human dignity. That's why we overhauled the old cities and conurbations, premised as they were on growth, control, industrial production, and the triumph of infrastructure over nature. We dismantled the concrete jungles and artificial wastelands in order to realize places where human animals, other kinds of animals, and plants can thrive. Green fingers protrude into every neighborhood, providing places to play, read, grieve, party, meet, and reflect. As we get older, our preferences change, and we made cities that accommodate those changes. In-between the houses and building blocks are places of silence, revered by all. In changing the ways that we inhabit the Earth, we changed something about the way we consume. We produce less and less waste. If something can be reused, it will be reused. Overproduction is seen as a transgression against efficacious living. So, what we teach our children nowadays is that a bigger house, a bigger car, and more money, means more waste, less room for nature, and less satisfaction of true human needs in the long run.

According to this imaginative vision, we are gradually making the shift towards a society that's focused on longevity and health, than on immediate consumption and greed. Of course, this process is difficult, and there are many who do not wish to discard the old economic models. The biggest step, however, has already been taken: slowly to overhaul the malfunctioning political systems in which captains of industry could freely lobby for their interests at the expense of everybody else. If we all inhabit the Earth, it is our home, our commons. If someone tries to take that away from us by force, we have no choice but to defend ourselves with a minimally sufficient and meditatively disciplined counterforce—as it were, like Seven Kantian Samurai (Hanna and Paans, 2019). And if we focus on the Earth and the innate beauty of our surroundings, we see that the things close by are as beautiful as the things far off. Yes, we still travel and explore, but we have heavily invested in teaching people local and regional appreciation. Small, regional communities flourish, as the large States, premised on centralized control and the accumulation of territories dwindle and gradually lose power and authority. In the current state of affairs, they have nothing relevant to say any longer. They failed at addressing global warming with ineffective summit meetings, they organized devastating wars, and they kept economies going that

should have been bankrupt decades ago. Global pandemics and resource shortages signalled the final nail in their coffin: most of their measures were focused on power, control, and order, even in situations in which it was painfully clear that their instruments and ways of thinking were outdated.

So, now *the region* has superseded *the State*. Whatever semblance of unity and bulwark against regression to a mythical Hobbesian state-of-nature, ‘the war of all against all,’ that the State once purported to provide by means of coercive authoritarianism is gone, frowned upon by various regional communities, who can manage their own affairs together with representatives who live close by and who must live with the consequences of their choices. The appreciation of local and regional identities has led to a change in circulation patterns: in general, people stay close to home most of the time. The 20th century was built on the idea of a universal architecture around the globe, on 24/7 internet access, on consumer patterns tailored to the demands of instant enjoyment. The 21st century now slowly effectuates a change: it slows down, and is focused on preservation and quality of life, rather than quick consumption of perishable goods. Circulation-patterns have radically changed, and instead of having a ‘rush hour’ every day, we have divided manual and non-distanced office or service labor in such a way that many distances can be walked or cycled. This new type of planning has already resulted in a healthier population, more social contacts, less obesity, and a longer life expectancy. Moreover, the air quality has increased significantly, smog has subsided, and slowly but surely, natural areas are recovering. Mobility is mainly electrically powered, fueled by various sources of renewable energy that form a thoroughly decentralized system. Our economy has changed as a consequence. Instead of an interconnected global system by which we were all tethered to an ever-increasing mountain of debts, we decoupled all economies above the regional scale where this was possible. There are some global industries left, but they are not nearly as numerous as they used to be. Consequently, we do not have to reckon with the interests of global corporations as a central concern of humanity, because their influence has radically decreased. Indeed, the word ‘corporate’ is less and less used, thoroughly tainted as it is by the economic excesses of the late 20th and early 21st centuries.

Economies are now organized with circulation and re-use in mind. Moreover, we think about economy now in terms that are broader than just profit, margins,

and growth. Instead of a ‘Gross National Product’, we use ‘Gross Regional Happiness’ as the main key performance indicator of our economies. When economic measures do not contribute to climatic, societal and individual wellbeing, as well as regional resilience and strength, they are discarded or adapted until a satisfactory alternative is found. The job market has been reformed along similar lines. Jobs should contribute to the vitality of the community and should be as satisfying as possible. Of course, there are tasks that are repetitive or necessary, but these are performed only on a part-time basis, and those performing them enjoy respect. However, excessive reliance on heavy or intensive labor is drastically reduced, and if possible, altogether prevented. Instead, people are encouraged to pursue what is meaningful for them, be it family life, artistic vocations, sports, or hobbies. If people wish to work a great deal, this can of course be accommodated, but the main point is that no one needs to work excessively long hours out of need alone.

This policy goes hand in hand with morally-guided automation and the correspondingly guided development of remote services. Digital and other kinds of technology play an essentially supportive, dignitarian role in daily life. Wisely constraining the global influence of social media worldwide, the monopoly of large tech firms has been broken up, with broad panels of stakeholders reviewing the effects that new digital tools and platforms exert on the wellbeing of the community. Communal wellbeing is also ensured by decentralizing social organization, and gradually dismantling a coercive ‘law-and-order’ system of authority in favor of local, unarmed police who know their neighborhoods well. In particular, security firms are reviewed and must prove that and how their services contribute to community safety. A leading idea here is the ‘local hands’ principle. Every police officer or security guard lives in the area where they are deployed, in order to ensure proportionality and the local support of this person’s authority. Social networks are the substrate of the community, and they stretch often over multiple adjacent regions. The idea is that there is some degree of social guardianship and protection, but without becoming intrusive, stifling, or oppressive. Sufficiently respecting human dignity is always the basic guideline, usually as embedded in larger communities. But if one wishes to live their life in relative seclusion, this is also sufficiently respected.

As to (ii)—i.e., translating our ideas into a concrete organic, generative action-

schemata that collectively yields a context-specific neo-utopian action-plan for creating and sustaining the Cosmopolis, our global garden—for the purposes of setting a preliminary agenda, let's perform a quick state-of-the-world checklist for early 2022: There is still an ongoing COVID-19 pandemic. A climate change disaster is fully underway worldwide. There is radical and increasing income disparity and poverty worldwide. Millions of global and internal refugees are indefinitely locked away in camps. Authoritarian and all-too-often racist police coercion in many states around the globe is on the rise, particularly in the West. The political elite is held less and less accountable for the often-disastrous decisions they take, thereby undermining the trust in democratic institutions. There is daily gun violence in the USA. Billions of people worldwide are working for almost their entire adult lives in boring, pointless, oppressive jobs in the global neoliberal advanced capitalist economy, like a veritable sickness unto death. So the question naturally arises:

Shall we realize a hell-on-Earth, or an Earthly neo-Eden?

Because, as per section 1 above, we're fully committed to a broadly and radically Kantian dignitarian moral and sociopolitical theory which says that everyone has absolute, non-denumerably infinite, intrinsic, objective value (i.e., dignity, *Würde*), and also that everyone should be treated with sufficient respect for their human dignity, and never treated like a mere means or like a mere thing, we vote for the latter. And to substantiate the visionary perspective we sketched out above, we've also designed a set of organic, generative action-schemata for doing it *in four days*—per week, that is.

During July 2021, Slavoj Žižek published an interesting and important essay, 'Last Exit to Socialism', about the impending ecological apocalypse that's caused by climate change and by humanly-created natural environmental damage and exploitation more generally (Žižek, 2021). This was followed a few weeks later by the release of a U.N.-sponsored Intergovernmental Panel on Climate Change report (IPCC, 2021), prominently highlighted in the *New York Times* (Plumer and Fountain, 2021), which nailed down the factual grounds for Žižek's claims. More specifically, Žižek cogently argued for (i) a robustly anthropocentric approach to ecophilosophy and (ii) immediate worldwide activism. We strongly endorse (ii), while also critically noting with regard to (i) that Žižek remains needlessly stuck in a *narrowly* anthropocentric approach to solving the climate crisis: we want a

world in which the non-anthropocentric is *also* an integral part of our lifeworld. What we'd *also* want to add to those theses, however, is what we call *cosmic dignitarianism*, as per section 1 above, which says (iii) that the all-inclusive natural or physical universe, i.e., the cosmos, together with its proto-dignity, is the metaphysical ground of all rational human animals, especially including our consciousness, our free agency, and our dignity; and, insofar as we're unconditionally morally obligated to treat all people with sufficient respect for their human dignity, so too we're unconditionally morally obligated to treat the cosmos, and especially our natural or physical environment here on Earth, with sufficient respect for its proto-dignity, never treat it like a mere means or a mere thing, and always treat it in ways that are fully consistent with sufficient respect for human dignity.

Reflecting on this four-part package—i.e., a broadly and radically Kantian dignitarian moral theory, a robustly anthropocentric approach to ecophilosophy, immediate worldwide activism, and cosmic dignitarianism—it then occurred to us that immediate worldwide action could be taken as follows: worldwide social movements would collectively compel their governments to create and implement a program we call *Global Dignity Days* (GDD). GDD would have three parts.

Part 1 would consist in implementing most if not all of the worldwide immediate actions recommended by climate scientists (IPCC, 2021; Plumer and Fountain, 2021), driven by worldwide social support.

Part 2 would consist in people 18 years of age and over, whether they currently have a wage-paying job or not, voluntarily agreeing (1) to their not working anywhere but at home²⁰ *for four days a week*, Thursday through Sunday (hence we call them the 'Global Dignity Days'), (2) to organizing their urban and rural settlements in such a way that staying very close to home, say, 2-3 miles is in itself rewarding, and stimulating local traveling habits by car/gas-powered transit only for essential purposes (grocery shopping or hospital visits, etc.) for those four days, every single week, and (3) more generally, to the extent that it's

²⁰ For the purposes of our argument in this section, we're using 'at home' in the broad sense that means "wherever someone is permanently or temporarily living." In that sense, even an otherwise homeless person, or a refugee, can be "at home" just by living *somewhere*. In any case, if all three parts of GDD were actually implemented, then no one would ever have to be homeless in *any* sense.

humanly possible, to avoiding any polluting or degenerative industrial production or any non-trivially environmentally damaging or exploitative activities at all for those four days, every single week. So, in a four-word phrase, GDD would mean *practicing green four-day weekends*.

Part 3 would consist in organizing tax systems in such a way that, in return for people's participation in GDD and for as long as they continued to participate, (4) to pay GDD participants a tax-free truly generous basic income, (5) to supply universal free adequate health care, (6) to give GDD participants and their dependents free college/higher education tuition, and also (7) to give the GDD participants financial tax-free supplements per day for any care-needing dependent, for example, children or elderly infirm parents, etc., they were looking after, for each of the four days they're participating in GDD per week, and above all, (8) to make it illegal for employers to lay off or cut the existing salaries of working people who choose to engage in GDD and would thereby be working somewhere other than at home for only three days per week—for example, Monday through Wednesday.

Furthermore, there would be two further broadly and radically Kantian dignitarian necessary conditions that must be satisfied in order for people to participate in GDD: (9) all GDD participants would personally commit to pursuing and sustaining non-violent practices and to *not* using force, especially including the *abolition* of owning, carrying, or using guns (Hanna, 2021g), and finally (10) for any GDD zone (town, city, area, region, etc.), the police in that zone would *also* be strictly required to pursue and sustain non-violent practices, and *not* to use force, especially including the use of guns, and *never* to engage in any bully-boy, “broken-windows”-sweeps-style, ‘up-against-the-wall-motherfucker’-style policing in that zone, 24-7. So, now in a five-word phrase, GDD would mean *practicing peaceful green four-day weekends*.

Obviously, actual nations and their governments, actual people, actual morality, and actual sociopolitics all being what they actually are, not everyone would choose to participate in GDD instantly; but we do think that a great many people, *would* choose to participate *soon*, or at least *eventually*, and, also, by democratic means, compel their governments to make it really possible for people everywhere to participate in GDD. We also think that, of all those people who do choose to participate, many of them would also quit their current wage-paying

jobs, precisely because those jobs are boring, pointless, oppressive, or all three, then get together with some other people doing the same thing, set up housekeeping, pool their GDD money, engage in doing various creative or otherwise productive, natural-environmental proto-dignity-respecting, human-dignity-respecting, non-wage-paying activities that they actually enjoy doing, or at least find it meaningful and valuable to do, and live much better lives. And we also think that if all three parts of GDD were implemented in some equivalent form or another, then this would simultaneously (i) significantly reduce environmental degradation and the rate of climate change to the tipping-point of indefinitely avoiding the impending ecological apocalypse, (ii) significantly slow down and reduce neoliberal capitalist production and its oppressions, (iii) provide truly generous universal basic income, healthcare, and higher education for any adult who chooses to participate in GDD, and thereby effectively end poverty and other morally scandalous sociopolitical inequalities, (iv) significantly reduce the further moral scandal and tragedy, particularly in the USA, of daily gun violence (Hanna, 2021f), and above all, (e) significantly improve a great many people's well-being, especially including the dependents, children, aged infirm parents, etc., of the people who participate in GDD. Again, people participating in GDD could *still* work elsewhere than at home in industrial production jobs or in any other kind of wage-paying jobs, and could still freely travel, etc., *if they wanted to*, but only from Monday to Wednesday. But even if GDD participants *don't* work in wage-paying jobs, then they would still be working for their own sake and that of their families, and for the sake of the rest of human kind, at least four days a week, by sufficiently respecting the proto-dignity of the Earth's natural environment, and by sufficiently respecting everyone's human dignity.

Now, GDD could be paid for by vigorously taxing the wealthiest 1%, their property, and their corporations, by progressive ordinary taxes on the less-wealthy 99%, and by vigorously reducing military spending, worldwide. In view of the fairness of this system of raising money for GDD, and because participating in GDD would be strictly voluntary and fully non-coercive, and also because the necessary conditions for participating in GDD jointly express sufficient respect for human dignity, no one could *justifiably* complain that they're being discriminated against or unfairly treated, if they don't choose to participate in GDD. No one has a moral right to choose or do what's *not* sufficiently human-

dignity-respecting: for example, owning, carrying, or using a gun (Hanna, 2021f); or systematically carrying out brutal, oppressive activities on behalf of coercive authoritarian social institutions.

Finally, here's the bottom line. According to the Bible, God created the world in seven days. But, providing that what we've written in this section is cogent, and provided that humankind acts immediately and worldwide by implementing all three parts of GDD, and whether God or any other kind of god exists or doesn't exist, then we really and truly can avoid the (self-inflicted) end of the world, and thereby save the world, in only four days. —Per week, that is; and we can do it simply by making it really possible for people everywhere to practice peaceful green four-day weekends.

CONCLUSION

Early Marx's aphorism, '[t]he philosophers have only *interpreted* the world in different ways; the point is to *change* it' (Marx, 1964: p. 69) is *half-right* and *half-wrong*. Yes, leaving aside Marx himself and a few other philosophical activists (Hanna, 2020b), philosophers have only ever variously *interpreted* the world. But no, the point *isn't* that philosophers should act upon the world directly and unreflectively, as if their actions were shot out of a revolutionist's rifle, and as if radical change were always *very* simple and *very* straightforward. Indeed, as Paulo Freire has correctly pointed out, this attitude expresses a kind of shallow activism that generally accomplishes very little, that typically repeats the worst repressive tendencies in morality and sociopolitics, and that all too easily slips back in zealotry, coercive moralism, and coercive authoritarianism (Freire, 1996). Instead, the point is that philosophers should critically and reflectively *shape the world*, by means of *shaping human thinking about the world* (Hanna and Paans, 2021), in ways that liberate and prime the individual and collective imagination, so that people, not only individually but also collectively and social-institutionally, can *shape and change their own lives* (Hanna, 2017b; Maiese and Hanna, 2019; Maiese et al., 2022), for the *better*, and then finally *act* in order to change the world in ways that sustain them and the social institutions they belong to.

So, not only must we cultivate our global garden—*il faut cultiver notre jardin mondial*—but also, we must know specifically *how* to do this for ourselves, thereby becoming *the vanguard* of a concrete, realistic, cosmopolitan neo-utopian project for creating and sustaining the Cosmopolis, our global garden. And that's what

we've tried to do in this essay, by presenting and then practicing creative piety. Accordingly, we'll conclude with a new thought-shaping image that encapsulates our overall argument:

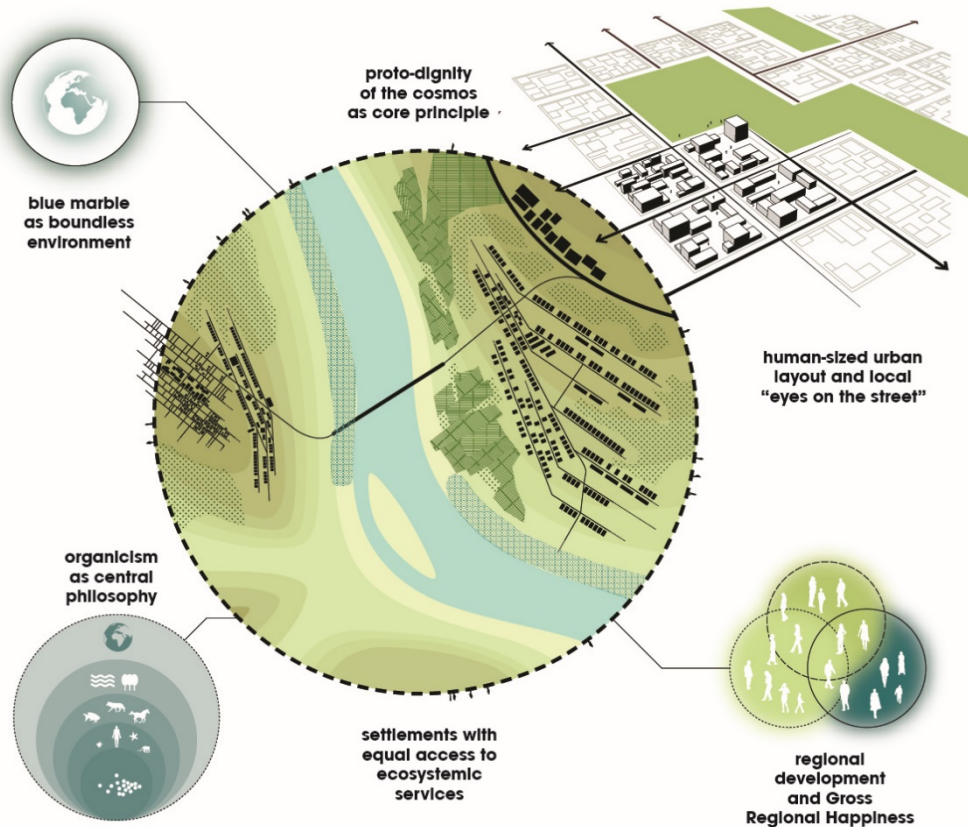


Figure 4: 'Cultivating Our Global Garden', by Otto Paans (2022).

Robert Hanna <bobhannahbobi@gmail.com>

Otto Paans ocpaans@gmail.com

REFERENCES

- (AIAA, 2014). AIAA Aerospace Research Central, 'The Overview Effect: Space Exploration and Human Evolution, Third Edition, by Frank White', available online at URL = <<https://arc.aiaa.org/doi/book/10.2514/4.103223>>
- (Alexander, 1939). Alexander, S., 'Natural Piety', in S. Alexander, *Philosophical and Literary Pieces*, London, Macmillan, 299-315.

- (Anderson, 2014). Anderson, R., *Metropolisarchitecture: Ludwig Hilberseimer*, New York, Columbia Univ. Press/GSAPP Books.
- (Attfield 2014). Attfield, R., *Environmental Ethics: An Overview for the Twenty-First Century*, Cambridge, Polity Press.
- (Bachelard, 2002). Bachelard, G., *The Formation of the Scientific Mind*, trans. M. MacAllester Jones, Manchester UK, Clinamen Press.
- (Bakunin, 1882/1916). Bakunin, M., *God and the State*, trans. B.R Tucker, New York, Mother Earth Publishing Assoc., available online at URL = <https://www.marxists.org/reference/archive/bakunin/works/godstate/index.htm>.
- (Bakunin, 2010) Bakunin, M., *Selected Writings from Mikhail Bakunin*, St. Petersburg FL: Red and Black Publishing.
- (Banham, 1970). Banham, R., *Theory and Design in the First Machine Age*, New York, NY: Praeger Publishers.
- (Barnes, 2011). Barnes, J., 'A Candid View of *Candide*', *The Guardian*, 1 July, available online at URL = <https://www.theguardian.com/books/2011/jul/01/candide-Voltaire-rereading-julian-barnes>.
- (Beatley, 2000). Beatley, T., *Green Urbanism: Learning from European Cities*, Washington, Island Press.
- (Bernal, 1967). Bernal, J.D., *The Origin of Life*, London: Wiedenfeld and Nicolson.
- (Berners-Lee, 2021). Berners-Lee, M., *There is no Planet B: A Handbook for the Make or Break Years*. Cambridge: Cambridge Univ. Press.
- (Blake, 1794). Blake, W., 'London', in W. Blake, *Songs of Experience*.
- (Bohm, 1952). Bohm, D., 'A Suggested Interpretation of the Quantum Theory in Terms of "Hidden" Variables, I and II', *Physical Review*, 85(2), 166–193.
- (Bohm, 1982). Bohm, D., *Wholeness and the Implicate Order*, New York: Routledge.
- (Bohm and Hiley, 1975). Bohm, D. and Hiley, B., 'On the Intuitive Understanding of Nonlocality as Implied by Quantum Theory', *Foundations of Physics*, 5, 93-109.
- (Bond, 1980). Bond, H.L. (ed.), *Symeon the New Theologian: The Discourses*, New York, The Paulist Press.
- (Bone, 2014). Bone, K. (ed.), *Lessons from Modernism: Environmental Design Strategies in Architecture 1925–1970*, New York, The Monacelli Press.
- (Bookchin, 2018). Bookchin, M., *Post-Scarcity Anarchism*, Edinburgh, AK Press.
- (Boolos and Jeffrey, 1989). Boolos, G. and Jeffrey, R., *Computability and Logic*, 3rd edn., Cambridge: Cambridge Univ. Press.
- (Bregman, 2020). Bregman, R., *Humankind: A Hopeful History*, trans. E. Manton and E.

- Moore, New York, Little, Brown and Company.
- (Camus, 1955). Camus, A., *The Myth of Sisyphus and Other Essays*, trans. J. O'Brien, New York, Vintage.
- (Camus, 1956). Camus, A., *The Rebel*, trans. A. Bower, New York, Vintage.
- (Cantor, 1891). Cantor, G., 'Ueber eine elementare Frage der Mannigfaltigkeitslehre.' *Jahresbericht der Deutschen Mathematiker-Vereinigung*, 1, 75–78.
- (Cantor, 2019). Cantor, G., 'A Translation of G. Cantor's "Ueber eine elementare Frage der Mannigfaltigkeitslehre"', trans. P.P. Jones et al., 23 August, available online at URL = https://www.researchgate.net/publication/335364685_A_Translation_of_G_Cantor%27s_Ueber_eine_elementare_Frage_der_Mannigfaltigkeitslehre.
- (Chomsky, 2005). Chomsky, N., *On Anarchism*, Oakland CA, AK Press, available online at URL = <https://libcom.org/files/1345266991261.pdf>.
- (Church, 1936). Church, A., 'An Unsolvable Problem of Elementary Number Theory,' *American Journal of Mathematics*, 58, 345–363.
- (Conrads, 1970). Conrads, U. (ed.), *Programs and Manifestoes on 20th Century Architecture*, Cambridge MA, MIT Press.
- (Dammbeck, 2003). Dammbeck, L. (dir.), *The Net: The Unabomber, LSD, and the Internet (Das Netz)*, available online at URL = https://archive.org/details/DasNetz_LutzDammbeck.
- (Devlieger, 2014). Devlieger, L., Cahn, L., and Gielen, M., *Behind the Green Door: A Critical Look at Sustainable Architecture through 600 Objects*, Oslo, Oslo Architecture Triennale/Rotor.
- (Duany, 2016). Duany, A., 'A General Theory of Ecological Urbanism,' in M. Mostafavi (ed.), *Ecological Urbanism*, Zürich, Lars Müller Publishers, 436–441.
- (Eliot, 1920). Eliot, T.S., 'Hamlet and His Problems,' in T.S. Eliot, *The Sacred Wood: Essays on Poetry and Criticism*, New York, Alfred A. Knopf, 55-59.
- (Etinson, 2020). Etinson, A., 'What's So Special about Human Dignity?', *Philosophy and Public Affairs*, 48, 353-381.
- (Farr, 2008). Farr, D., *Sustainable Urbanism: Urban Design with Nature*, Hoboken NJ, John Wiley and Sons.
- (Feniak, 2022). Feniak, H., 'Why It's Wrong to Call Ricardo Bofill's Architecture "Dystopian"', *Architizer*, available online at URL = <https://architizer.com/blog/inspiration/stories/ricardo-bofill-utopian-dystopia/>.
- (Fishman, 1982). Fishman, R., *Urban Utopias in the Twentieth Century*, Cambridge MA: MIT Press.

- (Fleck, 1979). Fleck, L., *Genesis and Development of a Scientific Fact*, trans. T.J. Trenn and F. Bradley, Chicago IL, Univ. of Chicago Press.
- (Foucault, 1972). Foucault, M., *The Archaeology of Knowledge & The Discourse on Language*, trans. A.M. Sheridan Smith, New York, Pantheon.
- (Frampton, 2006). Frampton, K., *Moderne Architectuur: Een Kritische Geschiedenis*, trans. H. Hoeks, Amsterdam, SUN.
- (Freire, 1996). Freire, P., *Pedagogy of the Oppressed*, trans. M.B. Ramos, London, Penguin.
- (Giesemann and Ungers, 1960). Giesemann, R. and Ungers, M.O., 'Towards a New Architecture', trans. M. Bullock, in (Conrads, 1970, 165-166).
- (Gödel, 1967). Gödel, K., 'On Formally Undecidable Propositions of Principia Mathematica and Related Systems', in (Van Heijenoort, 1967, 596-617).
- (Goldstein, 2017). Goldstein, S., 'Bohmian Mechanics' in E.N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Summer Edition, available online at URL = <<https://plato.stanford.edu/archives/sum2017/entries/qm-bohm/>>.
- (Gray, 2018). Gray, J., *Reading Broadacre*, available online at URL = <<https://franklloydwright.org/reading-broadacre/>>.
- (Habermas, 1981). Habermas, J., *The Theory of Communicative Action*, trans. T. McCarthy, 2 vols., Boston MA, Beacon Press.
- (Hanna, 2006a). Hanna, R., *Rationality and Logic*, Cambridge MA, MIT Press.
- (Hanna, 2006b). Hanna, R., 'Rationality and the Ethics of Logic'. *Journal of Philosophy*, 103, 67-100.
- (Hanna, 2015a). Hanna, R., *Cognition, Content, and the A Priori: A Study in the Philosophy of Mind and Knowledge*, THE RATIONAL HUMAN CONDITION, Vol. 5, Oxford, Oxford Univ. Press.
- (Hanna, 2015b). Hanna, R., 'Transcendental Normativity and the Avatars of Psychologism', in A. Stati (ed.), *Husserl's Ideas I: New Commentaries and Interpretations*, Berlin, De Gruyter, 51-67.
- (Hanna, 2015c). Hanna, R., 'A World With Persons But Without Borders', *Oxford University Press Blog*, 11 October, available online at URL = <<http://blog.oup.com/2015/10/kant-global-refugee-crisis/>>.
- (Hanna, 2016). Hanna, R., 'Radical Enlightenment: Existential Kantian Cosmopolitan Anarchism, With a Concluding Quasi-Federalist Postscript', in D. Heidemann and K. Stoppenbrink (eds.), *Join, Or Die: Philosophical Foundations of Federalism*, Berlin, De Gruyter, 63-90.
- (Hanna, 2017a). Hanna, R., 'Exiting the State and Debunking the State of Nature', *Con-Textos Kantianos*, 5, 167-189, available online at URL = <<https://www.con->

- textoskantianos.net/index.php/revista/article/view/228>.
- (Hanna, 2017b). Hanna, R., 'Life-Changing Metaphysics: Rational Anthropology and its Kantian Methodology', in G. D'Oro and S. Overgaard (eds.), *The Cambridge Companion to Philosophical Methodology*, Cambridge, Cambridge Univ. Press, 201-226.
- (Hanna, 2018a). Hanna, R., *Deep Freedom and Real Persons: A Study in Metaphysics*, THE RATIONAL HUMAN CONDITION, Vol. 2., New York, Nova Science.
- (Hanna, 2018b). Hanna, R., *Kantian Ethics and Human Existence: A Study in Moral Philosophy*, THE RATIONAL HUMAN CONDITION, Vol. 3., New York, Nova Science.
- (Hanna, 2018c). Hanna, R., *Kant, Agnosticism, and Anarchism: A Theological-Political Treatise*, THE RATIONAL HUMAN CONDITION, Vol. 4, New York, Nova Science.
- (Hanna, 2020a). Hanna, R., 'On Rutger Bregman's *Humankind: Optimism For Realists, Or, Neither Hobbes Nor Rousseau*', Unpublished MS, available online at URL = https://www.academia.edu/43631182/On_Rutger_Bregmans_Humankind_Minor_revisions_22_September_2020 >.
- (Hanna, 2020b). Hanna, R., 'How to Philosophize with a Hammer and a Blue Guitar: Quietism, Activism, and The Mind-Body Politic', *Borderless Philosophy*, 3, 85-122, available online at URL = <https://www.cckp.space/single-post/2020/06/04/BP3-2020-How-to-Philosophize-with-a-Hammer-and-a-Blue-Guitar-Quietism-Activism-and-The-Mind-Body-Politic-pp-85-122>>.
- (Hanna, 2020c). Hanna, R., 'The Kant Wars and The Three Faces of Kant', *Contemporary Studies in Kantian Philosophy*, 5, 73-94. Available online at URL = <https://www.cckp.space/single-post/2020/06/15/CSKP5-2020-The-Kant-Wars-and-The-Three-Faces-of-Kant>>.
- (Hanna, 2021a). Hanna, R., *The Fate of Analysis: Analytic Philosophy From Frege to The Ash-Heap of History*, New York, Mad Duck Coalition.
- (Hanna, 2021b). Hanna, R., 'Ultimate Nocebos', Unpublished MS, available online at URL = https://www.academia.edu/62111258/Ultimate_Nocebos_November_2021_version >.
- (Hanna, 2021c). Hanna, R., 'The State, Advanced Capitalism, Paleo-Capitalism, and Paleo-Private Property', Unpublished MS, available online at URL = https://www.academia.edu/62755129/The_State_Advanced_Capitalism_Paleo_Capitalism_and_Paleo_Private_Property_December_2021_version >.
- (Hanna, 2021d). Hanna, R., 'The New Conflict of the Faculties: Kant, Radical Enlightenment, The Hyper-State, and How to Philosophize During a

- Pandemic', *Con-Textos Kantianos*, 13, 209-233. Available online at URL = <https://www.con-textoskantianos.net/index.php/revista/article/view/582/955>>.
- (Hanna, 2021e). Hanna, R., 'Our Sociable Sociality: A Postscript to *The Mind-Body Politic*', *Borderless Philosophy*, 4, 57-96. Available online at URL = <https://www.cckp.space/single-post/bp4-2021-robert-hanna-our-sociable-sociality-a-postscript-to-the-mind-body-politic>>.
- (Hanna, 2021f). Hanna, R., 'A Theory of Human Dignity', Unpublished MS, available online at URL = https://www.academia.edu/44826196/A_Theory_of_Human_Dignity_January_2021_version >.
- (Hanna, 2021g). Hanna, R., 'Gun Crazy: A Moral Argument For Gun Abolitionism', Unpublished MS, available online at URL = https://www.academia.edu/61516955/Gun_Crazy_A_Moral_Argument_For_Gun_Abolitionism_May_2022_version .
- (Hanna, 2022). Hanna, R., *The Philosophy of the Future: Uniscience and the Modern World*, Unpublished MS, available online at URL = https://www.academia.edu/62653411/THE_PHILOSOPHY_OF_THE_FUTURE_Uniscience_and_the_Modern_World_2022_version >.
- (Hanna and Maiese, 2009). Hanna, R. and Maiese, M., *Embodied Minds in Action*, Oxford, Oxford Univ. Press.
- (Hanna and Paans, 2019). Hanna, R. and Paans, O., 'On the Permissible Use of Force in a Kantian Dignitarian Moral and Political Setting, Or, *Seven Kantian Samurai?*', *Journal of Philosophical Investigations*, 13, 75-93, available online at URL = https://philosophy.tabrizu.ac.ir/article_9431.html>.
- (Hanna and Paans, 2020). Hanna, R. and Paans, O., 'This Is The Way The World Ends: A Philosophy of Civilization Since 1900, and A Philosophy of the Future', *Cosmos & History*, 16, 2, 1-53, available online at URL = <http://cosmosandhistory.org/index.php/journal/article/viewFile/865/1510> >.
- (Hanna and Paans, 2021). Hanna, R. and Paans, O., 'Thought-Shapers', *Cosmos & History*, 17, 1, 1-72, available online at URL = <http://cosmosandhistory.org/index.php/journal/article/view/923>>.
- (Hawkins and Allen, 1991). Hawkins, J.M. and Allen, R. (eds.), *The Oxford Encyclopedic English Dictionary*, Oxford, Clarendon/Oxford Univ. Press.
- (Heiser, 2015). Heiser, J., 'Peter Krauskopf: Künstlerhaus Bethanien', *Frieze*, 20, available online at URL = <https://www.frieze.com/article/peter-krauskopf>>.

- (Henry, 2021). Henry, J., 'Newton, the Sensorium of God, and the Cause of Gravity', *Science in Context*, 7 June, available online at URL = <https://www.cambridge.org/core/journals/science-in-context/article/abs/newton-the-sensorium-of-god-and-the-cause-of-gravity/B291C61C50623FEC5F4100CA69CoCBD2#>.
- (Hopkins, 2001). Hopkins, L.D., *The Logic of Making Plans*, Washington DC, Island Press.
- (Huxley, 2002). Huxley, T., 'On the Hypothesis That Animals are Automata, and Its History', in D. Chalmers (ed.), *Philosophy of Mind: Classical and Contemporary Readings*. New York, Oxford Univ. Press, 24-30.
- (IPCC, 2021). Intergovernmental Panel on Climate Change, 'AR6 Climate Change 2021: The Physical Science Basis', *IPCC*, 9 August, available online at URL = <https://www.ipcc.ch/report/ar6/wg1/>.
- (Jenkins, 2008). Jenkins, W., *Ecologies of Grace: Environmental Ethics and Christian Theology*, Oxford, Oxford Univ. Press.
- (Kant, 1996a). Kant, I., *Immanuel Kant: Religion and Rational Theology*, Cambridge: Cambridge Univ. Press.
- (Kant, 1996b). Kant, I., *Religion within the Boundaries of Mere Reason*, trans. A. Wood and G. di Giovanni, in (Kant, 1996a: pp. 57-215, Ak 6: 3-202).
- (Kant, 1996c). Kant, I., 'What Does It Mean to Orient Oneself in Thinking?', trans. A. Wood, in (Kant, 1996a: pp. 7-18, Ak 8: 133-146).
- (Kant, 1996d). Kant, I., *Critique of Practical Reason*, trans. M. Gregor, in I. Kant, *Immanuel Kant: Practical Philosophy*, Cambridge, Cambridge Univ. Press, 139-272.
- (Kant, 1997). Kant, I., *Critique of Pure Reason*, trans. P. Guyer and A. Wood, Cambridge, Cambridge Univ. Press.
- (Kant, 2000). Kant, I., *Critique of the Power of Judgment*, trans. P. Guyer and E. Matthews, Cambridge, Cambridge Univ. Press.
- (Kant, 2005). Kant, I., 'Remarks on the Observations on the Feeling of the Beautiful and the Sublime', trans. M. Cooley and P. Frierson, available online at URL = http://people.whitman.edu/~frierspr/kants_bemerkungen1.htm.
- (Kazin, 2012). Kazin, M., *American Dreamers: How the Left Changed a Nation*, New York, Vintage.
- (Kearns and Keller, 2007). Kearns, L. and Keller, C. (eds.), *Ecospirit: Religion, Philosophy and the Earth*, New York, Fordham Univ. Press.
- (Kimbell, 2009). Kimbell, L., *Design Practices in Design Thinking*, Proceedings of the European Academy of Management, Liverpool UK, document without page numbering.

- (Knabb, 2006). Knabb, K. (ed.), *Situationist International Anthology*, Berkeley CA, Bureau of Public Secrets.
- (Kropotkin, 2002). Kropotkin, P., *Anarchism: A Collection of Revolutionary Writings*, Mineola NY, Dover.
- (Kuch, 2019). Kuch, U. (ed.), *Das Diaphane: Architektur und ihre Bildlichkeit*, Bielefeld, Transcript Verlag.
- (Kuhn, 1970). Kuhn, T., *The Structure of Scientific Revolutions*, 2nd edn., Chicago IL, Univ. of Chicago Press.
- (Lehmann, 2010). Lehmann, S., *The Principles of Green Urbanism*, London, Routledge.
- (Lewandowsky et al., 2012). Lewandowsky, S. et al., 'Misinformation and Its Correction: Continued Influence and Successful Debiasing', *Psychological Science in the Public Interest*, 13, 106-131, available online at URL = https://dornsife.usc.edu/assets/sites/780/docs/12_pspi_lewandowsky_et_al_misinformation.pdf.
- (Lloyd Morgan, 1923). Lloyd Morgan, C., *Emergent Evolution*, London, Williams and Norgate.
- (Löwenheim, 1967). Löwenheim, L., 'On Possibilities in the Calculus of Relatives', in (van Heijenoort 1967: pp. 228–251).
- (Louridas, 1999). Louridas, P., 'Design as Bricolage: Anthropology meets Design Thinking', *Design Studies*, 20, 517-535.
- (Ludlow and Wallace, 2007). Ludlow, P. and Wallace, M., *The Second Life Herald: The Virtual Tabloid that Witnessed the Dawn of the Metaverse*, Cambridge MA, MIT Press.
- (Luibheit, 1987). Luibheit, C. (ed.), *Pseudo-Dionysius: The Complete Works*, New York NY, The Paulist Press.
- (Lynch, 1984). Lynch, K., *Good City Form*, Cambridge MA, MIT Press.
- (Maas et al. 2009). Maas, W., Sverdlow, A. and Waugh, E. (eds.), *Visionary Cities: 12 Reasons for Claiming the Future of Our Cities*, Rotterdam, NAI Publishers/The Why Factory.
- (Maiese and Hanna, 2019). Maiese, M. and Hanna, R., *The Mind-Body Politic*, London: Palgrave Macmillan.
- (Maiese et al., 2022). Maiese, M. et al., 'The Shape of Lives to Come', *Frontiers in Psychology Research Topics*, available online at URL = <https://www.frontiersin.org/research-topics/25439/the-shape-of-lives-to-come>.
- (Makkreel, 2021). Makkreel, R., 'Wilhelm Dilthey', in E.N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Spring Edition, available online at URL = <https://plato.stanford.edu/archives/spr2021/entries/dilthey/>.

- (Malherbe and Ferguson, 2006). Malherbe, A.J. and Ferguson, E. (eds. and trans.), *Gregory of Nyssa: The Life of Moses*, New York, HarperCollins.
- (Mallgrave and Goodman, 2011). Mallgrave, H. F. and Goodman, D., *An Introduction to Architectural Theory: 1968 to the Present*, Chichester UK, Wiley-Blackwell.
- (Maloney, 1992). Maloney, G.A. (ed.), *Pseudo-Macarius: The Fifty Spiritual Homilies and the Great Letter*, New York, The Paulist Press.
- (Marx, 1964). Marx, K., *Karl Marx: Selected Writings in Sociology & Social Philosophy*, trans. T.B. Bottomore, New York, McGraw-Hill.
- (Maurois, 1959). Maurois, A., 'The Sage of Ferney: An Appreciation', in (Voltaire, 1959: pp. 1-15).
- (Meyendorff, 1983). Meyendorff, J., *Byzantine Theology. Historical Trends and Doctrinal Themes*, New York, Fordham Univ. Press.
- (Michlewski, 2008). Michlewski, K., 'Uncovering Design Attitude: Inside the Culture of Designers', *Organization Studies*, 29, 373-392.
- (Miles, 2008). Miles, M., *Urban Utopias. The Built and Social Architectures of Alternative Settlements*, London, Routledge.
- (More, 1516/2000). More, T., *Utopia*, available online at URL = <https://www.gutenberg.org/files/2130/2130-h/2130-h.htm>.
- (Mostafavi, 2006). Mostafavi, M. (ed.), *Ecological Urbanism*, Cambridge MA, Harvard Univ. Press.
- (Muldoon, 2021). Muldoon, J., 'Facebook Is Now Meta. And It Wants to Monetize Your Whole Existence', *Jacobin*, 28 October, available online at URL = https://jacobinmag.com/2021/10/mark-zuckerberg-meta-facebook-rebrand-metaverse?mc_cid=55af04bf85&mc_eid=53b430cceo.
- (Nagel, 1986). Nagel, T., *The View From Nowhere*, Oxford: Oxford Univ. Press.
- (Nicholson and Dupré, 2018). Nicholson, D.J. and Dupré, J. (eds.), *Everything Flows: Towards a Processual Philosophy of Biology*, Oxford, Oxford Univ. Press.
- (Nishitani, 1983). Nishitani, K., *Religion and Nothingness*, Berkeley & Los Angeles CA, Univ. of California Press.
- (Nelson and Stoltermann, 2014). Nelson, H. and Stoltermann, E., *The Design Way: Intentional Change in an Unpredictable World*, Cambridge MA, MIT Press.
- (Nicolis and Prigogine, 1977). Nicolis, G. and Prigogine, I., *Self-Organization in Nonequilibrium Systems*, New York, Wiley.
- (Nyhan and Reifler, 2010). Nyhan, B. and Reifler, J., 'When Corrections Fail: The Persistence of Political Misperceptions', *Journal of Political Behavior*, 32, 303-330, available online at URL = <https://www.unc.edu/~fbaum/teaching/articles/PolBehavior-2010->

[Nyhan.pdf](#).

- (Otto, 1936). Otto, R., *The Idea of the Holy*, Oxford: Oxford Univ. Press/London, Humphrey Milford.
- (N'Simbo, 2016). N'Simbo, A., 'Forced From Home Launches in the Northeast', *ALERT: Médecins Sans Frontières/Doctors Without Borders*, 17, 12-13.
- (Paans, 2019). Paans, O., 'The Generic Eternal: Modernism, Alienation, and the Built Environment', *Borderless Philosophy*, 2, 207–256, available online at URL = <https://www.cckp.space/single-post/2019/06/01/bp2-2019-the-generic-eternal-modernism-alienation-and-the-built-environment-pp-207-256>>.
- (Paans, 2020a). Paans, O., 'Opening Up Towards the Non-Conceptual: From Kantian Judgment to Creative Oscillation', *Contemporary Studies in Kantian Philosophy*, 5, 116–131, available online at URL = <https://www.cckp.space/single-post/2020/06/15/cskp5-2020-opening-up-towards-the-non-conceptual-from-kantian-judgment-to-creative-oscill>>.
- (Paans, 2020b). Paans, O., 'Postmodernity and the Politics of Fragmentation', *Borderless Philosophy*, 3, 264-310, available online at URL = <https://www.cckp.space/single-post/2020/06/04/BP3-2020-Otto-Paans-%E2%80%9CPostmodernity-and-the-Politics-of-Fragmentation%E2%80%9D-264-310>>.
- (Paans and Ehlen, 2022). Paans, O. and Ehlen, B., 'Action-Shapers and Their Neuro-Immunological Foundations', *Frontiers in Psychology*, 15 July, available online at URL = <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.917876/full>.
- (Paans, 2022). Paans, O. 'Ontogenesis as Model for Design Processes', in D. Lockton, P.Lloyd, and S. Lenzi (eds.), *DRS2022: Bilbao*, available online at doi = [10.21606/drs.2022.280](https://doi.org/10.21606/drs.2022.280) .
- (Pinder, 2011). Pinder, D., *Visions of the City: Utopianism, Power and Politics in Twentieth-Century Urbanism*, London: Routledge.
- (Plant, 2000). Plant, S., *The Most Radical Gesture: The Situationist International in a Postmodern Age*, London, Routledge.
- (Plato, 1961). Plato, 'Timaeus', trans. B. Jowett, in Plato, *The Collected Dialogues of Plato*. Princeton NJ, Princeton Univ. Press, 1153-1211.
- (Plumer and Fountain, 2021). Plumer, B. and Fountain, H., 'A Hotter Future Is Certain, Climate Panel Warns. But How Hot Is Up to Us', *New York Times*, 10 August, available online at URL = <https://www.nytimes.com/2021/08/09/climate/climate-change-report-ipcc-un.html>>.

- (Potter, 1990). Potter, M., *Sets: An Introduction*, Oxford, Oxford Univ. Press.
- (Potter, 2000). Potter, M., *Reason's Nearest Kin: Philosophies of Arithmetic from Kant to Carnap*, Oxford, Clarendon/Oxford Univ. Press.
- (Prigogine, 1997). Prigogine, I., *The End of Certainty: Time, Chaos, and the New Laws of Nature*, New York: Free Press.
- (Prigogine and Stengers, 1984). Prigogine, I. and Stengers, E., *Order Out of Chaos*, New York: Bantam.
- (Qiang, 2009). Qiang, M., 'Eco-City and Eco-Planning in China: Taking an Example from *Caofeidian Eco-City*', in L. Qu, C. Yang, X. Hui, and D. Sepúlveda (eds.), *The New Urban Question: Urbanism Beyond Neo-Liberalism— 4th Conference of International Forum on Urbanism*, 511-520.
- (Rasmussen and Jakobsen, 2011). Rasmussen, M. B. and Jakobsen, J. (eds.), *Expect Everything, Fear Nothing: The Situationist Movement in Scandinavia and Elsewhere*, Copenhagen/Brooklyn NY, Nebula/Autonomedia Publishing.
- (Register, 2006). Register, R., *Ecocities: Rebuilding Cities in Balance with Nature*, Gabriola Island: New Society.
- (Rheinberger, 2013). Rheinberger, H.-J., *On Historicizing Epistemology*. Stanford CA, Stanford Univ. Press.
- (Rifkind, 2014). Rifkind, D., 'Reviewing Modernism Through the Lens of Sustainability', in K. Bone (ed.), *Lessons from Modernism: Environmental Design Strategies in Architecture 1925–1970*, New York, The Monacelli Press, 12–27.
- (Riskin, 2018). Riskin, J., 'Alive and Ticking', *Aeon*, 20 August, available online at URL = <<https://aeon.co/essays/can-animals-be-usefully-described-as-clockwork-machines>>.
- (Rittel, 1988). Rittel, H., *The Reasoning of Designers: Arbeitspapier zum International Congress on Planning and Design Theory*, Stuttgart, Schriftenreihe des Instituts für Grundlagen der Planung, Univ. Stuttgart.
- (Russell, 1971). Russell, B., 'Mathematical Logic as Based on the Theory of Types', in B. Russell, *Logic and Knowledge*, New York, G.P. Putnam's Sons, 59-102.
- (Sagan, 1994). Sagan, C., *Pale Blue Dot: A Vision of the Human Future in Space*, New York, Random House.
- (Saint Augustine, 1961). Saint Augustine, *Confessions*, trans. R.S. Pine-Coffin. Harmondsworth, Middlesex, UK, Penguin.
- (Sartwell, 2008). Sartwell, C., *Against the State: An Introduction to Anarchist Political Theory*, Albany NY, SUNY Press.
- (Schrödinger, 1944). Schrödinger, E., *What is Life? The Physical Aspect of the Living Cell*, Cambridge, Cambridge Univ. Press.

- (Scott, 1998). Scott, J.C., *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven CT, Yale Univ. Press.
- (Scruton, 2012). Scruton, R., *The Face of God: The Gifford Lectures 2010*, London, Bloomsbury.
- (Sellars, 1963). Sellars, W., 'Philosophy and the Scientific Image of Man', in W. Sellars, *Science, Perception, and Reality*, London, Routledge & Kegan Paul, 1-40.
- (Shelley, 1816). Shelley, P.B., *Alastor*, available online at URL = <http://www.online-literature.com/shelley_percy/2778/>.
- (Shelley, 2016). Shelley, P.B., *Percy Bysshe Shelley: Selected Poems and Prose*. London, Penguin.
- (Siegel, 2021). Siegel, E., 'William Shatner Cried Upon Returning From Space. The "Overview Effect" Explains Why', *Big Think*, 14 October, available online at URL = <<https://bigthink.com/starts-with-a-bang/william-shatner-space/>>.
- (Skolem, 1967a) Skolem, T., 'The Foundations of Elementary Arithmetic Established by Means of the Recursive Mode of Thought, Without the Use of Apparent Variables Ranging Over Infinite Domains', in (van Heijenoort, 1967: pp. 302-333).
- (Skolem, 1967b). Skolem, T., 'Some Remarks on Axiomatized Set Theory', in (van Heijenoort 1967: pp. 290-301).
- (Spearing, 2001). Spearing, A.C. (ed.), *The Cloud of Unknowing and Other Works*, London, Penguin.
- (Suwa and Tversky, 2003). Suwa, M. and Tversky, B., 'Constructive Perception: A Metacognitive Skill for Coordination and Perception', *Proceedings of the Annual Meetings of the Cognitive Science Society*, 25, 1140-1145.
- (Tafuri, 1976). Tafuri, M., *Architecture and Utopia. Design and Capitalist Development*, trans. B. Luigia la Penta, Cambridge, MA, MIT Press.
- (Tarski, 1943). Tarski, A., 'The Semantic Conception of Truth and the Foundations of Semantics', *Philosophy and Phenomenological Research*, 4, 342-360.
- (Tarski, 1956). Tarski, A., 'The Concept of Truth in Formalized Languages', in A. Tarski, *Logic, Semantics, and Metamathematics*, Oxford, Oxford Univ. Press, 152-278.
- (Thaler and Sunstein, 2008). Thaler, R.H. and Sunstein, C.R., *Nudge: Improving Decisions about Health, Wealth, and Happiness*, New Haven CT: Yale Univ. Press.
- (Thomas, 1997). Thomas, A., *Górecki*, Oxford, Oxford University Press.
- (Thompson, 2007). Thompson, E., *Mind in Life*, Cambridge MA, Harvard Univ. Press.
- (Thoreau, 2022). Thoreau, H.D., *Civil Disobedience*, available online at URL = <<https://www.thoreau-online.org/civil-disobedience.html>>.
- (Torday, Miller Jr, and Hanna, 2020). Torday, J., Miller Jr, W.B., and Hanna, R., 'Singularity, Life, and Mind: New Wave Organicism', in J. Torday and W.B.

- Miller Jr, *The Singularity of Nature*, Cambridge: Royal Society of Chemistry, ch. 20, 206-246.
- (Turing, 1936/1937). Turing, A., 'On Computable Numbers, with an Application to the Entscheidungsproblem', *Proceedings of the London Mathematical Society*, 42, 230-265, with corrections in 43, 644-546.
- (Turing, 1950). Turing, A., 'Computing Machinery and Intelligence', *Mind*, 59, 433-460.
- (van Heijenoort, 1967). van Heijenoort, J. (ed.), *From Frege to Gödel*, Cambridge MA, Harvard Univ. Press.
- (Varela, 1979). Varela, F., *Principles of Biological Autonomy*, New York, Elsevier/North Holland.
- (Varela, Maturana, and Uribe, 1974). Varela, F. Maturana, H. and Uribe, R., 'Autopoiesis: The Organization of Living Systems, its Characterization and a Model', *Currents in Modern Biology*, 5, 187-196.
- (Voltaire, 1947). Voltaire, *Candide*, trans. L. Butt, London, Penguin.
- (Voltaire, 1959). Voltaire, *Candide*, trans. L. Bair, New York, Bantam.
- (Vonnegut, 1972). Vonnegut, K., 'The Big Space Fuck', in H. Ellison (ed.), *Again, Dangerous Visions*, New York, Doubleday, also available online at URL = <https://sensitiveskinmagazine.com/big-space-fuck-kurt-vonnegut/>.
- (Waldheim, 2016). Waldheim, C., *Landscape as Urbanism: A General Theory*, Princeton NJ, Princeton Univ. Press.
- (Walshe, 2009). Walshe, M. (ed.), *The Complete Mystical Works of Meister Eckhart*, New York, Herder&Herder/Crossroads.
- (Warren, 2011). Warren, J., *The Practical Anarchist: Writings of Josiah Warren*, New York, Fordham Univ. Press.
- (White, 1987). White, E., *The Overview Effect: Space Exploration and Human Evolution*, New York, Houghton Mifflin.
- (Whitehead, 1967). Whitehead, A.N., *Science and the Modern World*, New York, The Free Press.
- (Whitehead, 1971). Whitehead, A.N., *The Concept of Nature*, Cambridge, Cambridge Univ. Press.
- (Whitehead, 1978). Whitehead, A.N., *Process and Reality: An Essay in Cosmology*, corrected edn., New York, The Free Press.
- (Wilde, 1891). Wilde, O., 'The Soul of Man Under Socialism', *Fortnightly Review* 55 (old series) 49 (new series), 292-319, available online at URL = <https://www.marxists.org/reference/archive/wilde-oscar/soul-man/>.
- (Wittgenstein, 1953). Wittgenstein, L., *Philosophical Investigations*, trans. G.E.M. Anscombe, New York, Macmillan.

-
- (Wittgenstein, 1981). Wittgenstein, L., *Tractatus Logico-Philosophicus*, trans. C.K. Ogden, London, Routledge & Kegan Paul.
- (Wolchover, 2020). Wolchover, N., 'Does Time Really Flow? New Clues Come From a Century-Old Approach to Math', *Quanta*, 7 April, available online at URL = <<https://www.quantamagazine.org/does-time-really-flow-new-clues-come-from-a-century-old-approach-to-math-20200407/>>.
- (Wordsworth, 1807). Wordsworth, W., 'My Heart Leaps Up', available online at URL = <<http://www.poets.org/poetsorg/poem/my-heart-leaps>>.
- (Zermelo, 1930). Zermelo, E., 'Über Grenzzahlen und Mengenbereiche', *Fundamenta Mathematicae*, 16, 29-47.
- (Zermelo, 1967a). Zermelo, E., 'Proof That Every Set Can Be Well-Ordered', in (van Heijenoort, 1967: pp. 139-141).
- (Zermelo, 1967b). Zermelo, E., 'A New Proof of the Possibility of a Well-Ordering', in (van Heijenoort, 1967: pp. 183-198).
- (Zermelo, 1967c). Zermelo, E., 'Investigations in the Foundations of Set Theory I', in (van Heijenoort, 1967: pp. 199-215).
- (Žižek, 2021). Žižek, S., 'Last Exit to Socialism', *Jacobin*, 21 July, available online at URL = <<https://jacobinmag.com/2021/07/slavoj-zizek-climate-change-global-warming-nature-ecological-crises-socialism-final-exit>>.
- (Zuboff, 2019). Zuboff, S., *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, London, Profile Books.