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Renewable Imagination via the Sun: Solarpunk, Speculative
Anthropology and the Making of Regenerative Futures

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Abstract / English

To outline a future-oriented but present-bound anthropology centering around the mediating dimensions of the planetary *imagination*, this thesis explores *Solarpunk* – an emergent science-fiction genre, speculative arts movement, planetary hyper-project and memetic super-organism that resources the sun’s quasi-infinite gifting to amplify regenerative transitions towards post-fossil, post-capitalist and post-dystopian timelines. Speculatively surveying Solarpunk as a renewable futures research tool for projecting and prefiguring recyclical relationships between the imagination’s virtual boundlessness and its actual contingencies (*contingencies of boundlessness*), this thesis interrogates (a) Solarpunk’s solar-terrestrialism as a purely immanent, cosmo-botanical stance on the axis mundi, (b) how its intersection of vision, vibe and action can mobilize an affective pedagogy for “learning to love the future”, (c) how the reciprocal dynamism of its memetic engine oscillating between solar-mimicry and bio-mimicry can catalyze runaway refuturing, (d) how it critically tangles liminalities between art(ificiality) and nature, as much as (e) how its future fictions serve as a infrastructure for the planetary imagination itself. Centering around the catalytic phenomenology and creative episteme of speculative fiction as an experimental way of seeing and Solarpunk’s unique planetary vision of heliocentric descendentalism, this thesis preconstructively imagines how the joyous and skillful amplification of renewable relationships with artificially crystallized future alterities can hijack and transfigure collective horizons in the age to come. Probing fictional sediments of imagined timelines as speculative fieldsites, it is investigated how a renewed future anthropology can contribute to critically informing, radically reorienting and regeneratively energizing collective imaginings and tangible enactments towards more beautiful, vibrant and pluriversal planetary tomorrows.

Abstract / Deutsch

Im Sinne einer gegenwartsorientierten Zukunftsanthropologie zentriert rund um die mediierenden Dimensionen planetarischer Imagination untersucht diese MA-Thesis das emergente Science-Fiction Genre *Solarpunk*, welches als spekulative Kunstbewegung, globales Hyper-Projekt und memetischer Superorganismus zum gemeinsamen Visionieren post-fossiler, post-kapitalistischer und post-dystopischer regenerativer Zukünfte einlädt. Zur Erforschung der Liminalität zwischen Imagination und Realität wird Solarpunk als präfiguratives Instrument zur Kultivierung erneuerbarer Beziehungen zwischen der virtuellen Grenzenlosigkeit der Imagination und ihrer tatsächlichen Bedingtheit untersucht. Die Auseinandersetzung mit Zukunftsfiktion als experimentellem Forschungsfeld dreht sich um die katalytische Phänomenologie der Zukunfts-Gegenwartsachse und die kreative Epistemologie spekulativer Artefakte. Um dies zu beleuchten exploriert diese Thesis (a) die solar-terrestrische Ontologie als deszendentelem Gegenentwurf zu konventionellen solaren Utopien, (b) das Zusammenspiel von Vision, Vibe und zukunftsorientiertem Handlungsvermögen als affektiver Pädagogik um zu “lernen, die Zukunft zu lieben”, (c) die reziproke Dynamik mimetischer Strategien oszillierend zwischen Bio-Mimikry und Solar-Mimikry, (d) wie Solarpunk kritisch, konstruktiv und doch ambivalent auf die anthropozentrische Hybridität zwischen Kunst (*artificiality*) und Natur antwortet, sowie (e) wie die Zukunftsfiktionen und spekulativen Artefakte aus Solarpunk-Welten als erneuerbare Infrastrukturen für die planetarische Imagination selbst imaginiert werden können. Durch eine kritische und kreative Spiegelung der in der Solarpunk-Bewegung vorgefundenen Projektionen, Prinzipien und Praktiken wird spekulativ erprobt wie eine reimaginierte zukunftsorientierte Anthropologie zu radikalen Reorientierungen und Metamorphosen kollektiver Horizonte im anbrechenden Zeitalter beitragen kann.

The only truth I can understand or express is, logically defined, a lie. Psychologically defined, a symbol. Aesthetically defined, a metaphor (...) All fiction is metaphor (...) The future, in fiction, is a metaphor: A metaphor for what? If I could have said it non-metaphorically, I would not have written all these words, this novel (...) and used up my ink and typewriter ribbon in informing me, and you, rather solemnly, that the truth is a matter of the imagination.

(Ursula K. LeGuin)¹

Now we are flying fast and high, mimetic beings in wonderlands of what until recently was pure make-believe. One minute it's winter, the next, summer. Tremors and drought shake the earth and its peoples, while the far-fetched notion that the real is really made up has become real.

The bird's wing is different now.

(Michael Taussig)²

(...) problematic Ideas are precisely the ultimate elements of nature and the subliminal objects of little perception. As a result, 'learning' always takes place in and through the unconscious, thereby establishing the bond of a profound complicity between nature and mind.

(Gilles Deleuze)³

¹ LeGuin, U.K. (1969) *The Left Hand of Darkness*: 5.

² Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 7.

³ Deleuze, G. (1994) *Difference and Repetition*: 165.



To those dangerously promising creatures of the future-tense, blessed with a hyper-active imagination and magnetically drawn to the creative abyss, the dizzying vastness of far-out constellations and the light source in the sky. May this thesis help them to not fall from the heavens and strand as stellar corpses at the shores of a soulless sea trashed by the future's ashes, but instead find pathways for translating their gifts into fertile immanence – thereby reminding themselves and the others that the promise of a larger reality is not some treacherous illusion, but a permanently accessible, inexhaustible resource springing from the heart of the present itself.



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1. Introduction: Speculative Fiction and the Renewal of Worlds

Solarpunk and imagination-oriented anthropology

literary realism runs out of steam in the face of the climate crisis and its increasingly commonplace impossible events. Realism relies on an unspoken reliability of the social and material world for its verisimilitude, yet when the world refuses to function as the stable background for our kitchen-sink dramas, a realism which ignores the growing instability of the Earth's climate increasingly feels like escapist fantasy. (Williams 2018)⁴

Strange world it must be where realism breaks down in the face of emergent realities, but with the confluent advent of biospherical meltdown (*climate dystopia*) and exponential artificiality (*technological utopia*), we increasingly interface with horizons sparking heretofore unseen, even unimaginable disruptions that crash our narrative apparatus, ways of living and capacities of navigation. The gaping incompatibility of existing imaginaries to constructively engage combinatorially-explosive uncertainty (*new normal reality*) signals urgent import for a *speculative turn* – not declared at the expense of reality but exactly the opposite: in service of recovering and prefiguring vital agencies for maneuvering arising unfoldings as earthly affairs drift beyond thresholds and tipping points⁵. When diagnosing Future Shock, Toffler described *acceleration* as “one of the most important and least understood of all social forces”⁶. Around the same time, Deleuze and Guattari argued that in regards to techno-capitalism’s runaway velocities “the truth is that we haven’t seen anything yet”⁷. But that was *half a century ago*. Today, we no longer live in the shadow of Moore’s law but increasingly in that of AI on quantum-computed steroids *and* unprecedented planetary closure. With futurity expected to flood in at almost asymptotic curvatures, it feels more relevant than ever before to inquire what an anthropological engagement with anticipation, possibility and prefiguration can contribute to radically reorienting and transfiguring collective horizons in the age to come.

⁴ Williams, R. (2018) Solarpunk: Against a Shitty Future.

⁵ See: Ghosh, A. (2015) The Great Derangement: Climate Change and the Unthinkable.

⁶ Toffler, A. (1970) Future Shock: 25.

⁷ Deleuze, G. & Guattari, F. (1972) Anti-Oedipus: Capitalism and Schizophrenia: 240.

To cultivate the ground for a future-oriented *and* present-bound anthropology “dedicated to healing the rupture between imagination and real life”⁸ as envisioned by Ingold, this thesis explores the oeuvre of *Ursula K. LeGuin* (1929-2018) – known not merely for pioneering anthropological science-fiction, but in recent days recognized as the perhaps most influential proto-Solarpunk avant la lettre. When seeking to reimagine intimacies between the imagination and reality, we may first play LeGuin’s wildcard according to which “the truth is a matter of the imagination”⁹, which – being an anthropological work, this thesis does not exactly affirm but rather explores *what* might happen *if* it is posited. Depending on where we stand, we may find this proposition to be insane, childish, beautiful or necessary but LeGuin herself found it to be *dangerous*¹⁰. But in which ways is it dangerous? Evidently in all imaginable ways, but they all seem to share the same root: when accepting the premise, *reality becomes up for grabs*. This rather unsettling effect not only showcases how via imagination, we can induce quasi-infinite rupture but that this immense potential for activating alterations also offers endless openings for the most bizarre flights of delusion. Void of the ability to project into boundlessness, we could not instantiate virtual departures from present actuality – hence, the Utopian moment (*seeing the not-yet*) would be impossible. But from the very same leap that enables all kinds of visionary creativity can arise also the most outrageous negations of what is already in the world. These hubristic dangers inherent in Utopian flights were already coded in Ancient solar parables: the stories of *Phaethon* – who demanded to ride the chariot of his father Helios for one day as a proof that he was indeed the sungod, and *Ikarus* – whose blinding enthusiasm towards the sun was dismantled as his molten wings rained as ashes into the sea. What can be traced in these accounts is a line of flight towards the sun that fails to pivot and turns into a line of non-flight, to invert Deleuzian terminology¹¹. These heroically-fatal tales of solar sacrifice thus elucidate the dark

⁸ Ingold, T. (2014) That’s enough about ethnography!: 383.

⁹ LeGuin, U.K. (1969) The Left Hand of Darkness: 5.

¹⁰ *The exercise of imagination is dangerous to those who profit from the way things are because it has the power to show that the way things are is not permanent, not universal, not necessary.* LeGuin, U.K. (2004) The Wave in the Mind: Talks and Essays on the Writer, the Reader and the Imagination.

¹¹ Deleuze G. & Guattari F. (1980) Introduction: Rhizome. In: Thousand Plateaus: Capitalism and Schizophrenia II.

dialectics of the Utopian imagination: how trajectories of visionary voyages accelerating towards the light-source in the sky carry an inbuilt propensity *not* to return to earthly contingencies. This perennial tendency becomes existential in our age as we find ourselves at an epochal crossroads as a species and as a planet: for is not the human that creature which asked to maneuver the chariot of the gods and now finds that the earthly realities it assumed to reign over are beginning to fall apart?

To undermine escalating drifts towards tech-induced overshoot, Latour advocated that in the face of climate change we must come *down to Earth*, rather than amplifying trajectories upwards which he indexed as *out of this world imaginaries*: “the horizon of people who no longer belong to the realities of an earth that would react to their actions”¹². A consonant pivot in axial meta-orientation is summoned in Segall’s 2023 work on the imagination. According to the Whiteheadian process philosopher, gifted with the freedom to imagine the infinite, humanity can “either (...) flee upwards by way of anti-physical idealistic transcendentalism, or we can fall deeper in love with cosmogenesis via a *descendental naturalism*”¹³. These revaluations of verticality (=the *axis mundi*) will here be examined through the *imagination-reality axis*. It will be argued that we cannot hope to accomplish a descendental reversal towards regeneration by policing or inhibiting pathways towards boundlessness. Rather the contrary: imaginative flights that enable access to excessive potentials for radical alteration will become more vital than ever before. What is therefore inquired, is how we can more reliably qualify the distinction between illusory phantasm and those kinds of illuminations we will need to survive and prosper as earthbound collectives in the age to come. To learn cultivating complicities with speculative non-actualities while doing exactly the opposite of negating the present, the overarching purpose of this thesis is prefiguring right relationship between (a) the boundlessness of the imagination and (b) its actual limitations: the *contingencies of boundlessness*. To zoom into this, this thesis traces shifting liminalities among three key nexuses: (1) between the sun and the body of the planet,

¹² Latour, B (2018) *Down to Earth*: 34.

¹³ Segall, M. (2023) *Crossing the Threshold: Etheric Imagination in the Post-Kantian Process Philosophy of Schelling and Whitehead*: 19.

(2) between future fiction and present actuality, as much as (3) between art(ificiality) and nature's fertile capacity for renewal.

When asking how the imagination, as Appadurai claimed in the 90s, became “central to all forms of agency (...) itself a social fact, and (...) the key component of the new global order”¹⁴, we usually first hear about developments in technological mediation, especially the meteoric proliferation of light-driven interfaces¹⁵. This drastic shift towards largely visually translated artificial environments has been activating tremendous intensifications of the “imagistic potential of the postmodern body”¹⁶ as Massumi writes. With the hand-in-hand advent of ubiquitous affordances for making artificial worlds and turbo-consumption of hyper-mediated spectacle, we are increasingly able to see and create *anything we want all the time*, but the perverse possibility of the *virtual exodus* (the wholesale migration of lived experience into simulated environments¹⁷) is merely the extreme exemplification of how today's immense techno-artificial overdrive tends to *not* spin around a regenerative axis. One need not even explicate the pyro-mad undercurrents among contemporary brake-failure enthusiasts to see how today's turbo-machinic acceleration suspiciously reflects the trajectory of flight traced by Ikarus.

The perhaps most visible effect of artificial acceleration was captured by the cyberpunk pioneer William Gibson (who fictionally prefigured the internet in the early 80s by coining the term *cyberspace*¹⁸) when in an interview he said that we are now “all living in the shadow of at least half a dozen wildly *science fiction scenarios*”¹⁹, basically declaring that reality itself had morphed into an sf-epos. But that was in 2007. How much truer is it today where armies of deep-faked bots Twitter-beef with other bots on *X* while everyone and their mother

¹⁴ Appadurai, A. (1996) *Modernity at Large: Cultural Dimensions of Globalization*: 31.

¹⁵ Davis, E. (1998) *TechGnosis: Myth, Magic and Mysticism in the Age of Information*.

¹⁶ Massumi, B. (2003) *The Autonomy of Affect*, in: *Parables for the Virtual*: 44.

¹⁷ Castronova, E. (2008) *Exodus to the Virtual World: How Online Fun Is Changing Reality*.

¹⁸ *Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding.* Gibson, W. (1984) *Neuromancer*: 69.

¹⁹ Riesman, A.J. (2017) William Gibson Has a Theory About Our Cultural Obsession With Dystopias, *Vulture*.

is training their own LLMs (large language models) at home? While these developments foreground prevailing techno-symbioses between the imagination and art(ificiality), this thesis shifts attention to the role of science-fiction in the making of *regenerative futures*. For if the world indeed becomes increasingly science-fictional, with the simultaneous advent of biospherical meltdown, as Sarena Ulibarri argues, “any near-future science fiction that does not engage with climate change (becomes) fantasy”²⁰. On such horizons, the intersection between sf and climate fiction promises to yield a rich and relevant instrumentarium for reimagining the world and writing ourselves in²¹. By providing “a sandbox, a test-bed, a gedankenexperiment (...) the technological archaeology of imagined futures”²², the experimental strategies of sf encourage openings for speculative encounters with future alterities which can “bypass the established narratives about the present and future that create the hypnosis of normality, and in doing so allow for an emotional connection with the raw weirdness of our times, opening up an array of unexplored possibilities”²³ as Raven and Jain put it.

A strong case for cultivating such regenerative complicities with sf was given in *Staying With the Trouble* (2016) where Haraway envisioned a future tale populated by *Communities of Compost* who found “the richest humus for their inquiries in sf – science fiction and fantasy, speculative fabulation, speculative feminism, and string figures. Blocking the foreclosures of utopias, sf kept politics alive”²⁴. In his 2019 volume *Theory for the World to Come: Speculative Fiction and Apocalyptic Anthropology*, Wolf-Meyer unfolded how in the face of planetary closure and hypernormalized catastrophe, sf can serve as “not just a game of ‘what if?’ but a challenge to complacency and resignation”²⁵. Exploring the zone named as “the

²⁰ Ortiz, D.A. (2019) Can imagined futures of drowned cities and solar utopias help us grasp the complexity of climate change?

²¹ *You’ve got to create your own worlds. You’ve got to write yourself in.*

Source: Octavia E. Butler Interview w/ Charlie Rose, YouTube.

²² Raven, P.G. (no date) An Introduction to Infrastructure Fiction. Guest-post on *Superflux*.

²³ Jain, A. (2013) Design for the New Normal.

²⁴ Haraway, D. (2016) *Staying With the Trouble: Making kin in the Chthulucene*: 150.

²⁵ Wolf-Meyer, M. (2019) *Theory for the World to Come: Speculative Fiction and Apocalyptic Anthropology*: 72.

necessary tension between science-fiction and anthropology”²⁶, his essay invites us to reevaluate the speculative artefacts of sf as fertile sites for synthesizing experimental theory for the people of tomorrow. And indeed, when interrogating the proposal of leading future-oriented anthropologists: to place the question “*what does a future alterity feel like?* at the centre of investigations of imagination, the possible, the not yet to come or be”²⁷, do we not find that the imagined worlds of sf offer tangible entry-points for exactly such explorations? Do its fictional sedimentations of experimental positionalities situated in altered timelines not open concrete and sensible doorways for shifting anthropology’s nexus of Otherness to the temporal beyond and study the sensorial and ethical dimensions of encounters with possible worlds, preconstruction and permutation?

A promising phenomenon for investigating this and thereby reactivating and further extrapolating interdisciplinary alliances between sf and future-oriented anthropologies is *Solarpunk* – an emerging sf-genre that over the past one-and-a-half decades has coalesced into a global speculative arts movement and memetic super-organism that resources the sun’s quasi-infinite gifting to amplify regenerative transitions towards post-fossil, post-capitalist and post-dystopian timelines. To curate some leading voices – Solarpunk has been described as “a speculative movement: a collaborative effort to imagine and design a world of prosperity, peace, sustainability and beauty, achievable with what we have from where we are”²⁸, an attempt to “wrench science fiction from both Steampunk’s magical tech fantasies and Cyberpunk’s tech-gone wrong”²⁹, “a future that we can want and we might actually be able to get”³⁰, a “schelling point for the hopeful”³¹, a “container for more fertile futures”³², a “pragmatic science-fiction” that “for the first time (replies) to the Anthropocene in a conscious and constructive way” and thus “(prepares) the field for the imaginary collective of

²⁶ Wolf-Meyer, M. (2018) The Necessary Tension Between Science-Fiction and Anthropology.

²⁷ Pink, S. & Salazar J.F. (2019) Anthropologies and Futures: Researching Emergent and Uncertain Worlds: 27.

²⁸ Hudson, A.D. (2015) On the Political Dimensions of Solarpunk.

²⁹ Wilk, E. (2016) Is Ornamenting Solar Panels a Crime?

³⁰ Dragonfly.Eco (2015) Interview with Adam Flynn on Solarpunk.

³¹ Campbell, S. & Moore, S. (2022) Solarpunk! Reimagining Public Goods in the Age of Ethereum.

³² Springett, J. (2022) A Container for More Fertile Futures.

the next thirty or forty years”³³ as much as a “gateway drug” and “Trojan horse” towards the “metamodern protopia”³⁴. First named online in 2008 on *Republic of the Bees*³⁵, Solarpunk initially spread on the vibe-curation platform *Tumblr* and in the Brazilian eco-punk scene, where the first short-story anthology *Solarpunk: Histórias ecológicas e fantásticas em um mundo sustentável*³⁶ was released in 2012. Its first moments of wider attention can be detected two years later when Tumblr-user Olivia Louise gave a defining account of the Solarpunk aesthetic³⁷ and Adam Flynn published *Solarpunk: Notes toward a manifesto* (2014). “We’re solarpunks because the only other options are denial or despair” Flynn declared, envisioning future communities coordinating around “innovative dissent”, “ingenuity, generativity, independence, and community” to bring forth “a future with a human face and dirt behind its ears”³⁸.

Solarpunk starts from the basic empirical observation that the most sensible entity around which to construct a shared attractor (*memetic orbit*) for a planetary hyper-project³⁹ appears to be the *star* around which our planet has been revolving since the beginning of cosmic time (~ 4.6 bn heliocycles ago). On a horizon where “the necessity of remaking the global energy infrastructure appears to present a rare opportunity for remaking the world in another image, one where utopian visions have material vehicles for their realization”⁴⁰, the sun offers far more than just endlessly renewable hope. As radical metamorphoses in energy relations seem sort of inescapable, about five million tons of hydrogen per second for ~4 billion years permanently outpouring as ionized plasma which “bathes the Earth in enough energy in a day

³³ Verso, F. (2022) *Solarpunk: New Seeds from the Ashes of the Future*.

³⁴ Freinacht, H. (2022) *We Must Reclaim Solarpunk from Authoritarian Regimes*.

³⁵ Republic of the Bees (2008) *From Steampunk to Solarpunk*.

³⁶ Edited by Lodi-Ribeiro, english translation by Fernandes in 2018.

³⁷ *Natural colors! Art Nouveau! Handcrafted wares! Tailors and dressmakers! Streetcars! Airships! Stained glass window solar panels!!! Education in tech and food growing! Less corporate capitalism, and more small businesses! Solar rooftops and roadways! Communal greenhouses on top of apartments! Electric cars with old-fashioned looks! No-cars-allowed walkways lined with independent shops! Renewable energy-powered Art Nouveau-styled tech life!* Miss Olivia Louise, Tumblr.

³⁸ Flynn, A. (2014) *Solarpunk: Notes Towards a Manifesto*.

³⁹ See: Morton, T. (2013) *Hyperobjects: Philosophy and Ecology After the End of the World*.

⁴⁰ Williams, R. (2019) *This Shining Confluence of Magic and Technology: Solarpunk, Energy Imaginaries, and the Infrastructures of Solarity*: 4.

for 10 years of global energy consumption”⁴¹ is seen as sufficient stellar overshoot to speak of a *literal* Copernican revolution in economy. But just as it would be too simple to see the sun as the panacea or messiah per se, it would be mistaken to reduce Solarpunk to solar-mimicry, a reenchantment of the sun and heliocentric reversal in global energy-relations. In his 2015 essay *On the Political Dimensions of Solarpunk* (2015) A.D. Hudson explicitly did not define Solarpunk monolithically “and therefore limit it, for the thousands now exploring its possibilities” but nevertheless made clear that “the world of Solarpunk is *this world. The here, the now and the very soon*”⁴². In consonance with warnings that “in turning towards the Sun, we tend to turn away from the ground where the real work of energy transition gets done”⁴³, we here encounter a stance that is simultaneously heliocentric *and* descendent. Rather than encouraging us to escape upwards, Solarpunk suggests that navigating the age to come will require us turning towards the sun *and* landing on Earth at the same time, not only the first at the expense of the second.

Centering around plausible and possible planetary futures that those who participate in envisioning them would love to see amplified and actualized, Solarpunk responds to the widespread sentiment that “dystopia has done its job” and continuing to pursue it thus became more indulgent than cathartic, to echo Kim Stanley Robinson who instead advocates for an *anti-anti-utopian* turn⁴⁴. In sf-terms, Solarpunk emerges on a horizon where *Cyberpunk* – the dystopian sf-genre revolving around techno-capitalism running amok (to which it is seen as both successor and anti-thesis) has come to be cynically affirmed as capitalist realism’s “go-to-image for the future”⁴⁵ as Harlock reports. Emerging in the 1980s as a darkened response to the shattering of the techno-optimist promises of sf’s Golden Age, Cyberpunk was initially intended to prefigure an “anticipatory opposition politics to the cyberfascism lurking over the horizon”⁴⁶ but within a few decades has been “reduced to an

⁴¹ Eschrich, J. & Miller, C. A. (2018) *The weight of light: A collection of solar futures*: 4.

⁴² Hudson, A.D. (2015) *On the Political Dimensions of Solarpunk*

⁴³ Barney, D.; Szeman, I. (2021) *Introduction: From Solar to Solarity*: 1.

⁴⁴ Robinson, K.S. (2018) *Dystopias Now*.

⁴⁵ Harlock, J.D. (2022) *The Rise and Fall of Cyberpunk*.

⁴⁶ Davis, M. (1995) *Beyond Blade Runner: Urban Control, The Ecology of Fear*: 3.

aesthetic, easily appropriated by the corporations against which it once waged war”⁴⁷. The dictum *all cyber, no punk* that echoes through reviews of the blockbuster game *Cyberpunk 2077* (2020) is seen reflected not just in the game’s fictional futures (which as *Altered Carbon* uses Cyberpunk primarily as a cultural artefact rather than as a strategy to imagine counter-hegemonic futures). It is even moreso reflected in our present: for while its subversive impulse may have been (largely) evacuated and reduced to a consumable flex, the popcultural imaginary (not just futures feared but already cynically-created actualities) is more than ever before populated and haunted by Cyberpunk tropes (such as algorithmic totalitarianism, AI-demiurge CEOs, cloned wage-slaves and full substitution of ecological processes by artificial ones). While the observation of tendency should never eclipse nuance, Cyberpunk, previously seen by Fredric Jameson as “the supreme literary expression if not of postmodernism, then of late capitalism itself”⁴⁸ is in his later work “for all its energies and qualities historically (...) interpreted as sf’s doomed attempt at a counteroffensive”⁴⁹.

This extremely exhausting defuturing circuit of a cautionary tale or self-defeating prophecy that fails to defeat itself and is instead coopted to amplify what was sought to prevent, is nowadays often seen as indicative of a much wider pattern. For if we scan imaginaries of planetary futures from the last decade(s), we cannot fail to detect that they increasingly begin with the *ends of the world* as Danowski and Viveiros de Castro put it⁵⁰. The critical argument that the prevalence of dystopian visions in today’s popcultural imaginary not merely signifies a symptom of our hopelessness, *but also a cause*, was articulated by Neal Stephenson in *Innovation Starvation* (2011). While his often-echoed essay on sf’s “relevance – even utility – in addressing the problem” of societies having become less capable of mobilizing and actualizing large visions towards shared future attractors (“executing the big stuff”⁵¹) invokes the old-school, techno-imperial narrative of sf (primarily addressed to scientists and engineers as the folks who build the future), his intervention, which helped catalyze early incubations of

⁴⁷ Harlock, J.D. (2022) The Rise and Fall of Cyberpunk.

⁴⁸ Jameson, F. (1991) Postmodernism: Or, the Cultural Logic of Late-Capitalism: 419.

⁴⁹ Jameson F. (2005) Archaeologies of the Future: The Desire Called Utopia and Other Science-Fictions: 68.

⁵⁰ Danowski, D. & De Castro, E. V. (2017) The ends of the world.

⁵¹ Stephenson, N. (2011) Innovation Starvation.

Solarpunk (via *Project Hieroglyph* at ASU's Center for Science and the Imagination) enfold the signature pattern that will be explored in this thesis: a kind of ouroboric relationship between future fiction and present actuality. The hypothesis that the future-present and fictional-actual axes run *recyclical* is here explored from the premise that at the heart of Solarpunk we do *not* encounter a solar orientation by itself, but something else: a solarized manifestation of LeGuin's vision of the *garden story*, as laid out in her seminal 1986 essay *The Carrier Bag Theory of Fiction*, widely recognized as containing Solarpunk blueprints. This signature pattern will here be speculatively inquired upon via two interplaying lenses: (1) *renewable imagination* – a bio-mimetic mode of visioncasting where flights towards future alterities recyclically infuse present horizons with a surplus in enthusiasm, possibility and an appetite for enactment, which can mobilize (2) *runaway refuturing* – an autocatalytic pattern that describes the prefigurative cancellation of the future's cancellation by transvaluating contingencies of transition from closure towards opening.

Chapter 4 lays out the overarching argument that Solarpunk is never about the sun by itself, but always about *the sun in relation to the garden*. By tracing movements of a bundle of imaginative flights, it explores the entanglements of *solar-terrestrialism* in distinction from pure solar ontologies and other upward reductionist imaginaries. Chapter 5 explores the central nexus of tension which Solarpunk needs to mobilize into a renewable oscillation in order not to run off as a feelgood hopium: between a *vibe-oriented* pole and a *pragmatically-oriented* pole. Inquiring upon the native Solarpunk trope of *memetic engineering* and the central articulation of *solar-mimicry*, chapter 6 interrogates how the cultivation of reciprocal relationships with the sun promises mobilizing renewable cascades of collective creativity. Through the bio-mimetic lens of *artificial photosynthesis*, chapter 7 critically interrogates troubling entanglements between art(ificiality) and nature in Solarpunk's visual politics, tracing which mimetic configurations it proposes for tangling the *dialectics of the artificial garden* to dismantle the specter of the pseudo-oasis. Finally, chapter 8 unfolds my speculative synthesis: that of seeing the co-created future fictions of Solarpunk as a renewable *infrastructure of the (solarized, planetary) imagination*.

2. Methodology

The world is not a solid continent of facts sprinkled by a few lakes of uncertainties, but a vast ocean of uncertainties speckled by a few islands of calibrated and stabilized forms.

(Latour)⁵²

If I flip ten coins, I can talk about the odds that it's gonna be all heads, but it's really hard for science to say something about that really niche possibility in which you flip a coin a hundred times and get heads a hundred times. But it's very easy for fiction to say something about that.

(Hudson)⁵³

In *Anthropologies and Futures: Researching Emergent and Uncertain Worlds* (2017) Pink and Salazar envisioned a future anthropology committed to “confronting and intervening in the challenges of contested and controversial futures”⁵⁴ through “creative, improvisational, speculative, and participatory techniques of a renewed anthropological ethnography” which they like to see becoming “more daring, open and interventional” in “(facing) futures and our role in shaping them, full on, while retaining a critical perspective”⁵⁵. Attuned to these proposals, the overarching purpose of this MA-thesis is neither to give a conventional nor a comprehensive ethnographic account of the Solarpunk movement, which due to its radical pluriversality and shapeshifting tendencies would be a rather futile endeavor anyway. It instead strategically and experimentally explores Solarpunk as a *renewable futures research tool*, to outline a future-oriented *and* present-bound speculative anthropology centering around the mediating dimensions of the solarized planetary imagination. To carry this out, this thesis imaginatively retraces the creative episteme, ways of seeing and modes of world-writing of sf and its unique manifestations, potencies and ambivalences arising with the heliocentric but descendent synthesis encountered in the world(s) of Solarpunk.

⁵² Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*: 245.

⁵³ Hudson, A.D. (2022) Interview via Zoom, 17.8.2022.

⁵⁴ Pink, S.; Salazar J.F. (2017) *Anthropologies and Futures: Researching Emergent and Uncertain Worlds*: 1.

⁵⁵ Pink, S. & Salazar J.F. (2017) *Anthropologies and Futures: Researching Emergent and Uncertain Worlds*: 3.

Fusing approaches laid out by Kazubowski-Houston and Auslander (2021) who prefigured anthropological explorations *In Search of Lost Futures* by triangulating (a) multimodality, (b) deep interdisciplinarity, and (c) autoethnography, it will be inquired how speculative fiction enables rendering visions of future alterities immediately sensible and tangible via artificial concreteness and how this “first contact with possible futures” may not only catalyze “an opening for vibrant, compelling and relevant speculative ethnography in solidarity with those who dream”⁵⁶, but how such imaginary departures, when revaluated as “windows on the present”⁵⁷ may become “a staging ground for *action*, and not only for escape”⁵⁸. Revolving around the ontological orbit, affective flows and descendent contingencies of imagined planetary futures by interrogating fictional crystallizations from the world(s) of Solarpunk as speculative fieldsites, the research interest of this thesis can be circumscribed as follows:

Main research question: *How is the imagination entangled with the sun and the garden in Solarpunk future fiction?*

The imagination’s liminal interplay with Solarpunk’s two central metaphors (*sun* and *garden*) is explored through a triangular prism, unfolding three mediating dimensions of the imagination that I found to be the most significant in the world(s) of Solarpunk: (1) *affect* (cyclical intermediation between vibe and action) (2) *mimesis* (reciprocally contagious mediation of fictional tropes) and (3) *infrastructures* (flow-enabling substrata). From these key lenses, three sub-research questions have been formulated: *How is the imagination (1) affectively, (2) mimetically and (3) infrastructurally entangled with the sun and the garden in Solarpunk future fiction?* Explicating these categories at this stage, while perhaps seeming unorthodox, does *not* entail a forward-deploying of abstractions, as the linear and consecutive nature of language might suggest. Displaying my condensed understandings of key lenses here, while also serving orientational purposes for the reader, should make clear that this research does *not* run on a linear trajectory. Who expects to find a clean beginning and clean

⁵⁶ Oman-Reagan, M. (2018) First Contact With Possible Futures.

⁵⁷ Raven, P.G. (2022) The Unbearable Lightness of Solarpunk.

⁵⁸ Appadurai, A. (1993) Modernity at Large: Cultural Dimensions of Globalization: 7.

ending eclipses ambivalences arising when interrogating renewable questions but having to give finite answers, thereby projecting a temporal regime this thesis explicitly seeks to undermine. Navigations from methodology design to fieldwork to thesis creation should instead be envisioned as a multi-temporal recursive accumulation sedimenting around an evolving web of crystallization points from which over time arose the pluri-perspectival kaleidoscope of this thesis.

As this project came to encompass a massive, many-faceted and continuously morphing multiplicity of maneuvers, its compendious representation necessarily leaves out substantial landscapes of relevant unfoldings. Logics of finite scope and logics of translation into finality forced me to repeatedly select the most salient from a combinatorially-explosive set of possible trajectories, concrete perspectives and synthetic constellations. The matrix of valuations through which salience was qualified arose from a critical *and* creative examination of shared entailments *and* differences between anthropology and sf. While the trope of *science-fictionality* is now widely recognized as an indispensable epistemic supplement to ethnographic realism⁵⁹, with *anthropological sf about sf* emerges something else: the possibility of imaginatively hybridizing ways of seeing and modes of world-writing of either discipline to transmutate both. To begin cultivating such interdisciplinary symbioses, I conceived of both methodology design and thesis creation as inherently imaginative acts that mirror the creative logics of speculative world-writing. Far from ascribing sameness between anthropology and sf, this aims at transvaluating the possibility-space for maneuvers. The imagination-oriented anthropologist is seen as inhabiting a similar (not identical) meta-position as the speculative futurist or game-designer. They are all engaged in the creation of an artificial ecosystem where they configure perhaps not the script, but the *meta-script*. Put differently: a move in methodology-design may not only alter the unfolding of the game but the properties of the playing field itself. Of the numerous ramifications, the simplest valuation for conducting efforts that sprang from this echoes Ingold⁶⁰: how would

⁵⁹ See: Latour, B., Bastide, F. (1986). Writing Science — Fact and Fiction.

Clifford, J. & Marcus G.E. (1986) Writing Culture: The Poetics and Politics of Ethnography.

⁶⁰ Ingold T. (2018) Anthropology for the Future, in: Anthropology: Why it Matters: 130.

the methodological architecture and compositional orbit of my thesis need to be envisioned to create a distinctly anthropological world that activates the greatest *capacity to transform lives*?

To induce what Merleau-Ponty called optimal grip⁶¹, navigation was continuously calibrated towards a set of orientational patterns: Deleuze's metaphor for the renewable imagination of sf as a "larval consciousness which moves endlessly from science to dream and back again"⁶² and that which Takacs in her often-echoed Solarpunk poem called *synthesis: this shining confluence*⁶³. Reflections of these lenses turned what Wolf-Meyer called "the necessary tension between science-fiction and anthropology", with anthropology generally operating "descriptive and diagnostic, (while) sf operates in three idioms: extrapolation, intensification, and mutation"⁶⁴ into a fusional oscillation. This pendulation was again seen interfering with two of Ingold's visions for anthropology: the hybridization of artistic and scientific strategies towards "a future anthropology that is speculative and experimental, as well as descriptive and analytic"⁶⁵ and the projection of anthropology as a discipline "energized by the tension between speculative inquiry into what life *could* be like and a knowledge, rooted in practical experience, of what life is like for people of particular times and places"⁶⁶. Super-positioning these epistemic interfaces opened up two critical nexuses of interplay: reflexive loopings between retrospective analytic description and preconstructive reimagination. But prior to that, between these two and *fieldwork*.

The body of research of this thesis assembled through multi-modal fieldwork carried out in the hyper-mediated world(s) of Solarpunk on the planetary web starting in spring 2022. Next to immersing myself in feeds, blogs, videos, Twitter spaces, Discord servers and Telegram

⁶¹ Vervaeke translates Merleau-Ponty's optimal grip as signifying right relationship between gestalt and feature & between zooming in and zooming out. Source: *Ep. 2 - Awakening from the Meaning Crisis - Flow, Metaphor, and the Axial Revolution*, YouTube.

⁶² Deleuze, G. (1994) *Difference and Repetition*: 220.

⁶³ Takacs, B. (2017) *Synthesis: This Shining Confluence*, in: *SunVault: Stories of Solarpunk and Eco-Speculation*: 86.

⁶⁴ Wolf-Meyer, M. (2018) *The Necessary Tension Between Science-Fiction and Anthropology*.

⁶⁵ Ingold T. (2018) *Anthropology for the Future*, in: *Anthropology: Why it Matters*: 116.

⁶⁶ Ingold, T. (2014) *That's enough about ethnography!*

groups, I studied the emergent literary canon of Solarpunk, specifically drawing from *Solarpunk Magazine* and the anthologies *SunVault: Stories of Solarpunk and Eco-Speculation* (Wagner, Wieland 2017) and *Glass & Gardens: Solarpunk Summers* (Ulibarri 2018). On May 28th 2022, I participated in the *Solarise Con* – a day of global conversation on Solarpunk organized by *Future Fiction* which was live-streamed via YouTube. After the event, I reached out to some of the organizers and panelists to initiate conversations. From June to September 2022, I conducted qualitative online interviews with interlocutors based in Peru, the UK, Italy, Kenya, Brazil, Belgium, Lebanon and the US, including some of the leading contributors of the Solarpunk movement to date.

Inquiring upon the principles, projections and practices of Solarpunk as encountered in interlocutors, speculative future artefacts and fictional future humans, the synthetic translation of fieldwork data was geared towards speculatively retracing the catalytic phenomenology and liminal intermediations of Solarpunk as an imaginative strategy for contacting the future on a renewable axis. While seeking to faithfully represent the spectral complexity of its world(s) as encountered in the field – which due to its radical pluriversality and global mutations can merely be approximated here, this thesis openly remains an individual attempt to synthetically imagine a possible creative ontology of the future. Again aligning with Ingold, who argued that as anthropologists we should “say what *we* think, without pretending that our words are actually distillations of the views of the people among whom we have studied”⁶⁷ does however *not* imply that trajectories of speculation and synthesis spiral beyond the researched ecosystem to voyage somewhere else entirely. Rather, any of the extrapolations, intensifications and mutations undertaken remain reflexive upon concrete perspectives collected and curated from the world(s) of Solarpunk and its contextual environments. Aimed at mobilizing a regenerative tension between creativity and critique, meta-reflections of the imagination’s troubling tendencies (projection, prescription, upward reduction) which I openly diagnose within myself (this is impossible to hide) run as axiomatic currents through this thesis. Mirroring my personal struggles and ambitions of

⁶⁷ Ingold T. (2018) Anthropology for the Future, in: *Anthropology: Why it Matters*: 112.

landing on Earth without desertifying the imagination's boundlessness, explorations do not seek to reach resolution but rather strive to unfold nuanced views of ambivalences, not at the expense of enthusiasm and experimentation.

The trope that perhaps most accurately reflects what has been done is that of *(p)reconstruction*. Encompassing not just the reconstruction of prefigurative strategies but the imitation and adoption thereof, constellating a mirror-image of my ecosystem of research became somewhat indistinguishable from prefiguring an engine for (renewable) prefiguration itself. Imaginatively interfacing with the speculative world-writing interfaces of Solarpunk incrementally rendered my methodological orbit and architecture of composition reciprocally confluent, meaning that key methods explored correspond with main chapters. Mirroring Suvin's signature sf-method which posits the *novum as protagonist* (see Literature Review 3.2), this thesis explores five interplaying articulations which I have come to see as pivotal meta-articulations of the Solarpunk novum from where I was standing. Each of these dimensions is not only traced, but amplified and critiqued as a methodical instrument. Main chapters are presented as a series of vision-casting operations: each chapter bundles a set of ethnographic moments, future artefacts, theoretical positions and speculative meditations confluent and dialogically sequenced to make visible that which most transvaluated my own ways of seeing. This generally meant pendulating back and forth between seeing via my interlocutors' eyes, those of fictional future humans, those of trees, the sun and my own. To draw out the nexus between the imagination and world-writing further and reflexively investigate new creative methodologies enabled by artificial intelligence, this MA-thesis moreover makes use of the prompt-to-image AI *MidJourney* for making some of its key tropes immediately visible. From the prompts encountered in and synthesized from the world(s) of Solarpunk sprang a bundle of speculative artefacts that populate this thesis as future sediments. Each chapter features an experimental vision-board constellated to complement textual unfoldings by rendering bundles of metaphor, meaning and movement sensible and tangible, thereby deepening multi-modal engagement with arising liminalities of

digital-corporeal interplay between hyper-mediated artificial environments and the planetary imagination (and the critique thereof).

To zoom out, this thesis seeks to shine light on the cosmo-botanical and hypertemporal phenomenology arising when interfacing Solarpunk future fictions, especially attending to their renewable capacities for infusing present horizons with a surplus of enthusiasm and possibility. In consonance with the movement patterns it explores, this thesis too is designed as a renewable infrastructure: not merely a retrospective protocol and certainly not a singular prescriptive blueprint, but rather an interdimensional instrumentarium for prefiguring co-creative departures *and* landings of speculative world-writing laboratories, equipped with anthropological critiques of projection, prescription, pure solar utopianism and other upward reductionist ontologies, as much as with experimental catalytic strategies for preconstructing, magnifying and maneuvering the boundless force of imagination towards recursively amplifying post-fossil, post-dystopian, regenerative and pluriversal trajectories i.e. *Solarpunk timelines*.

3. Literature Review

3.1 Future-Oriented Anthropology

(...) just as anthropological invocations of the (traditional, savage) past have been inextricably embedded in power and knowledge configurations in the present, so, too, anthropological futures are imbricated with the fears and desires that make up anthropology's disciplinary unconscious. (Collins)⁶⁸

In *Time and the Other* (1983) Johannes Fabian argued that the “systematic study of ‘primitive’ tribes began first in the hope of utilizing them as a kind of *time-machine*, a peep into our own historic past, as providing closer evidence about the early links in the great Series”⁶⁹. This more-than-implicit past orientation in anthropology’s early origins would suggest that the discipline’s “study of alien encounters”⁷⁰ did not initially gravitate towards

⁶⁸ Collins, S.G. (2003) Sail on! Sail on!: Anthropology, Science Fiction, and the Enticing Future: 192.

⁶⁹ Fabian, J. (1983) Time and the Other: How Anthropology Makes Its Object: 39.

⁷⁰ Nelson, D. M. (2003) A Social Science Fiction of Fevers, Delirium, and Discovery: 250.

anticipation, preconstruction and possibility. But 19th century anthropology was not void of a dialectic crosspollination between renewed understandings of the ‘savage’ past of our species and utopian speculations on its future possibilities as traced by Trouillot⁷¹ – an orientation which due to its later convergence with Spencerian evolutionary teleology was evacuated from early 20th century Boasian cultural anthropology. From the 1950s, critical anthropologies sought to dismantle the time-machine’s rearview asymmetries to instead face their interlocutors as contemporaries (*coevalness*), a development following which it was only a matter of time until anthropological experiments for voyaging beyond present actuality took flight once again. Margaret Mead was among the most notable to articulate large visions of anthropological engagements with possible, desirable and extraterrestrial futures⁷² in the decade that saw the rise of *future studies*, with classic volumes such as Toffler’s *Future Shock* (1970) and Polak’s *The Image of the Future* (1973), a volume that explored how future visions historically shaped beliefs, aspirations and horizons of societies. Polak argued that

*(the) rise and fall of images of the future precedes or accompanies the rise and fall of cultures. As long as a society’s image is positive and flourishing, the flower of culture is in full bloom. Once the image begins to decay and lose its vitality, however, the culture does not long survive.*⁷³

Polak’s image-centered theory of societal process as pulled forward by “magnetic images of an idealized future”⁷⁴ not only made visible how the “formulation and description of images of the future may influence the future itself”⁷⁵, thereby emphasizing the catalytic role of fictional fabulations and imaginal proxies for collective world-making, he also argued that social scientists as second-order participants in this process could “rewrite the history of the future”⁷⁶, a move that in contemporary anthropology feels as enticing as problematic. The 1980s then gave rise to *anticipatory anthropology*, with Textor being one of the most vocal

⁷¹ Trouillot, M.R. (2003) *Anthropology and the Savage Slot: The Poetics and Politics of Otherness*.

⁷² Mead, M. (1978) *The Contribution of Anthropology to the Science of the Future*.

⁷³ Polak, F. (1973) *The Image of the Future*: 19.

⁷⁴ Polak, F. (1973) *The Image of the Future*: 1.

⁷⁵ Polak, F. (1973) *The Image of the Future*: 19.

⁷⁶ Polak, F. (1973) *The Image of the Future*: 23.

critics of the discipline's tempocentrist fixation on "the past, the ethnographic present and the actual present"⁷⁷. Despite these departures, Munn in her 1992 volume *The Cultural Anthropology of Time* still found futurity to be "poorly tended as a specifically temporal phenomenon within the discipline"⁷⁸ – a stance that resurfaced in the 2009 anthology *Encountering the Future: Anthropology and Outer Space*, where Battaglia, Olson and Valentine argued that in fearing that futurity "as an ontological category brings us too close to prediction, prescription and the utopian dreams of modernity that our discipline takes as its critical foil"⁷⁹, anthropologists have neglected the cultivation of promising and urgent potentials in contributing to matters of futurity altogether. Intriguingly, their critique centered around shared entailments between the future and (outer) space:

*(...) that anthropology has dismissed outer space as an 'un-emergent' field reflects less on what space offers in the way of field sites or methodological opportunities, than how we have come to regard certain phenomena as overcoded by 'futurism' or devoid of the sociality, embodied experience and material relations that are anthropology's bread and butter.*⁸⁰

While tracing anthropology as starting from a critique of the modern techno-utopian imagination's tendency of projecting and privileging futurity and trans-terrestrial ascent at the expense of shared, down to Earth contingencies, identified as the discipline's lifeblood, these scholars critiqued the critique of such complicities in mainstream anthropology as a conflation from afar, rather than a participatory observation. In their 2018 essay *Uncommon Futures*, the same Valentine with Hassoun turned the neglect-hypothesis on its head, arguing that in light of diverse ventures in future-oriented anthropologies since the 1990s, "the persistence of temporalizing claims to past anthropological neglect of futurity amid the accelerating profusion of new anthropological futurities amounts to a 'neglect hypothesis'"⁸¹. Rather than neglecting it, anthropologists, and often especially the future-oriented ones, have tended to critically *deemphasize* futurity against the salvific promises and blinding

⁷⁷ Textor, Robert B. (1980) *The Art of Anticipation*: 2.

⁷⁸ Munn, N. (1992) *The Cultural Anthropology of Time*: 116.

⁷⁹ Battaglia, D.; Olson V.; Valentine, D. (2009) *Encountering the Future: Anthropology and Outer Space*: 11.

⁸⁰ Battaglia, D.; Olson V.; Valentine, D. (2009) *Encountering the Future: Anthropology and Outer Space*: 11.

⁸¹ Valentine, D., & Hassoun, A. (2019). *Uncommon futures*: 245.

enthusiasm of technoscience and neoliberal capitalism's overshoot temporalities⁸² of novelty fetish, accelerated obsolescence and hype pornography, as crystallized in Tsing's argument that we should "look around rather than ahead"⁸³ – a valuative axiom, which given that it was itself formulated in a book about the end of the world, is better understood as a tendential heuristic rather than an exclusionist razor at the expense of looking ahead.

In *Anthropologies and Futures: Researching Emerging and Uncertain Worlds* (2017) Salazar, Pink and numerous collaborators ontologically and ethnographically investigated the discursive and performative dynamics of "how futures emerge as complex configurations of things and processes of different qualities and affordances that coalesce and change, and the relationalities and contingencies through which this happens"⁸⁴. These leading scholars approach the future as an Other: an *alterity* to the present that is simultaneously imaginable and unknowable. They propose "putting the question *what does a future alterity feel like* at the centre of investigations of imagination, the possible, the not yet to come or be"⁸⁵ – a move that anchors the imagination, potentiality and futurity in the sensible reality of vital bodies which can only ever exist in the present, thus promising to afford for integrating *contingency*, which as Bessire and Bond have argued, if ontological anthropology fails to do so, then "it assumes the form of a modern myth and the only image it reflects is its own"⁸⁶.

While future scholars in anthropology and beyond largely agree that "the future is only possible and revocable as a dimension of the present"⁸⁷, according to Bryant and Knight, the notion of the present virtually containing the conditions of emergence of possible future alterities does not yet reflect the full picture. In *The Anthropology of the Future* (2018) they contended that "our concept of the present as present derives from the future" and that

⁸² Haraway, D. (2016) *Staying With the Trouble*.

⁸³ Tsing, A. L. (2015). *The mushroom at the end of the world: On the possibility of life in capitalist ruins* 22.

⁸⁴ Salazar, J. F., Pink, S., Irving, A., & Sjöberg, J. (2017). *Anthropologies and futures: Researching emerging and uncertain worlds*: 11.

⁸⁵ Salazar, J. F., Pink, S., Irving, A., & Sjöberg, J. (2017). *Anthropologies and futures: Researching emerging and uncertain worlds*: 148.

⁸⁶ Bessire, L., & Bond, D. (2014). *Ontological anthropology and the deferral of critique*: 450.

⁸⁷ Salazar, J. F., Pink, S., Irving, A., & Sjöberg, J. (2017). *Anthropologies and futures: Researching emerging and uncertain worlds*: 9.

therefore “without a concept of futurity, the present ceases to exist as such”⁸⁸. This posits the inverted conditionality: that evacuating the horizon of any tangible attractor instantiates a kind of cancellation of the present. This paints an image of the future-present axis not merely as an ascending vector perpetually exceeding the present frontier, but as a cyclical two-way street with a descendental movement interfacing through “a plethora of orientations with indeterminate teleologies” through which “the future awakens the present”⁸⁹ – the central ones they explore being anticipation, expectation, speculation, potentiality, hope and destiny.

“People’s actions are all the time informed by possible worlds which are not yet realized”⁹⁰ Strathern adds, pointing to the sphere of the *virtual*, which Agamben described as the presence of an absence⁹¹. And to one of Aristotle’s foundational axioms – that potentiality (*dunamis*, δύναμις) is a necessary condition for actualization (*energeia*, ἐνέργεια). While Eshun envisioned the virtual as a “landscape extending out into the fertile immanence of possibility space”⁹², Roy describes it as a permanent, non-articulated presence of a boundless realm of potentiality that implicitly envelops all possible alterities in contingent intimacy with the present, such that “what actually exists is a small fragment of what potentially exists, with all that is latent potential composing a background that remains implicit in what exists”⁹³.

3.2. SF and Speculative Ontologies

In *After Finitude: An Essay on The Necessity of Contingency* (2008), Meillassoux falsified *correlationism* – an epistemic axiom of Kant’s philosophy according to which “we only ever have access to the correlation between thinking and being and never to either term considered apart from the other”⁹⁴. According to Meillassoux and the *speculative realists*, by reducing the possibility of knowledge to representations, correlationism has sanctified an embargo on

⁸⁸ Bryant, R., & Knight, D. M. (2019). *The anthropology of the future*: 16.

⁸⁹ Bryant, R., & Knight, D. M. (2019). *The anthropology of the future*: 192.

⁹⁰ Strathern, M. (2005). *Experiments in interdisciplinarity* 1: 77.

⁹¹ Agamben, G., & Heller-Roazen, D. (1999). *Potentialities: Collected essays in philosophy*.

⁹² Eshun, K. (1999) *More Brilliant than the Sun: Adventures in Sonic Fiction*: 103.

⁹³ Roy, B. (2021) *Time, Change and Causality: Notes towards a metamorphosis of mind*, in: *Metamodernity: Dispatches from a Time Between Worlds*: 57.

⁹⁴ Meillassoux, Q. (2013) *After Finitude. An Essay on the Necessity of Contingency*: 5.

speculative metaphysics, thereby inhibiting experimental engagement with unarticulated potentiality and ontological recomposition. To go beyond this, they encourage imaginative engagements with the immanent as a zone of potentiality, not in order to escape reality but to infiltrate the contingent with radical alterity and thereby transvaluate landscapes of probability, plausibility and possibility. When developing their experimental ontologies, the speculative realists often imitated and adopted strategies from sf (science-fiction and speculative fiction)⁹⁵.

First contact with zones of complicity between *sf* and *anthropology* can be established via Latour's argument that "there is in fact only one large literary genre: that of science-fiction (the best part of which is not written by science fiction writers)"⁹⁶. The very same epistemic reflection notably had Clifford and Marcus (1986)⁹⁷ understand writing ethnography as the fashioning of *artisanal objects* and *true fictions*, basically postulating that postmodern cultural anthropology is sf or it is nothing at all. In *Theory for the World to Come: Speculative Fiction and Apocalyptic Anthropology* (2019) Wolf-Meyer drew these lines of hybridization even further:

*Social theory and speculative fiction are two sides of the same coin. It is not the case that social theory is the sole provenance of academics nor that speculative fiction is that of science fiction writers. Both traditions ask us to imagine worlds that can be described and depicted, and ask us as audiences to imagine the rules that undergird a society and its human and more-than-human relationships.*⁹⁸

While these accounts fluidize boundaries between fiction and science as much as fiction and theory, histories of sf, starting from early classics such as Shelley's *Frankenstein* (1818), *The Time Machine* by H.G. Wells (1895) and Gernsbaeck's gadget-oriented pulp magazines (*Amazing Stories* 1926) usually centered around the "synergistic, mutually constitutive relationship between speculative fiction and technological innovation"⁹⁹. Bell & Dourish

⁹⁵ Harman, G. (2018) *Speculative Realism: An Introduction*.

⁹⁶ Latour, B. (1981) *Insiders & outsiders in the sociology of science; or, how can we foster agnosticism?*: 211.

⁹⁷ Clifford, J., & Marcus, G. (1986). *Writing Culture: The Poetics and Politics of Ethnography*.

⁹⁸ Wolf-Meyer, M. (2018) *The Necessary Tension Between Science-Fiction and Anthropology*: 5.

⁹⁹ Badami, N. (2018) *Solarpunking Speculative Futures*.

write that “science fiction does not merely anticipate but actively shapes technological futures through its effect on the collective imagination”¹⁰⁰, giving us a narration that remains techno-centric but recognizes shared imaginaries as the pivotal mediating catalyst whose scope is by no means limited to technological metamorphoses exclusively. When examined through an anthropological lens, the more salient entry-point is the two discipline’s “shared concern with and commitment to difference”¹⁰¹ or as Dayal writes, “with questions of otherness, social and cultural difference, the ethics of encounter, faithful representation and the faculty of the imagination”¹⁰². The intimate alien encounter at the horizon of both sf and anthropology is encapsulated in Darko Suvin’s seminal sf-notion of the *novum* (borrowed from Ernst Bloch): a speculative element of alterity that according to the pioneering sf-theorist catalyzes *cognitive estrangement* and *a sense of wonder*¹⁰³. While Suvin’s estrangement had to be cognitive for his theory to draw the critical distinction between sf and fantasy, viewed through the anthropological imagination, we can expect to encounter social, political, poetic and performative facets of hypertemporal alterity taking center-stage. “For anthropologists, SF provides a natural laboratory that has long been the basis of the cross-cultural ethnographic project” Wolf-Meyer wrote in a 2018 series on *Speculative Anthropologies* run by the Society for Cultural Anthropology. While seeking to establish interdisciplinary alliances, he does this by diagnosing a “necessary tension between science-fiction and anthropology” (see *Chapter 2*) and identifies three meta-operational idioms of sf: *extrapolation*, *intensification*, and *mutation*. Extrapolation “imagines what would happen if a present thing – some institution, practice, or people – were to survive into the future relatively unchanged”, while intensification “takes present forces and magnifies them to imagine their possible effect”. Mutation – according to Wolf-Meyer the most surprising trope “attempts to radically unsettle the suppositions of reality with an unconventional ‘what if?’”¹⁰⁴.

¹⁰⁰ Bell, G.; Dourish, P. (2014) “Resistance is futile”: reading science fiction alongside ubiquitous computing: 769.

¹⁰¹ Anderson et al. (2018) Introduction: Speculative Anthropologies.

¹⁰² Dayal, S. (2023). Afterword: Anthropology and Science Fiction: 215.

¹⁰³ Suvin, D. (1977) *Metamorphoses of Science Fiction*.

¹⁰⁴ Wolf-Meyer, M. (2018) *The Necessary Tension Between Science-Fiction and Anthropology*.

Moving back to a historical¹⁰⁵ perspective, after golden age sf-giants (Clarke, Sturgeon, Heinlein, Asimov) had left the genre's early pulp orientation behind, by the 1960s, the task of sf-writers had grown into imagining "a future society as a real, self-consistent and organic thing"¹⁰⁶ as Dozois reports i.e. a complete "representational experience"¹⁰⁷ as Jameson would later put it. These metamorphoses gave rise to crossed pollinations with anthropological horizons, seen reflected in Williams' notion of *Space Anthropology* – a speculative discipline voyaging out to find "what are essentially new tribes, and new patterns of living"¹⁰⁸. The most notable early academic contributions to the emergent *anthropological science-fiction* were Stover and McNelly's 1972 anthology *Above the Human Landscape: A Social Science Fiction Anthology* and Maruyama & Harkins' 1975 anthology *Cultures Beyond the Earth: The Role of Anthropology in Outer Space* (1975). But anthropological sf's most influential contributor remains Ursula K. LeGuin (1929-2018) whose fictional works – which were not rarely populated with anthropologists – opened up experimental laboratories, extrapolating ethnographic strategies into imagined universes, thereby mutating both disciplines. While Alfred Kroeber might not have agreed when LeGuin said that her father studied "real cultures and I make them up – in a way, it's the same thing"¹⁰⁹, scholars have found LeGuin's speculative anthropology as "(combining) the strengths while overcoming some of the limitations of Geertz's thick-descriptive method and Jameson's theory of the science-fiction genre"¹¹⁰. More recent interdisciplinary interplay between sf and theory arose in the 1980s when writers like William Gibson probed how "extrapolative science fiction can operate as prefigurative social theory"¹¹¹, with the most influential cross-fertilizations traced from Baudrillard's dark postmodernism to cyberpunk fiction and from there to the high madness of CCRU – who formulated a now quintessential framework for speculative world-writing on a

¹⁰⁵ For a more comprehensive genealogy of shared histories between anthropology and sf, see also: Rieder J. (2008) *Colonialism and the Emergence of Science Fiction*.

¹⁰⁶ Dozois, G. (1991) *Living in the Future*: 14.

¹⁰⁷ Jameson F. (2005) *Archaeologies of the Future: The Desire Called Utopia and Other Science-Fictions*: 94

¹⁰⁸ Williams, R. (1956) *Science-Fiction*: 360.

¹⁰⁹ Brigg, P. (1997) A "literary anthropology" of the Hainish, derived from the tracings of the species Guin: 16.

¹¹⁰ Davison-Vecchione, D., & Seeger, S. (2023). Ursula Le Guin's speculative anthropology: Thick description, historicity and science fiction: 123.

¹¹¹ Davis, M. (1992) *Beyond Blade Runner: Urban Control, The Ecology of Fear*: 12.

profoundly future-shocked horizon. *Hyperstition*, described by Land as “the experimental techno-science of self-fulfilling prophecies”¹¹² describes proliferations of fictional tropes morphing into reality by means of reciprocal contagions catalyzing self-amplifying feedback loops that trace increasingly asymptotic reverberations through an increasingly artificially augmented and thus massively interdependent and porously permeable planetary body.

3.3. Imagination

No longer mere fantasy (opium for the masses whose real work is somewhere else), no longer simple escape (from a world defined principally by more concrete purposes and structures), no longer elite pastime (thus not relevant to the lives of ordinary people), and no longer mere contemplation (irrelevant for new forms of desire and subjectivity), the imagination has become an organized field of social practices (...) is now central to all forms of agency, is itself a social fact, and is the key component of the new global order. (Appadurai 1996)¹¹³

Humans are not the only dreamers in the animal kingdom, but we seem to stand out by virtue of our excessive tendency of projecting complex synthetic inner mental imagery outwards to make the world in our images. Since year zero, when the first proto-symbolic designs and mirror-images of reality were moulded into raw materials, spoken into existence and cast onto cave walls, almost all of our inventions and expressions have been at heart enabled by our ability to see what was not immediately visible in the sensible world. But scholars of the imagination do well in hesitating definitions, for if anything, the imagination appears to be a faculty that will inevitably be limited and perhaps even caricatured when pinned down monolithically. Seen by the Enlightenment empiricist Hume as "a kind of magical faculty in the soul"¹¹⁴ and today by Segall as “perhaps the most profound mystery in the history of philosophy”¹¹⁵, all we can be sure about is that the only meaningful way to study the imagination is via imagination itself. There are a bunch of epistemic axioms I found

¹¹² ‘Hyperstition: An Introduction’ Delphi Carstens Interviews Nick Land (2009) orphanriftarchive.com.

¹¹³ Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization*: 31.

¹¹⁴ Hume, D. (1739) *A Treatise of Human Nature*: 15.

¹¹⁵ Segall, M. (2023) *Crossing the Threshold: Etheric Imagination in the Post-Kantian Process Philosophy of Schelling and Whitehead*: 18.

especially relevant when approaching this: Korzybski argued, that if we split semantically what is not split ontologically, we introduce fallacies into our thinking¹¹⁶. This reflects Bergson's critique of the isolationist, rigidizing architecture of representational language, which he found to be useful (for analysis, identification and instrumentalization) precisely insofar as it is illusory (pseudo-separation and pseudo-solidity)¹¹⁷. Consonant traps to avoid were articulated by Whitehead¹¹⁸, who warned of the *fallacy of misplaced concreteness* and the *fallacy of the perfect dictionary* – two razors reflexively consonant with a rule given by Cheetham: that when dealing with the imagination “the literal has to go”¹¹⁹.

In ancient Vedic texts such as the *Chandogya Upanishad*, the dreamworld of appearances was referred to as *maya* – a Sanskrit term etymologically mycelial with a conglomerate of large words such as magic, image, imagination, might and make. It seems critical to point out that the transcendentalist epistemic skepticism against the world as appearance, as associated with *maya*, is definitely *not* a primarily Eastern phenomenon, as most emblematically reflected in the *Allegory of the Cave*, where Plato outlined a metaphysical account of the imagination as the mediator between the heavens of abstract ideas and the world's sensible exteriority. He notably discarded the imagination and its key vehicle of aesthetic representation as chiefly distorting and deluding what he envisioned to be a purely idealistic path towards the light source, thereby laying foundations for spiritual logocentrism and what LeGuin called heavenly desert Utopias¹²⁰ for millenia to come. Aristotle, who was aware that “every time one thinks one must at the same time contemplate some image”¹²¹, then psychologized the imagination, positing it as the liminal layer between mind and the materialized realm of sensible bodies. In *On Dreams* (350 BCE), he explored the phenomenology of the dreamstate, discussing how our mind is structured as a kind of memory-bank that enfolds all objects of exterior sense perception via an interior immaterial materiality populated by a

¹¹⁶ Korzybski, A. (1958). *Science and sanity: An introduction to non-Aristotelian systems and general semantics*.

¹¹⁷ Deleuze, G. (1988) *Bergsonism*.

¹¹⁸ Whitehead, A. N. (1929). *Process and reality*.

¹¹⁹ Cheetham, T. (2015) *Imaginal Love: The Meanings of Imagination in Henry Corbin and James Hillman*: 37.

¹²⁰ LeGuin, U.K. (1982) *A Non-Euclidean View of California as a Cold Place to Be*.

¹²¹ Aristotle (ca 350 BC) *De Anima (On the Soul)*.

multiplicity of forms and patterns that can be reactivated and rearranged via imagination. Our conceptions of the world, he argued, generally spring not from our sensual experience directly, but from the speculatively assembled mirror-images arising in our mind's eye.

While these ancient accounts already understood the imagination's pivotal role in matters of mediation, projection and meaning-making, it was not yet seen as an inherently creative force, or as Croce put it, the imagination was seen "as a faculty midway between sense and intellect, but always as conservative and reproductive of sensuous impressions or conveying conceptions to the senses, never properly as a productive autonomous activity"¹²². A notable facet of such non-creative forms of imagination are reflected in what the Romantic philosopher Coleridge called *fancy*: the reconfiguring and remixing of sensual and semantic impressions from the past to construct phantasmagorical constellations, which however remain superficial and ornamental. This trivial and perverted mode of manipulating the imagination's tropes for entertainment and amusement, according to Coleridge, must not to be conflated with the real thing, which, being a proper Romantic, he saw as "the living Power and prime Agent of all human Perception, and (...) a repetition in the finite mind of the eternal act of creation in the infinite I AM"¹²³.

Prior to Romanticism, during the Enlightenment, Hume made sense of the imagination as that which fused discontinuous (and in the empiricist understanding, passive) sensual impressions with continuous mental experience into a whole¹²⁴. Building upon Hume's work, the perhaps most influential account of the imagination in Western philosophy was then formulated by Kant, who in the first version of his *Critique of Pure Reason* (1781) placed it at the center of experience as the *transcendental synthesizing function*:

Both extremes, namely sensibility and understanding, must necessarily be connected by means of this transcendental function of the imagination, since otherwise the former would to be sure

¹²² Croce, B. (1902) *Aesthetic as Science of Expression and General Linguistic*: 170f.

¹²³ Coleridge, S. T. (1817) *Biographia Literaria*: 36.

¹²⁴ Hume, D. (1739) *A Treatise of Human Nature*.

*yield appearances but no objects of an empirical cognition, hence there would be no experience.*¹²⁵

According to Kant, “the synthesizing activity of imagination is responsible for unconsciously drawing together the chaos of raw sensory experience so that the world appears to us as always already ordered and coherent”¹²⁶ as Segall translates. Only, he erased central passages about the imagination in the second version of the Critique, as it contradicted his clean separation between the the imaginal and the conceptual. As Heidegger (quoted by Segall) would later argue, “Kant’s recoil from the creative abyss of imagination is a result of his desire to ‘(preserve) the mastery of reason’ over the senses. As a result (...) the core distinction of his transcendental philosophy between sensation and cognition widens into an unbridgeable chasm¹²⁷. In the monumental aftermath of this rupture, the threshold Kant himself feared to cross, has been repurposed into a vantage-point from which liminal hybridizations for going beyond dualisms sprang forth. For example, Deleuze’s transcendental empiricism describes the imagination as “(crossing) domains, orders, and levels, knocking down the partitions coextensive with the world, guiding our bodies (...) inspiring our souls” and thereby “(grasping) the process of actualization”¹²⁸. On the other hand, Segall argues that “the ontological bifurcation separating the physical form from the psychical can be healed only through an aesthetic act of creative imagination, an act that allows us not only to think but to *feel* the world in a new way”¹²⁹. Building upon Schellings’s Naturphilosophie and Whitehead’s processual cosmology of organism, in his recent book, he laid out what he calls a *descendental imaginal aesthesis*:

Attending to the imaginal tides of aesthesis as they flow to-and-fro across the sublime edges of embodied experience helps bridge the otherwise gaping chasm between mind and matter. Attending only to conceptual thought, or to transcendental structures, artificially widens the

¹²⁵ Kant, I. (1781) Critique of Pure Reason: 124.

¹²⁶ Segall, M. (2023) Crossing the Threshold: Etheric Imagination in the Post-Kantian Process Philosophy of Schelling and Whitehead: 44.

¹²⁷ Segall, M. (2023) Crossing the Threshold: Etheric Imagination in the Post-Kantian Process Philosophy of Schelling and Whitehead: 135

¹²⁸ Deleuze, G. (1968) Difference and Repetition: 220.

¹²⁹ Segall, M. (2018). Physics of the World-Soul: Whitehead’s Adventure in Cosmology: 14.

*gap. Dwelling instead upon the way aesthetic and emotional vectors vibrate sympathetically through and between bodies, we begin to realize that modern philosophy's categories of mind and matter no longer hold any water. They leak.*¹³⁰

Further contributions on the imagination, which cannot be unfolded at length here but have influenced my understandings while working on this thesis include Corbin's *Mundus Imaginalis or the Imaginary and the Imaginal* (1964) which interrogates the non-ordinary phenomenology of the imagination as a transsensorial perceptual organ, Castoriadis's *The imaginary institution of society* (1987) which gives a sedimentary view of imaginative process from a socio-political perspective, Davis's *TechGnosis: Myth, Magic and Mysticism in the Age of Information* (1998) which traces archetypal resonances and animist longings alive in today's hyper-mediated techno-imagination, Taylor's seminal work on *Modern Social Imaginaries* (2004) which describes the overarching function of shared projections in collective organization and meaning-making, alongside renewed interdisciplinary efforts in fields such as embodied cognition, philosophy of mind and affective neuroscience, which are rediscovering the imagination as "not just a peripheral feature of cognition or a domain for aesthetic research (but) instead the core operating system for humans" whose "epistemic and therapeutic functions (...) ground all our sense-making activities"¹³¹ as Asma writes in *Imagination: A New Foundation for the Science of Mind* (2022). Revaluating our "submerged mythopoetic cognition" as "the engine of mind, pulsing through many other forms of cognition including perception below and reasoning above", he argues that the "imagination needs to be moved from the periphery to the center"¹³².

3.4 Solar Ontologies

From the moment light-sensitive membranes on the surface of the planet first began morphing forth into what we would later call eyes half a billion heliocycles age, all earthly seeing has at heart been animated and illuminated by solar starlight. But not only vision: all

¹³⁰ Segall, M. (2023) Crossing the Threshold: Etheric Imagination in the Post-Kantian Process Philosophy of Schelling and Whitehead: 121.

¹³¹ Asma, S.F. (2022) *Imagination: A New Foundation for the Science of Mind*: 1.

¹³² Asma, S.F. (2022) *Imagination: A New Foundation for the Science of Mind*: 6.

life and flourishing. In light of our almost entire dependency upon the sun, which has never been an alternative energy source, the pervasiveness of the solar symbol in the mythic landscape of ancient civilizations is not so surprising¹³³. Ancient lore across the world was widely populated with anthropomorphic supreme deities that personified the sun: from the Egyptian Amun, Ra, Osiris and Horus, the Persian Mithra, the Norse goddess Sunna, the Shinto goddess Amaterasu, the Greek Helios and Apollo to the suspiciously recurring appearance of a messianic figure born from a virgin on the day of the winter solstice with twelve disciples who walks on water, dies on the cross (equinoxes and solstices) and returns as the risen saviour, allegedly all things which the sun was already doing in the sky all the time. But the pattern of *anthropomorphic solar-mimicry* symbolically representing (and to some extent substituting) the cosmic center of the world is *not* just a religious theme: its reverberations and reincarnations run through the heart of Modernity, but people are oftentimes unaware of it. “Nothing bores the ordinary man more than the cosmos”¹³⁴, Walter Benjamin noted about his epoch, echoing earlier rants about Modernity’s indifference towards celestial events. Ralph Waldo Emerson in 1836 noted that “few adult persons can see nature. Most persons do not see the sun”¹³⁵, while D.H. Lawrence in the early 20th century diagnosed that the “universe is dead for us (...) ‘knowledge’ has killed the sun, making it a ball of gas, with spots”¹³⁶. Negarestani today sees the sun as an “inevitable *blind spot*”¹³⁷, suggesting that for those creatures forced to avert their gazes, the sun’s force is naturally affirmed in concealment. With solar blindness recognized as a natural reflex, the star is by those scholars who have been looking at it, not rarely found to be a kind of elephant in the cosmos: the brightest entity whose actual relationality to us has remained largely invisible. “We are solar-oriented creatures in so many ways without knowing it, but now with climate change (...) we are becoming more aware of our bodies and of how perturbing and interesting

¹³³ It goes without saying that this topic is much too vast to do more than present a bundle of facets most relevant for this thesis. Further readings: Frazer, J. G. (1890) *The Golden Bough: A Study in Magic and Religion*. Olcott, W.T. (1914) *Sun Lore of All Ages*. Singh, M. (1993) *The Sun: In Myth and Art*.

¹³⁴ Benjamin, W. (1982) *The Arcades Project*: 101f..

¹³⁵ Emerson, R.W. (1836) *Nature*: 103.

¹³⁶ Lawrence, D.H. (1994) *Lady Chatterley’s Lover*: 331.

¹³⁷ Negarestani, R. (2010) *Solar Inferno and the Earthbound Abyss*: 3.

is our relation to the cosmos at large”¹³⁸ Taussig declared in *Mastery of Nonmastery in the Age of Meltdown* (2020) – a deeply solar experimental ethnography, where he goes on to propose a preposterously plausible transposition of Nietzsche’s somatic transvaluation of philosophy: “What Nietzsche should have said, what would have more suited his drift is that all philosophy is a misunderstanding not of the body, but of *the body in relation to the sun*”¹³⁹.

The most salient nexus for interrogating the potential viability of such a large hypothesis is the Copernican revolution itself: the ultimate cosmological Event at the outset of the scientific revolution came to historically echo as an emblem of the triumph of enlightened reason, as traced at length by Tarnas¹⁴⁰. Note how almost a century after *De Revolutionibus orbium coelestium* (1543), Galileo, in his *Dialogue Concerning the Two Chief World Systems* (1632) marvels at the early heliocentrics as having

*through sheer force of intellect done such violence to their own senses as to prefer what reason told them over that which sensible experience showed them to be the contrary (...) I repeat, there is no limit to my astonishment when I reflect that Aristarchus and Copernicus were able to make reason so conquer sense that, in defiance of the latter, the former became mistress of their belief.*¹⁴¹

The Copernican revolution not only ignited elevations of the scientific intellect over scriptural authority. It simultaneously signalled the incremental evacuation of the heavens and celestial bodies from animate forces: a solar reversal that disenchanting the cosmos. The same complicities between heliocentrism, modern celebrations of objective knowledge and the emptying out of the universe of inherent meaning became more explicit in a later peak of Enlightenment breakthrough: in the aforementioned work of Kant, referred to as a Copernican revolution. Here we encounter a transfer of the solar metaphor, such that the transvaluative nexus is no longer situated in the middle of the sky, but in the transcendental subject of enlightened reason direct. A third paradigmatic instance of anthropomorphic

¹³⁸ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 11.

¹³⁹ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 25.

¹⁴⁰ Tarnas, R. (2006) *Cosmos and Psyche: Intimations of a New World View*.

¹⁴¹ Galileo, G. (1632) *Dialogue Concerning the Two Chief World Systems*: 328.

solar-mimicry constitutive of modern personhood can be diagnosed in Freudian psychoanalysis, where an abstracted solar hero that is no longer some messianic or mythic figure rises. From this perspective, Modernity is less the era in which the Earth orbits the sun, but the era in which the world orbits around the ego¹⁴². While this third association might feel a little far-fetched to some readers, I think it would not appear so to scholars of solar symbolism. For those folks that have looked at the sun display a tendency to see it everywhere: they described it as the origin of all myth (Müller)¹⁴³, as the energetic, economic and religious *ultimate capital* (Serres)¹⁴⁴ and understood terrestrial life as “differentiated sunshine” (Fiske)¹⁴⁵ or as an *echo* of solar activity (Chizhevsky)¹⁴⁶.

In post-Nietzschean discourse, the ontological primacy of the sun is often presented as an immanent necessity: the vacuum left after the death of god can only be filled by the sun. The most influential proponent of this stance is George Bataille (1897-1962), who referred to his work as a *Kopernican revolution in economics*. In *The Accursed Share: An Essay on General Economy* (1949), he started from the basic empirical fact of *solar excess*: “Solar energy is the source of life’s exuberant development. The origin and essence of our wealth are given in the radiation of the sun, which dispenses energy – wealth – without any return. *The sun gives without ever receiving*”¹⁴⁷. Due to the sun’s excessive default mode, “a living organism, in a situation determined by the play of energy on the surface on the globe, ordinarily receives more energy than is necessary for maintaining life”, an infinite surplus from which he derived his infamous law of *dépense*: the cosmic necessity that excess energy which cannot be absorbed in growth “must necessarily be lost without profit; it must be spent, willingly or not, gloriously or catastrophically”¹⁴⁸.

¹⁴² Freud explicitly used the sun as a symbol for the ego in *Civilization and its Discontents* (1929).

¹⁴³ Müller, F. M. (1889) *Natural Religion*.

¹⁴⁴ Serres, M. (1980) *Parasite*.

¹⁴⁵ Fiske, J. (1874) *Outlines of Cosmic Philosophy*: 124.

¹⁴⁶ Chizhevsky, A. (1976) *The Terrestrial Echo of Solar Storms*.

¹⁴⁷ Bataille, G. (1949) *The Accursed Share: An Essay on General Economy*: 28.

¹⁴⁸ Bataille, G. (1949) *The Accursed Share: An Essay on General Economy*: 29.

3.5 Solarity and Energy Politics

As early as 1891, Rollo Appleyard dreamt of “the blessed vision of the Sun, no longer pouring his energies unrequired into space, but by means of photo-electric cells and thermo-piles, these powers (are) gathered into electric storehouses to the total extinction of steam engines, and the utter repression of smoke”¹⁴⁹. “Sun power is most logical. We know the sun is the central power-house of our universe, and we should, therefore, attack most seriously the problem of connecting ourselves with the sun direct”¹⁵⁰ Gernsbaeck found more than a hundred years ago, while Frank Shuman, after completing a pioneering sun power pumping plant in Egypt claimed that “Sun power is now a fact, and is no longer in the ‘beautiful possibility’ stage. It can compete profitably with coal in the true tropics *now*”¹⁵¹. That was more than a hundred years ago, but this early technological optimism did not catch fire and faded with the world wars, an era that fostered the domination of coal, oil and gas. Historians of solar energy have attributed the decade-long inhibition of momentum of a heliocentric turn not merely with high initial costs for developing infrastructure and the storage problem, but also with a failure in imagination, disinterest among industrial capitalists and fossil-lobby propaganda. “Although technology is normally thought capable of anything, it remains for most people inconceivable that it might achieve the relatively simple task of meeting energy needs from the sun”¹⁵² Scheer wrote. In light of the sun delivering 15.000 times more energy than we consume, he finds it “utterly grotesque when people continue to assert – supposedly with scientific backing – that humankind’s energy needs cannot be met from solar energy alone”¹⁵³. Verso adds that the *Solar Age*, “despite appropriate technology having been ready for years, does not seem to be arriving with the necessary determination due to the lack of political and industrial enthusiasm towards a transition to natural energy”¹⁵⁴. But things are changing. In the 2020s, with solar energy having become the

¹⁴⁹ Appleyard, R. (1891) Photo-Electric Cells.

¹⁵⁰ Gernsbaeck, H. (1916) The Utilization of the Sun’s Energy.

¹⁵¹ Shuman F. (1914) Article in Scientific American, Magazine issue 24 February 1914.

¹⁵² Scheer, H. (2002) The Solar Economy: Renewable Energy for a Sustainable Global Future: 62f.

¹⁵³ Scheer, H. (2002) The Solar Economy: Renewable Energy for a Sustainable Global Future: 62.

¹⁵⁴ Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future: 17

cheapest and fastest-growing energy source, *Solarity* is increasingly emerging as “one of the sharpest and most powerful of ideologies, blurring concept, fantasy, and infrastructure together in a manner that makes it difficult to disentangle solar fiction from solar reality”¹⁵⁵ as Barney and Szeman put it. Not alone with their hopeful enthusiasm among scholars in the *energy humanities*, when speculatively surveying the above-the-horizon prospects of solar futures, they do see the sun’s quasi-infinite gifting as a kind of revolutionary promise:

*Solar energy is a promise. It has come to be seen as a solution to the present – perhaps the ultimate one, the only one. It names a future that we are already (all too slowly) creeping into, one which seems to have none of the problems that trouble or worry the present. Against the looming eschatology announced by virtually every report about the juggernaut of global warming, solar reignites progress and offers it to the people and places left behind by fossil-fueled modernity.*¹⁵⁶

While Scheer found solar power to be “by its very nature, decentralised”¹⁵⁷, Lynall – who in *Imagining Solar Energy: The Power of the Sun in Literature, Science and Culture* (2020) interrogated the reciprocal relationship between solar imaginaries and energy politics, argued that “solar energy technologies do not embody particular identities or politics inherently, but have been adopted across the political and cultural spectrum”¹⁵⁸. While the contemporary horizon of solar in the context of renewables is widely associated with the dismantling of singular nexuses of profit and the promise of decentralization and local energy sovereignty, his study of *solar absolutism* in history and fiction (e.g. how solar tech has been seen as one of “the ultimate symbols of the triumph of enlightened knowledge”¹⁵⁹) holds critical archetypal signatures for informing a nuanced discourse.

It is possible that a shift to renewables will spell the end of capitalism; that alternative forms of energy are not compatible with capital’s grail of profit and growth. But where there’s a

¹⁵⁵ Barney, D.; Szeman, I. (2021) Introduction: From Solar to Solarity: 1f.

¹⁵⁶ Barney, D.; Szeman, I. (2021) Introduction: From Solar to Solarity: 1.

¹⁵⁷ Scheer, H. (2002) *The Solar Economy: Renewable Energy for a Sustainable Global Future*: 88.

¹⁵⁸ Lynall, G. (2020) *Imagining Solar Energy*: 8.

¹⁵⁹ Lynall, G. (2020) *Imagining Solar Energy*: 6.

capitalist will there's usually a capitalist way (...) opposing ideologies are wrestling over the future not only of energy, but of society. (Williams 2018)¹⁶⁰

The pioneering Solarpunk scholar Rhys Williams frames the promise of solar and renewables as holding a potential for systemic transvaluations nowadays often deemed impossible, but with the well-documented¹⁶¹ recapture of renewable transitions by what he calls *business-as-usual imaginaries*, the naively Utopian hope that a switch in energy source would automatically do away with the extractivist logics of Petremodernity has faded. “Like all energy configurations solar is going to be a terrain of social contestation and struggle and imagination (...) This will determine the outcomes of solarity – not anything that inheres in the technologies themselves”¹⁶² he concludes. But a cautious optimism among energy humanities scholars remains. In *Revolution and Revellion: Toward a Solarity Worth Living* (2021), Boyer made the case for turning the promise of solar into a vehicle for social experimentation and energy-induced metamorphosis. While acutely aware that “whatever solarity we can imagine from our present political situation is a solarity that is bound to still be confined within certain functionalities of petroculture”¹⁶³, he outlines a path centering around imaginatively resourcing the sun’s excessive energies in order to become more joyfully compositional beings. “In bits and scraps, solarity is (be)coming and even if we don’t quite know yet what forms it will take, we know that the road will involve a lot of playful work and workful play”¹⁶⁴. To infuse collective becomings with a catalytic surplus used for initiating radical recomposition, he imagines people of the near-future that cultivate experimental complicities with the sun’s abundant energies, thereby propelling “a kind of reworlding of limbs and minds in order to encourage an excess of possibility”¹⁶⁵.

¹⁶⁰ Williams, R. (2018) Solarpunk: Against a Shitty Future.

¹⁶¹ See: Argenti, N. & Knight, D. (2015) Sun, wind, and the rebirth of extractive economies: renewable energy investment and metanarratives of crisis in Greece.

¹⁶² Williams, R. (2019) ‘This Shining Confluence of Magic and Technology’: Solarpunk, Energy Imaginaries, and the Infrastructures of Solarity: 13.

¹⁶³ Boyer, D. (2021) *Revolution and Revellion: Toward a Solarity Worth Living*: 24.

¹⁶⁴ Boyer, D. (2021) *Revolution and Revellion: Toward a Solarity Worth Living*: 35.

¹⁶⁵ Boyer, D. (2021) *Revolution and Revellion: Toward a Solarity Worth Living*: 34.

3.6 Affect

Hume noted that it “is remarkable, that the imagination and affections have close union together, and that nothing, which affects the former, can be entirely indifferent to the latter”¹⁶⁶. This not only stresses how the imagination plays a pivotal role in synthesizing sensual perception, but how all processes of imagining are intimately tangled with landscapes of feeling. “Vision always cofunctions with other senses, from which it receives a continuous feed and itself feeds into”¹⁶⁷ Massumi adds, painting the image of a synaesthetic, fusional flux, where the interflowing coalescence of different modes of perception shape horizons of seeing and vice versa. But while leading future anthropologists foreground the imagination-sensation axis when asking “what does a future alterity feel like?”¹⁶⁸, such languaging does not yet touch upon how the interplay of feeling and seeing *moves us* (=enables us to become active). To intimately grasp imaginal and sensorial liminalities with horizons and capacities for enactment, this thesis turns to *affect theory*. The affective turn has (especially among future-oriented folks) often been traced to Deleuze’s reading of Spinoza’s *Ethics* (1677). From the axiom that expansive transitions on horizons of feeling go hand in hand with expansive transitions in capacities to affect and vice versa, Spinoza argued that it is practically unreasonable (an “inadequate idea”) to not conceive of foundational categories such as freedom, capacity, reason, goodness and activity through the lens of affect, thereby radically opposing the Cartesian idea of an intellect that reigns supreme over the senses. Deleuze later synthesized Spinoza’s ideas into his processual ontology of intense flows of de- and reterritorialization nomadically and rhizomatically travelling on the *plane of immanence*, seen as populated with “relations of movement and rest, speed and slowness (...) nothing but affects and movements, differential speeds (that impact) the ability to affect and be affected (...) (directing) the metamorphosis of things and subjects”¹⁶⁹.

¹⁶⁶ Hume, D. (1739) *A Treatise of Human Nature*: ii.

¹⁶⁷ Massumi, B. (2002) *Chaos in the Total Field of Vision*, in: *Parables for the Virtual*: 146

¹⁶⁸ Pink, S. & Salazar J.F. (2019) *Anthropologies and Futures: Researching Emergent and Uncertain Worlds*: 27.

¹⁶⁹ Deleuze, G. (1988) *Spinoza: Practical Philosophy*: 261f..

According to Massumi, a translator of Deleuze (and Guattari), “affect offers a way of weaving together concepts of movement, tendency and intensity in a way (which reveals) in what sense the body coincides with its own transitions and its transitioning with its potential”¹⁷⁰. In *Parables of the Virtual* (2002), he unfolded an *incorporeal materialism* centering around the interflowing liminality between movement and sensation: a body that “moves as it feels, and (...) feels itself moving”¹⁷¹. “When a body is in motion, it does not coincide with itself. It coincides with its own transition, its own variation. (...) In motion, a body is in an immediate, unfolding relation to its own nonpresent potential to vary”¹⁷² he wrote. *Sensation* is seen as “the mode in which potential is present in the perceiving body”¹⁷³, while *intensity* (which he equates with affect) is at heart unassimilable and autonomous: “an echo of irreducible excess, of gratuitous amplification, piggybacked on the reconnection to progression, bringing a tinge of the unexpected, the lateral, the unmotivated, to lines of action and reaction”¹⁷⁴. The relationship between affect and visuality was explored in Massumi’s notable 1995 essay *The Autonomy of Affect* which themed the primacy of immediate affective processing over semantic qualification in imaginal encounters. Before meaning is made, we have already been visually *and* viscerally primed by a non-representational impingement that infiltrates and prefigures our incipient field of cognitive processing. Unfoldings at the convergence of bodies, signs and sight thus become visible as a liminal dynamism springing from the interplay between (1) “a register of symbolic mediation and discursive elaboration” and (2) “a register of affective, embodied intensity”, with the relation between the two seen as “not one of conformity or correspondence but rather of resonance or interference, amplification or dampening”¹⁷⁵.

The pivotal argument of affect theory discloses how the associational principle of cognitive processes is undergirded by a pre-rational, pre-linguistic, auto-volitional layer of embodied

¹⁷⁰ Massumi, B. (2002) *The Bleed, Where Body Meets Image*, in: *Parables for the Virtual*: 64.

¹⁷¹ Massumi, B. (2002) *Parables of the Virtual*: 1.

¹⁷² Massumi, B. (2002) *Parables of the Virtual*: 4.

¹⁷³ Massumi, B. (2002) *Parables of the Virtual*: 4.

¹⁷⁴ Massumi, B. (2002) *Parables of the Virtual*: 27.

¹⁷⁵ Massumi, B. (2002) *The Autonomy of Affect*, in: *Parables for the Virtual*: 25.

intensity. But the autonomous and unassimilable (*non-egoic*) properties and potentials of affect, which Deleuze saw as simultaneously pre-subjective and trans-subjectively contagious are not merely promising for virulently restratifying collective horizons, but for the very same reason, also kind of dangerous. As Bennet, a leading theorist on *vibrant materialism* writes, affect “cannot be expressed exclusively through metaphors of overflow and vitality, but simultaneously enfold a charge of “terror” and “world annihilating violence”¹⁷⁶. The affective realm can be turned into a collective pharmakon but also into a narcotic on a mass-scale, which appears to be why Modernity “demonizes the affective but also romantically fetishizes it”¹⁷⁷ as Mazzarella tells us. While people tend to be simultaneously attracted and repulsed of the affective domain, phenomenologers of creative process cannot be blind to it, insofar as it is not exterior to *any* kind of creative process. Seeing it as the differential of the immanent plane of intensities itself, affect becomes visible as somewhat indistinguishable from the fluid force of transitioning energy itself. It is “not so much (...) an object circulating among subjects, but rather (...) a medium in which subjects circulate”¹⁷⁸ or as Massumi summarizes: “it is everywhere in effect. Its ability to come secondhand, to switch domains and produce affects across them all gives it a metafactorial ubiquity. It is beyond infrastructural. It is *transversal*”¹⁷⁹.

3.7 Mimesis

It is old news now that memes move and mutate like viruses on the planetary web but nevertheless amusing that researchers at MIT’s *Technology Review*, when analyzing patterns of transmission of the K-pop track *Gangnam Style* (the first YouTube video with +1bn views) concluded that the “spread of modern memes occurs in just the same way as bubonic plague!”¹⁸⁰. There are differences too: while the plague voyaged only at the pace of horse-drawn travel, the speed-limit of meme transmission is technologically restricted only

¹⁷⁶ Bennet, J. (2009) *Vibrant Matter: A Political Ecology of Things*: 53.

¹⁷⁷ Mazzarella, W. (2020) *Affect: What is it Good for?*: 295.

¹⁷⁸ Richard, A. & Rudnycky, D. (2009) *Economies of Affect*: 59.

¹⁷⁹ Massumi, B. (2002) *The Autonomy of Affect*, in *Parables for the Virtual*: 45.

¹⁸⁰ How the “Gangnam Style” Video Became a Global Pandemic (2017) MIT Technology Review.

by the firing of internet routers, offering a non-local mediation grid of quasi-instantaneous proliferation on a planetary scale. Already in his 1890 volume *Laws of Imitation*, the (micro)-sociologist Gabriel Tarde had argued that “society is imitation and imitation is a kind of somnambulism”¹⁸¹ – not only placing the notion of interdependent reciprocities at the center of his social theory, but also emphasizing the somewhat dreamlike or hypnotic means by which reflexive mimetic circulations shape and transfigure the social body. Ever since, anthropology has brought forth a rich spectrum of mimetic theories: from Turner’s work on performative imitation in liminal ritual¹⁸², Girard’s work on mimetic desire and mimetic violence¹⁸³, Jackson’s phenomenological work on the body as site of mimetic play¹⁸⁴ or Gell’s work on the mimetic dynamism emitted by art objects¹⁸⁵.

This MA-thesis most extensively draws from Michael Taussig’s work¹⁸⁶ on mimesis as crystallized in his recent book *Mastery of Nonmastery in the Age of Meltdown* (2020) – an experimental ethnography that starts from the hypothesis that “global meltdown amplifies mimetic and animistic impulses as never before”¹⁸⁷ – a rather unsettling postulate that reflects a tendency predicted by McLuhan in the Sixties, when he warned that with the advent of global interconnectivity “unless aware of this dynamic, we shall at once move into a phase of panic terrors, exactly befitting a small world of tribal drums, total interdependence, and superimposed coexistence”, a kind of hyper-mediated hyper-animism where “everything affects everything all the time”¹⁸⁸. Taussig’s mimetic theory draws from Walter Benjamin, who in *On the Mimetic Faculty* (1933) saw humanity’s “gift of seeing resemblances” as “nothing more than a rudiment of the powerful compulsion in former times to become and behave like something else”¹⁸⁹. This suggests deep intimacies between mimesis and the imagination by their common root in *animism*. Inspired by William S. Burroughs’ work on

¹⁸¹ Tarde, G. (1890) *Laws of Imitation*: 87.

¹⁸² Turner, V. (1969) *The Ritual Process: Structure and Anti-Structure*.

¹⁸³ Girard, R. (1972) *Violence and the Sacred*.

¹⁸⁴ Jackson, M. (1983) *Knowledge of the Body*.

¹⁸⁵ Gell, A. (1998) *Art and Agency: An Anthropological Theory*.

¹⁸⁶ See also: Taussig, M. (1993) *Mimesis and Alterity: A Particular History of the Senses*.

¹⁸⁷ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 5.

¹⁸⁸ McLuhan, M. (1962) *The Gutenberg Galaxy*: 32.

¹⁸⁹ Benjamin, W. (1933) *On the Mimetic Faculty*: 1.

linguistic viruses, Taussig further theorizes upon those instances when “language (becomes) something else” and “acquires the properties of a metamorphosing virus”¹⁹⁰. “Mimesis has an inbuilt propensity to provoke a chain reaction in which things become other things in a process of mimetic fission”¹⁹¹ he writes, and the process by means of which “mimesis dissolves persons into that which is exchanged in metamorphic back-and-forth reciprocities of personhood” is seen as indistinguishable from life itself: a never-ending chain of imitations of imitations that never entails a pure repetition, but is “always creative”¹⁹². The mediation of mimetic process by “this soulful hybridity” again foregrounds immense interplay with the liminal synthesizer of experience, here referred to as the imagination.

Taussig’s work speculatively posits a connection between two central concepts: *mimetic excess* propelling *runaway metamorphosis*. Responding to a dystopian diagnosis of our age (a terribly excessive, nightmarishly contagious interdependence between dark surrealism, the negative sacred, bad shamans in political offices, solar malevolence as much as ecological and political meltdown), Taussig’s argument holds that the very same dynamics of mimesis on overdrive, if consciously mobilized and maneuvered, can catalyze desirable reciprocal relays and intensify feedback loops onto trajectories of runaway metamorphosis that are *not* monstrous: to cultivate “a mutuality geared to the *mastery of nonmastery*” (a kind of skillful trickster-ontology of reciprocal nondomination) “therewith giving the planet and ourselves a break”¹⁹³.

3.7 Infrastructures

Infrastructures are generally understood as the “system of substrates”¹⁹⁴ that enables the movements of something else i.e. that which structures, mobilizes and directs transitions of all kinds of materials, processes and entities. As Larkin wrote in *The Poetics and Politics of Infrastructure* (2013), infrastructures “shape the nature of a network, the speed and direction

¹⁹⁰ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 10.

¹⁹¹ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 44.

¹⁹² Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 9.

¹⁹³ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 4.

¹⁹⁴ Star S.L. (1999) *The ethnography of infrastructure*: 380.

of its movement, its temporalities, (...) its vulnerability to breakdown” as much as comprising its “architecture of circulation”¹⁹⁵. The lens on *infrastructural imaginaries* suggests that infrastructures can never be reduced to their mere technical functionality but always enfold and transmit an imaginal dimension – or as Larkin writes, they “encode the dreams of individuals and societies and are the vehicles whereby those fantasies are transmitted and made emotionally real”¹⁹⁶. The infrastructure-scapes we inhabit “produce the ambient conditions of everyday life: our sense of temperature, speed, florescence, and the ideas we have associated with these conditions”¹⁹⁷. By virtue of catalyzing circulation, “infrastructures bring about change, and through change they enact progress, and through progress we gain freedom” which for Larkin explains “why as objects they provoke such deep affectual commitments”¹⁹⁸. The affective dimensions of infrastructures were further explored in Mrazek’s *Engineers of Happy Land: Technology and Nationalism in a Colony* (2002). He found the experiential dimension of infrastructures to be inseparable from the often-mentioned “enthusiasm of the imagination”¹⁹⁹. Attending to the sensible and atmospheric dimensions of experiencing infrastructural scapes, he theorized upon *infrastructural aesthetics* as “a language (to be learned), a way of tuning into the desire and sense of possibility expressed in the very materials of infrastructure”²⁰⁰.

In *Visionary Infrastructure: Community Solar Streetlights in Highland Park* (2017) – an ethnographic study about the *Soulardarity* lightning cooperative in Michigan, Shane Brennan interrogated those instances when infrastructure becomes

(...) a vehicle for visionary thinking – that is, a tool for reimagining not just how a particular utility or support system operates, but also broader shifts in the social

¹⁹⁵ Larkin, B. (2013) *The Poetics and Politics of Infrastructure*: 328.

¹⁹⁶ Larkin, B. (2013) *The Poetics and Politics of Infrastructure*: 333.

¹⁹⁷ Larkin, B. (2013) *The Poetics and Politics of Infrastructure*: 336

¹⁹⁸ Larkin, B. (2013) *The Poetics and Politics of Infrastructure*: 332.

¹⁹⁹ Mrazek, R. (2002) *Engineers of Happy Land: Technology and Nationalism in a Colony*: 13.

²⁰⁰ Mrazek, R. (2002) *Engineers of Happy Land: Technology and Nationalism in a Colony*: 25.

*politics surrounding the production and distribution of essential resources, including light, energy and electrical power.*²⁰¹

Brennan's essay traces a feedback-loop between (1) the aesthetic dimension (seeing and sensing) of collectively created (solar) infrastructure, (2) incremental expansions on horizons of imagination and (3) incremental materialization of further infrastructural transformations in the neighborhood. The perpetual crystallization of altered infrastructure-scapes which became incrementally tangible and sensible experiential anchors for those populating them and thereby mobilized enthusiasm for further envisionings are speculatively traced as carrying the potential for a recyclical refuturing process.

4. Solar-Terrestrial Imagination

At the outset of this thesis stood a solar parable formulated by Camus: he claimed that all artists quest for their truth. If mediocre, each work will bring them further away as the center will be everywhere and the light will dissolve. But if great, each work will bring them closer or at least they will revolve around a center towards a *hidden sun that will one day illuminate everything*²⁰². Imagine the pattern: a teleological trajectory of a line of flight spiraling towards a solar-mimetic attractor in the future that he envisaged as a kind of revelatory threshold activating stellar metamorphosis. While Nietzsche declared that chaos is required for birthing a star, Camus reminds us that without an orbital orientation we will only produce a nebula of dust fading into nothingness. To make a sun instead, a gravity well for pooling energies has to be mobilized and upheld over longer periods of time. What became clear during this research is that Camus' metaphor requires some strategic modifications to reflect the ontological architecture of Solarpunk. This is not merely because it transcends the monoversal vision of the single-player solar hero, but also because its overall meta-orientational source code is explicitly *not* purely solar.

²⁰¹ Brennan, S. (2017) Visionary Infrastructure: Community Solar Streetlights in Highland Park.

²⁰² Quote translated from German: *Jeder Künstler ist auf der Suche nach seiner Wahrheit. Ist er groß, wird ihn jedes seiner Werke näher bringen, oder er kreist zumindest näher jenem Zentrum, jener verborgenen Sonne, die eines Tages alles entzünden wird.* Camus, A (1954) Das Rätsel. in: Hochzeit des Lichts: 136.

While its many-faced, polycentral and pluriversal hyper-body is only beginning to consolidate into a coherent constellation, a glance at its visual aesthetics suffices to see what a more in-depth engagement with its fictions, non-fictions and key actors confirms: the attractor of Solarpunk is *not* the sun by itself, but *the sun in relation to the garden*²⁰³. Solarpunk is *not* another conventional solar utopia insofar as its heliocentrism is not sky-oriented. Instead, it must be understood as a decentralized device for dismantling the singularizing, totalizing and top-down projecting dimensions of Solar Empire: the upward reductionist ontologies associated with the cosmo-politics of *solar absolutism* as known from Egyptian pharaonic theocracy and French sunkings who recruited the celestial perfection of solar iconography for propagating divine kinship and peak of pyramid politics. Perhaps at first somewhat counterintuitive, solar absolutist futures are not portrayed in Solarpunk, but we see them in Cyberpunk dystopias all the time. Or is it not cosmo-politically symptomatic of a totalitarian reign of Solar Empire when in *Blade Runner 2049* the surface of our planet has come to look like a Martian desert? But it is not just the landscape: the dark political imaginary of its brake-failure-induced race towards AI-supremacy and technological enslavement is shot through with thermodynamic pyro-madness, neo-imperial fantasies and pharaonic desire. An AI that becomes indistinguishable from the sun would be classic cyberpunk stuff. Rather than going solar by itself, what is projected and prefigured in Solarpunk is exactly the opposite of a solar-mimetic top-down singularity. It instead invites for cultivating complicities with the sun to accelerate towards a pluriversal and massively decentralized *garden multiplicity*.

From this stance follows what I call the *solar-terrestrial synthesis*. It is generally agreed upon that there are two vital terrestrial strategies for attaining and maintaining symbiotic alliances with the sun to shield our planet from its violent outbursts of pyrophilia, which appears to be

²⁰³ This thesis explicitly focuses on the botanical complementary of the sun. An in-depth dialogue with its cosmic complementary *Lunarpunk*, which embodies “another pole with its purple tones, mushroom animism, bioluminescence, shadows, phases shifts and eclipses” would have further exploded the scope of inquiry. This absence is by no means intended to eclipse its relevance. Being something like the shadow of Solarpunk, it needs to be looked at and integrated. Source: Gnomon (2020) *The Renaissance: A Metamodern Playbook*: 96. See also: Lunarpunk and the Dark Side of the Cycle, YouTube. JANK (2021) *What is Lunarpunk? A Sub-Sub Genre*.

our first cosmic condition of survival and flourishing. These are (1) the *terrestrial ecosphere*²⁰⁴ and (2) the *terrestrial magnetosphere*²⁰⁵. If either or both of these planetary meta-affective capacities weaken or disintegrate²⁰⁶, it would usher in an era of cataclysms by means of excessive influxing radiation propelling thermodynamic overdrive and angry-sky phenomena (this could lead to cooling but also to heat death). My experimental hypothesis synthesized from the world(s) of Solarpunk holds that there appears to be a third pivotal strategy for cultivating vital coalitions with the sun: this liminal super-organism I call the *solar-terrestrial imagination*.

Solar-terrestrialism is anchored in the source code of Solarpunk via the works of LeGuin, whose *realism of a larger reality*²⁰⁷ (=imagination-oriented ontology) was explicitly tuned in opposition to Frank Herbert's desert planet Arrakis – towards the *anti-Dune*, or in LeGuin's words – towards the amplification and recovery of worlds in which *the word for world is forest*.

*Athshe, which meant the Forest, and the World. So Earth, Terra, meant both the soil and the planet, two meanings and one. But to the Athsheans soil, ground, earth was not that to which the dead return and by which the living live: the substance of their world was not earth, but forest. Terran man was clay, red dust. Athshean man was branch and root. They did not carve figures of themselves in stone, only in wood.*²⁰⁸

In this section we get a feel for what LeGuin's anthropological sf affords: the speculative unfolding of an invented culture's semantics, mythologies and artisanal values renders

²⁰⁴ See: Lovelock, J. & Margulis, L. (1974) Atmospheric Homeostasis by and for the Biosphere: The Gaia Hypothesis.

²⁰⁵ See: Keiling et al. (2018) Magnetospheric Plasma Physics. Negarestani, R. (2008) Cyclonopedia.

²⁰⁶ The magnetosphere has lost about 30% of its force in the last 3000 years which could over the next millenia, centuries, or as some space weather experts believe, much sooner, drop to almost zero when a polar reversal or geomagnetic excursion occurs. That would not exactly be great news for us. Please feel free to do your own research, but be warned as this is a "rather" unsettling rabbit hole.

²⁰⁷ *Hard times are coming, when we'll be wanting the voices of writers who can see alternatives to how we live now; can see through our fear-stricken society and its obsessive technologies to other ways of being, and even imagine real grounds for hope. We'll need writers who can remember freedom — poets, visionaries — realists of a larger reality.* Source: Ursula K Le Guin's speech at National Book Awards 2014: YouTube.

²⁰⁸ LeGuin, U.K. (1972) The Word for World is Forest: 46.

visible an experimental positionality, here of a forestbound collective that experiences its vital substrate as identical with the fertile rhizome of the biosphere. LeGuin's deeply botanical vision for reanimating the collective imagination with a *recyclical turn* remains the most relevant for Solarpunk today due to its in-depth inquiry on liminal interplay between metaphor, temporalities, ecologies and collective world-writing. In *A Non-Euclidean View of California as a Cold Place to Be* (1983)²⁰⁹, she traced lines of complicity between a conglomerate of configurations running through the history of hegemonic utopianisms: logocentrism, fantasies of omnipotence, dominion of nature, the heavenly desert of the Euclidean mind, the privileging of the future at the expense of the present and the violent projection of an abstracted, singular future vision onto the present from above for which she turns to Dostoevsky's trope of the utopia of the Grand Inquisitor. It is impossible to miss that all these articulations are axially synchronous insofar as they are all upward reductions: they all privilege the boundless above at the expense of the finite below. LeGuin's argument that "utopia has been yang (...) the big yang motorcycle trip"²¹⁰ thus also critiques that utopia has tended to be a solar absolutist endeavor. Against these already-known traps of future-oriented ascent and violently projected top-down singularity, LeGuin proclaimed that "we are not ever going to get to utopia again by going forward but *only roundabout or sideways*"²¹¹.

In *The Carrier Bag Theory of Fiction*, a 1986 mini-essay often evoked as an origin-point of Solarpunk, she presented how that might look like: despite the difficulties of telling a captive story about collecting berries and wild oats compared to mammoth-hunting, LeGuin insisted upon the *carrier bag* as the first piece of human tech instead of the *spear*, arguing that "with or before the tool that forces energy outward, we made the tool that brings energy home"²¹². This maneuver is seen as a transvaluation of values and patterns radiating upon the horizon of Solarpunk from the dawn of humanity: a reversal of (1) *narrative structures* (a recyclical, quasi-infinitely renewable garden story rather than a linear, singular and eschatological spear story), (2) *nature-tech imaginaries* (culture and technology as a means of cultivating,

²⁰⁹ LeGuin, U.K. (1982) *A Non-Euclidean View of California as a Cold Place to Be*.

²¹⁰ LeGuin, U.K. (1982) *A Non-Euclidean View of California as a Cold Place to Be*: 11.

²¹¹ LeGuin, U.K. (1982) *A Non-Euclidean View of California as a Cold Place to Be*: 19.

²¹² LeGuin, U.K. (1986) *The Carrier Bag Theory of Fiction*: 4.

synthesizing and redistributing rather than as a means for domination, weaponization and killing), (3) *modes of energy transition* (harvesting, resourcing and circulating abundance rather than insulating, extracting and terminating it), as much as (4) *movements on the imagination-reality axis* (bringing energy home rather than overshoot followed by extreme exhaustion).

A precisely designed narratological application of LeGuin's critical argument that the conspiratorial coalition between upward reduction and spear-stories runs towards the desert can be encountered in Jessop's *New Siberia* – an apocalyptic tale set after the darkest hour of history when “Our Garden Eden turned out to be a desert planet”²¹³. Suggesting that with Solarpunk, the end of the world is never an absolute omega of eternal cancellation, the protagonist survives and meets *Amphisbaena* – a curiously shaped figure from Greek mythology introduced as the double-headed snake after the end of the spear/fall²¹⁴/world, who teaches him to survive. As it must, *New Siberia* ends with a beginning: an early dawn of renewed hope signaling the rise of the sun of Solarpunk, here performatively sanctified by a kind of thermo-illuminationist declaration of the super-abundant solar human: “That’s what I am. Potential energy. Waste heat. Humans radiate it whether we want to or not. It’s why we’re explorers. The long night passes, and we wait for the light”²¹⁵.

Here, we might want to zoom out one meta-layer: if we speculatively posit the *radiant sandcastle*²¹⁶ as the metaphor for utopia as LeGuin suggests, the analogous metaphor for the imagination would be that of the *sandbox*²¹⁷. What might that sandbox be filled with? And where is it located? Between dreamtime and spacetime? My speculative theory holds that the sandbox of imagination can be seen as kind of flight portal or beam-casting device (see:

²¹³ Jessop, B. (2018) *New Siberia*, in: Ulibarri, S. *Glass & Gardens: Solarpunk Summers*: 151f.

²¹⁴ I was a little surprised to find that Solarpunk stories (especially those in Ulibarri's *Glass & Gardens* series) not rarely enfold scriptural reverberations, but in light of recognizing the merit of reimagining ancient archetypes as a futuring strategy, it becomes a high-leverage move.

²¹⁵ Jessop, B. (2018) *New Siberia*, in: Ulibarri, S. *Glass & Gardens: Solarpunk Summers*: 160.

²¹⁶ LeGuin, U.K. (1982) *A Non-Euclidean View of California as a Cold Place to Be*: 10.

²¹⁷ See Raven, according to whom sf provides “a sandbox, a test-bed, a gedankenexperiment (...) the technological archaeology of imagined futures”. Raven, P.G. (no date) *An Introduction to Infrastructure Fiction*. Guest-post on *Superflux*.

Raven, P.G. (no date) *An Introduction to Infrastructure Fiction*. Guest-post on *Superflux*.

Literature Review 3.3). As without it, our world would appear only as unintelligible sensorial intensity to us, the imagination is better understood not only as the doorway towards utopia, *but also towards reality*. But how does it interface with reality to make a desert and how does it interface with reality to make exactly the opposite? To interrogate this, this chapter examines the pluri-dimensional topography of the imagination-reality axis by tracing entanglements between the complementary articulations of (1) *flight* and (2) *landing*. The flight metaphor best captures the basic symptom of the utopian imagination's projection beyond present actuality: a kind of leap into the creative void of non-articulated possibility that may or may not be closed. To experimentally study the phenomenology of imaginary flights and their modes of landing (or lack thereof), we can turn towards Einstein, who famously imagined surfing on a lightbeam to alter understandings of reality forever. He thought that "imagination is more important than knowledge. While knowledge is limited, *imagination encircles the world*"²¹⁸. If Einstein is right, how exactly does the imagination afford for encircling the world? To explore this, we can use his prompt as a jump-off point for retracing lines of navigation of a bundle of speculative voyages – not merely to assess what is virtually possible, but also to begin tracing how different configurations of flight pivot back to contingent present reality (or not).

To begin closest to reality and get a more adequate sense of the entangled life of cosmic flows, we can visualize movements we know are already happening, such as the fusional outflow of ionized hydrogen and helium particles at the sun's core travelling up to 200.000 years to the photosphere at the surface to then traverse the 150 million km to our planet in only 8.3 minutes, thereby illuminating our world. We can zoom out and picture how swarms of photonic currents from the sun have been driving the evolution of light-sensitive membranes on the surface of the planet since about 0.5 bn heliocycles. Or we imagine the flows of the solar winds – supersonic streams of luminous plasma permanently coarsing through the heliospheric or interplanetary magnetic field (HMF, IMF) with such immensity that the sunward side of our planet's magnetosphere expands only around ten times its radius

²¹⁸ The Saturday Evening Post, What Life Means to Einstein: An Interview by George Sylvester Viereck (1929).

but the night-side magnetosphere expands up to a thousand terrestrial radii. We can then envisage the fluctuating oscillations of the ~eleven-year solar cycle with the polar reversal and sunspot maximum occurring at the peak. Or we zoom into singular occurrences of solar flares or coronal mass ejections (CMEs) – sunspots with diameters exceeding 200.000 km with eruptions travelling at 673 km/s (May 2024) and releasing 4×10^{32} ergs of energy (Carrington Event 1859). Imaginatively interpreting these facts of nature opens a vast horizon of possibilities as to how the sun might affect us, such as seeing the sun as “a great heart whose tremors run through our smallest veins”²¹⁹ as Lawrence, viewing solar storms as the planet’s “ultimate musicality”²²⁰ as Negarestani or, like me, ask far-out imagination-oriented questions, such as whether it can be that as we perform rapid-eye movement, solar winds coarse through our bodies on a vertical axis?

Before this runs out of hand, we will turn to another approach: the imaginative transposal of knowledge about the sun into the realm of science-fiction to unfold a speculative positionality on another planet, as in the opening scene of Kim Stanley Robinson’s *2312* (2012):

(...) one last look at sunrise on Mercury. In the ultraviolet it's a perpetual blue snarl of hot and hotter. With the disk of the photosphere blacked out, the fantastic dance of the corona becomes clearer, all the magnetized arcs and short circuits, the masses of burning hydrogen pitched out at the night. Alternatively you can block the corona, and look only at the sun's photosphere, and even magnify your view of it, until the burning tops of the convection cells are revealed in their squiggling thousands, each a thunderhead of fire burning furiously, all together torching five million tons of hydrogen a second—at which rate the star will burn another four billion years. All these long spicules of flame dance in circular patterns around the little black circles that are the sunspots—shifting whirlpools in the storms of burning. (...) There are nonbiological explanations for all this convoluted motion—different gases moving at different speeds, magnetic fields fluxing constantly, shaping the endless whirlpools of fire—all mere physics, nothing more—but in fact it looks alive, more alive than many a living

²¹⁹ Lawrence, D.H. (2013) *Delphi Complete Works of D.H. Lawrence*: 848.

²²⁰ Telluro-Magnetic Conspiracy Towards the Sun I – Solar Rattle, in: Negarestani, R. (2008) *Cyclonopedia*: 145f.

*thing. Looking at it in the apocalypse of the Mercurial dawn, it's impossible to believe it's not alive.*²²¹

If we can “relax that tyrannical reality principle”²²² as Jameson proposes, this passage enables us to see what they saw even though ‘they’ never actually set foot onto Mercury or existed in the first place. By moving *beyond the where* of exterior space (concrete localities in sensible reality), the imagination enables going to *all* possible places: “its *ubi* is an *ubique* (everywhere)”²²³. But the flights of science-fiction, as opposed to fantasy, while oftentimes not exactly possible (yet) in actuality, generally remain truthful to some significant contingencies thereof, which are made visible in a heretofore unseen light. By hijacking and relocating our horizons of seeing towards a representational experience of an otherwise impossible experience (literally participating in the Mercurial dawn), this passage provokes a radical transfiguration of how we might experience ourselves in the cosmos: it invites us to *begin seeing the sun’s aliveness*. While this would already entail a profound ontological alteration for most people, it does not (yet) explicitly prefigure the relevance landscape for what we might *do*.

Any speculative meta-position visioncast beyond present actuality interacts with the lived horizons of those interfacing it, but sf tends to be strategically designed to do so in specific ways. This capacity “not to give us ‘images’ of the future (...) but rather to defamiliarize and restructure our experience of our own present”²²⁴ as Jameson put it, suggests a kind of designable hauntological backfolding whereby speculative futures can be explicitly encoded to *change the present*. A salient example of this is encountered in Robinson’s *Aurora* (2015) – a hard sf novel that interrogates how fantasies of leaving the solar system behind might realistically play out in the not-so-near future. It tells the tale of an interstellar spacecraft departing in 2545 to colonize heavenly bodies in the Tau Ceti constellation. Despite speeding at a severely extraterrestrial 0.1c (10% of lightspeed), they travel for 160 years, but soon after

²²¹ Quoted from a reading at Transformation without Apocalypse - How to Live Well on an Altered Planet, YouTube.

²²² Jameson F. (2005) Archaeologies of the Future: The Desire Called Utopia and Other Science-Fictions: 270.

²²³ Corbin, H. (1972) *Mundus Imaginalis* or the Imaginary and the Imaginal: 4.

²²⁴ Jameson, F. (1982) Progress versus Utopia: Or, Can We Imagine the Future?: 151.

arrival discover that the exoplanet they have landed on is not as hospitable as they had hoped. This is not exactly convenient: facing deadly prion bacteria and resource depletion, they question whether coming there was such a great move. As panic spreads and the ship's AI seizes control to run a referendum, half of the spacefarers vote to return back to Earth. Tormented by infections and crop failure, they barely survive the trip back only thanks to cryogenically freezing their bodies. During the twelve-year deceleration phase before landing via multiple gravity assists, the crew members who survived learn about the expansionist motifs of their initial voyage, while facing hostility from earthlings. After finally returning, the protagonist Freya joins a collective of terraformers to help recover the Earth's coastline, which had been havocked by centuries of rising sea levels. Now that is a pretty far-out intergalactic pivot you might say, but it nevertheless speaks rather clearly to our present moment: by painting a realistic image of the harsh eventualities that space enthusiasts might prefer not to face while fantasizing, Aurora questions whether it might not be a better choice in the first place to come down to Earth, thereby deeply resonating with Latour's descendent cosmo-politics according to which there is "no escape route except back on Earth"²²⁵.

To deepen our grasp on the vertical trajectories of solar flights, we can also turn towards actuality: the most salient example is the flight of *Parker Solar Probe* – a spacecraft named after Eugene Parker²²⁶ that in 2021 became the first artificial object that flew into the sun's corona²²⁷ and *touch the sun*²²⁸ as mythologized by NASA. On a cosmo-poetic level this is a big Event: millenia after its initial formulation, the fantastic tale of Ikarus is now no longer just a metaphor. While fiction imitates reality, one can apparently expect that reality will

²²⁵ Latour, B. (2015) Telling Friends from Foes in the Time of the Anthropocene: 130.

²²⁶ Eugene Parker (1927-2022) was a leading solar- and plasma-physicist who pioneered understandings of solar winds and first conceptualized the Parker spiral.

²²⁷ The *corona* is the outermost layer of the sun's atmosphere, made up of ionized gases that expand millions of kilometres into space – a blazing "crown" visible only during total solar eclipses. Due to magneto-ionic hyper-activity (referred to as coronal loops, magnetic reconnection or switchbacks), the corona's temperature reaches up to 3 million °C and is thus multiple magnitudes hotter than the photosphere at the surface which reaches 'only' around 5.500 °C.

²²⁸ NASA Goddard: NASA's Parker Solar Probe Touches The Sun For The First Time, YouTube. https://www.youtube.com/watch?v=LkaLfbuB_6E

imitate fiction in return, even epochs afterwards. How then does flying to the sun in actuality deviate from ancient myth? And how does the Parker probe's trajectory deviate from the heliocentric-but-descendental orientation of Solarpunk? With its seven Venus gravity-assists through which it gradually decreases its perihelion²²⁹ during 24 circumnavigations of the sun, the probe proves that flying to the sun in actuality is *not* a purely linear procedure at all. But that does not exactly indicate a return. Deviating from Ikarus, the spacecraft will not die falling from the sky. After its final orbit, when depleted of its fuel reserves, it will vaporize and merge with the celestial fires, but this heliocentric heat-death is planned and therefore void of the hubristic infatuation of the Ikarus archetype. What certainly echoes with Solarpunk is the probe's revolutionary heat-shield which enables it to endure for so many rounds under the most extreme thermodynamic conditions (for example, Hydroponic Trash – a Texas-based hacker-botanist not only builds recycled gardening gear, but also works on prototypes for affordable, self-assembling cooling suits to help the people of tomorrow to thrive during heat waves). Despite these resonances, the Parker probe traces a trajectory archetypal of pure solar upward reduction, thereby radically deviating from those projected and prefigured in Solarpunk, whose experimental flights definitely do not entail becoming machine and performing stellar sacrifice in exchange for data at the total expense of landing²³⁰. The deviating stance of Solarpunk is captured in Wilk's *dislocation rather than utopianism*²³¹, Verso's *energy from above, action from below*²³² (as opposed to Cyberpunk's "high-tech, low life") and Hudson's *move quietly and plant things*²³³ – a shift from heliocentric flight to touching and transfiguring the ground, suggesting that with Solarpunk, we have to imagine the swarming lines of flight associated with solar winds as currents of enthusiasm and possibility, mobilized to propel earthbound enactment (*lines of landing*).

²²⁹ The *perihelion* describes the point in an object's orbit around the sun where it is closest to it. Parker Solar Probe's perihelion distance is about 6.4 million km (about 4.6 diameters of the sun).

²³⁰ This should be known too: the Parker probe's flight's velocity reflects the sheer immensity of the sun, as due to its gravity being twenty-eight times higher than on the surface of the planet, the Parker probe is now also the fastest human-made thing of all time (635266 km/h).

²³¹ Wilk, E. (2016) Is Ornamenting Solar Panels a Crime?

²³² Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future.

²³³ Hudson, A.D. (2015) On the Political Dimensions of Solarpunk.

*endless permutations of cosmic trade winds
photon propulsion
would keep taut
our copper & micron sails²³⁴*

nathaneal's SunVault poem *light sail, star bound* builds upon an idea from Arthur Clarke's *The Wind from the Sun* (1972) where the main character invented a vehicle powered by solar radiation, giving rise to the sport of sunjamming. The story erupts into an epic race to the moon at the peak of which a massive solar flare is suddenly announced and the protagonist leaves his ship with the light-sail still open, allowing it to be carried into the endless realms of space. This classic (and cliché) space tale reflects correspondences between stellar super-abundance and the extraterrestrial desire of vanishing into the unknown vastness of the cosmos. With Solarpunk, the trope of *sailing with solar winds* is adopted as a strategy of propulsion, but in a way that radically deviates from Clarke's space-utopianism. It is definitely not about constructing and navigating solar-fueled space-sails as those prompted by Clarke's story²³⁵. But we can begin imagining it as a metaphorical terrestrialization of these vehicles and their movements. A paradigmatic account of how the vehicles of Solarpunk are to be constructed is given in the SunVault-poem *recursive*:

*he had wanted to be an astronaut
but works in an aircraft scrapyard
now, carefully dismantling, resorting
his love making him different from scrappers,
who loot the extinction of another age
he finds, with a scientist's precision,
new bodies for the marvels of his own time
a catharsis, in saving these old giants -*

²³⁴ nathaneal, j (2017) light sail star bound. In: Wagner, P.; Wieland C.B. (2017) SunVault: Stories of Solarpunk and Eco-Speculation: 85.

²³⁵ Such as NASA's Sunjammer (which never took off) or the Japanese IKAROS (Interplanetary Kite-craft Accelerated by Radiation Of the Sun).

shuttle, airplane, satellite, jet

*to birth new bodies of sunplant, windwing, radio to the universe*²³⁶

recursive sets the tone for a descendentalism that starts from discarding the initial extraterrestrial dream. Instead of accelerating towards the sun, spinning Dadaist utopias furthest away from reality as possible, flying off in transcendental spaceships, disappearing in interstellar voids or landing on desert planets, the imaginative maneuver of Solarpunk is geared towards compos(t)ing recyclical vehicles for obsoletizing Petromodernity's apparatuses of flight, whose overshoot depletes possibilities of future flourishing: "Our future must involve repurposing and creating new things from what we already have (instead of 20th century 'destroy it all and build something completely different' modernism)"²³⁷ as Flynn writes. Windwing signals that the movements traced by these nascent bodies resemble those of the *skysail*²³⁸ – the second first piece of Solarpunk tech next to LeGuin's carrier bag, similarly serving as an emblem of transfigured nature-tech imaginaries. Sunplant on the other hand again explicates the aforementioned solar-terrestrial synthesis: that going solar, aligned with LeGuin, is to be understood as perhaps not exactly an earthbound, but a forestbound maneuver.

While Oscar Wilde famously noted that "A map of the world that does not include Utopia is not worth even glancing at, for it leaves out the one country at which Humanity is always landing"²³⁹, Solarpunk is *not* about landing in Utopia. It is instead about *landing in the garden* as opposed to landing in the desert, which signals a shift towards a (bio-mimetic) *recyclical temporics*. The garden-desert axis is confronted most explicitly in *The Desert, Blooming* – a classic Solarpunk tale about a crew of experimental botanists doing bio-remediation work in a post-apocalyptic wasteland. The story enfolds a good number of Solarpunk's forest-oriented signature maneuvers: they voyage into the desert with "an enormous ship (which) slowly filled up with trees and seed beds and archaeological equipment" – a kind of

²³⁶ Powell, B. (2017) recursive, in: SunVault: Stories of Solarpunk and Eco-Speculation: 197.

²³⁷ Flynn, A. (2014) Solarpunk: Notes towards a Manifesto.

²³⁸ See: Republic of the Bees (2008) From Steampunk to Solarpunk.
Miyazaki's first film *Nausicaä of the Valley of the Wind* (1984).

²³⁹ Wilde, O. (1891) The Soul of Man Under Socialism.

botano-archaeological vehicle that is simultaneously a container. Their work centers around “grafting tree stocks and hybridizing fruits and seeding the wild grasses grown in the labs from the thing (...) found in waste pits to see how they would take in field conditions”²⁴⁰. Their mission is named as “filtration through planting, to turn the Desert into a blooming place that herds might travel from oasis to oasis”²⁴¹ – a kind of permacultural regeneration of vital infrastructure that enables renewable circulations of nomadic collectives.

The story’s theme of *terraforming terra itself* reveals the garden’s relationship to Utopia in the future: the garden can be seen as the ultimate *utopia-that-is-not-a-utopia* insofar as it not only archetypally enfolds the Edenic proto-paradise before the fall into civilization and meta-consciousness, but simultaneously always has been an actual place in the world since the dawn of everything. In our age, as the garden seems to be haunted by the image of its collapse in the future more than ever before, it is feared that it could become a non-place. But such transterrestrial or annihilationist projections are exactly those that Solarpunk seeks to undermine. LeGuin’s garden-argument that “if it is to come, it must exist already”²⁴² should make clear that what is suggested is *not* a resurrection of utopia as utopia, but as something else. Her high-concept of the garden story does not signify a heavenly dream nor a return to some pre-civilizational innocence or perfect harmony with nature, but something even more beautiful – a post-eschatological temporics where the end always turns around into a beginning: a *Return of the capacity for returning itself*. In the world(s) of Solarpunk, this quasi-infinitely renewable pattern has also been associated with the omega-and-alpha of hyperstitional tricks: the *cancellation of the apocalypse*²⁴³.

²⁴⁰ Mirov, L. (2017) The Desert, Blooming, in: SunVault: Stories of Solarpunk and Eco-Speculation: 104.

²⁴¹ Mirov, L. (2017) The Desert, Blooming, in: SunVault: Stories of Solarpunk and Eco-Speculation: 106.

²⁴² LeGuin, U.K. (1982) A Non-Euclidean View of California as a Cold Place to Be: 15.

²⁴³ Ayoub, J. (2022) What if We Cancel the Apocalypse?



²⁴⁴ Image sources: (a) Aurora Forecast, NOAA Space Weather Prediction Center. (b) The Dynamic Solar Magnetic Field, Nasa Scientific Visualization Studio. (c) Solarpunk Flag, Wikimedia Commons. Ouroboros, Wikimedia Commons (e) Amphisbaena, Wikimedia Commons. *All unsourced images made with Midjourney AI.*

5. Can We Learn to Love the Future?

*When the Strandbeest started dreaming it assumed sensor error. Why else would it feel
wavelets braceleting its PVC ankles where seconds before there was only
SAND SAND SAND SAND SAND SAND SAND SAND SAND SAND SAND
(Bradley, Jimenez)²⁴⁵*

The river is a wanderer. Its fuel is the imagination.
(Egyptian proverb)

The most echoed entry-point into the heart of Solarpunk remains Flynn’s prompt according to which “the only other options are denial or despair”²⁴⁶ but its large promise was most emblematically formulated in Future Fiction’s 2020 anthology *Solarpunk: Come ho imparato ad amare il futuro* (2020). Not only framing it as a kind of inversion of the atomic bomb²⁴⁷, Solarpunk is here presented as a pedagogical device for cultivating specific kinds of relationships with the future: complicities with visions of planetary tomorrows that are not loathed, but instead glow with the euphoric promise and pragmatic possibility of abundant energy, decentralized infrastructure, regenerative renaissance, wise tech, vibrant community and peaceful pluriversality – more beautiful worlds that many people would love to see amplified and actualized. To unfold my understanding of how Solarpunk proposes we can *learn* to get there, this chapter explores the catalytic phenomenology and recyclical temporics of *hypertemporal affect*, centering around liminalities of horizons of seeing, landscapes of feeling and how these two interplay with capacities to affect the future and being affected by it²⁴⁸.

When encountering the future, from the gap opened beyond present actuality springs a catalytic dynamism for propelling a feedback loop. If we view our projections beyond the

²⁴⁵ Bradley, L. & Jimenez, J.M. (2017) Strandbeest Dreams, in: SunVault: Stories of Solarpunk and Eco-Speculation: 32.

²⁴⁶ Flynn, F. (2014) Solarpunk: Notes Towards a Manifesto.

²⁴⁷ See: Dr. Strangelove: How I learned to love the bomb (1964). The metaphor works because the atomic bomb has also been referred to as an artificial sun.

²⁴⁸ See: Deleuze, G. (1970) Spinoza: Practical Philosophy.

horizon as *not just symptom, but also cause* as Stephenson²⁴⁹ proposed, we begin to see how imaginaries of tomorrow can haunt us from the future. This inverted hauntology suggests a prefigurative causality that runs on a recyclical trajectory. Projections prefigure: we project into the future, thereby solidifying fictive meta-positions that in return affect us in the present, such that a recursiveness arises by means of which our speculative designs backform reality from the future. As this circuit appears to enable non-linear participation in how the future “awakens the present”²⁵⁰, our go-to-images for looking beyond the horizon should be chosen wisely. But the sculpting of lenses, as should already be sensed, is only the entry-point. To prefigure right relationship between projection and prefiguration (*projection-prefiguration axis*), this chapter speculatively traces two diametrically opposed tendencies of hypertemporal affect: (a) the self-defeating Ouroboros of *fearing the future* – an autoexhausting loop spiraling between dystopian visions and the incremental closure and cancellation of the present, thereby recyclically amplifying dysphoric defuturing over time (*negative sum hauntology*) vs. (b) the regenerative Ouroboros of *loving the future* – an autocatalytic loop spiraling between desirable attractors and the incremental opening and enlargement of the present, thereby recyclically amplifying euphoric refuturing over time (*positive sum hauntology*). This speculative binary of hyperstitional polarization is painted with broad brushes, not in order to eclipse nuance, but to enable meta-orientation – for as we can expect futures in the future to present themselves via profoundly accelerated projection-prefiguration cycles reverberatively backfolding their imprints, the drift of our imaginary interfaces for seeing and thereby entering reality could easily distinguish between us landing in a desert or landing in a garden.

The worst possible stratagem that spirals into the lose-lose quadrant on the future-present scorecard is *lingering in dystopia*. Dystopian visions, insofar as they extrapolate trajectories whose amplification and actualization are undesirable, open up a future-present circuit that is mediated by fear (or its complementaries: repulsion, aversion, contraction etc.). In sf-terms, this is the *cautionary tale* as encountered in classic works such as 1984, Do Androids Dream

²⁴⁹ Stephenson, N. (2011) Innovation Starvation .

²⁵⁰ Bryant, R., & Knight, D. M. (2019). The anthropology of the future: 192.

of Electric Sheep?, Handmaid's Tale and in recent decades, the turbo-capitalist, techno-fascist and multi-dimensionally decayed worlds of *Cyberpunk*. Dystopian extrapolation can be extremely useful if the engagement with a catastrophic possibility seen beyond the horizon catalyzes anticipatory intelligence and fuels adaptive strategizing to steer trajectory²⁵¹. If however, a warned-against future scenario cannot be evaded and turns into an actuality, this induces fatalism and a kind of cynical fetishization of catastrophe. Such unfortunate dynamics are said to be at play in today's popcultural imaginary insofar as Cyberpunk-type techno-dystopias are viewed not merely as our go-to-image for the future but increasingly also as "a future present already (cynically) created where we wouldn't like living"²⁵² as Verso put it. With what had previously been warnings (e.g. of mass surveillance, AI-augmented apex capitalists, the primacy of silicon substrates over ecological ones etc.) turning into *real stories*, the Cyberpunk genre is by many deemed no longer alive but rather *undead* – a requalification that points towards a vicious side-effect of dystopian fixation and negative sum hauntologies: *becoming zombie*²⁵³.

*...now that we're here, most of us don't get to be cyberpunks, like cool hackers or badass mercs. Most of us are cyber-proles, living under the bootheel of the platforms, the algos, the plutocrats. That's kind of what happens when you build the future to create the counterculture, instead of building the counterculture to create the future. (A.D. Hudson)*²⁵⁴

The basic explanation as to why self-defeating prophecies carry an inbuilt risk of failing to defeat themselves, is because they constitute themselves not by what they affirm, but by what is feared could be actualized. Put differently: dystopian memes orbit around a *non-attractor*. This renders the indulgence therein a kind of nihilism towards the future. In this light, the cyberpunk writer Bruce Sterling's emblematic description of the late-stage everything sentiment, with "neither progress nor conservatism, because there's nothing left to conserve and no direction in which to progress"²⁵⁵ pulsates with the dark emptiness of Nietzsche's big

²⁵¹ See: Davis, M. (1995) Beyond Blade Runner: Urban Control, The Ecology of Fear.

²⁵² Verso, F. (2022) Solarpunk: New Seeds From the Ashes of the Future: 12.

²⁵³ See also: Vervaeke J.; Mastropietro, C. (2017) Zombies in Western Culture: A Twenty-First Century Crisis.

²⁵⁴ Our Shared Storm: An Interview with Andrew Dana Hudson (2022) Solarpunk Magazine.

²⁵⁵ Reboot 11 speech by Bruce Sterling (2009) WIRED.

fear: that deicide would move us “away from all suns”²⁵⁶. Future-annihilating nihilism sees the aspirational landscape as a priori evacuated from any possible attractor worth pursuing. With this major illness of imagination wherein the cancellation of the future feels to be the basic symptom, the present is reduced to a *non-horizon* emptied out of orientational anchors that could prefigure pathways for navigating elsewhere. But if we are incapable of even imagining a future possibility we would love to see amplified and actualized, the only option that remains is to further accelerate the status-quo, which according to my experimental theory at least, gives rise to nasty symptoms of zombification: turbo-inertia, hypernormalized horror and a proto-fascist euphorization of virulent dysphoria. Solarpunk negates this.

Solarpunk is punk because it stands in opposition to the increasingly mainstream position that we live in a world with no future. If the present condition of capitalist realism can be said to be defuturing, then solarpunk is a tool for refuturing the imagination. (Springett)²⁵⁷

Starting from a rejection of dystopian (pseudo-)realism and self-defeating prophecies (*black-pill loops*), Solarpunk encourages us to remember that a reanimation of the collective imagination can yield combinatorially explosive entry-points for hijacking the momentum of the planetary plot on a massively decentralized scale. Such script-flipping not merely entails a -1 multiplication in meta-orientation, but rather opens up the possibility for an inverted kind of feedback loop: desirable amplifications of benevolent backfoldings turning the present into a spiraling doorway for euphoria-inducing future alterities recursively infiltrating shared horizons with vortices of refuturing. My central argument here is that such a recyclical hauntology of surplus can never be grasped through the imagination by itself. It is instead to be envisioned as an oscillating motion that mobilizes the tension between two complementary poles into a renewable circulation: between (a) a *vibe-oriented futurism* and (b) a *solution-oriented pragmatism*.

The sensorial pole of Solarpunk is best captured in Springett’s argument that *the future is a vibe*. Rather than inquiring upon what is going to happen in the future, this shifts attention to

²⁵⁶ Nietzsche F. (1882) The Parable of the Madman.

²⁵⁷ Source: Solarpunk. A remix. Fo.am Anarchive.

“what it might feel like when we get there” and “how the future makes us feel today”²⁵⁸. According to this view, if we look at a decayed landscape devastated by techno-capitalist overshoot as portrayed in Cyberpunk-type dystopias vis-a-vis an oasisified landscape joyously radiating from a radically regenerated Solarpunk timeline, the most immediately felt distinction has to be that it is *an entirely different vibe*. But what exactly does that mean? The vibe is not merely a term from physics²⁵⁹, but has in recent years become a trope on the internet and everywhere. Springett understands it as synthesizing the double-pole of aesthetics: it bridges (a) the designable and curatable (hyper-mediated feeds of images and memes in juxtaposition) with (b) the corporeal (how being in the feed and maneuvering the meme-scape of the digital imaginary relocates our horizons of feeling). As such, vibe is not about feeling by itself, but about interflowing liminalities between the aesthetically mediated (*visible exteriority*) and the sensorially felt (*intense interiority*). This foregrounds the perceptual and embodied dimensions of the imagination, which in contrast to abstracted, purely intellectual projections of the future “allows us not just to see a different future, but to explore the impacts of it happening through feeling”²⁶⁰ as Tickell writes.

In our conversation, Springett told me that while Cyberpunk amplifies the feeling of an undesirable future to engineer a kind of total alienation, Solarpunk rejects the idea of a fixed, singular destination²⁶¹ and instead centers around moving towards future timelines that feel more vibrant. “*The feeling is the destination*”²⁶² he told me. Feeling as destination first of all indicates that fictional sedimentations of future alterities are *not* to be mistaken as ends in themselves. Whether we see Solarpunk as primarily populated by *stories* that “challenge the ineluctable solidity of the present”²⁶³ as Verso, or *visuals* serving as “windows on the

²⁵⁸ Springett J. (2021) The Future is a Vibe, Talk at INTONAL Festival 2021.

²⁵⁹ Faraday, who in the 1830s discovered electromagnetic induction saw corporeal reality as a fluctuating multiplicity of vibratory lines of force, while Tesla famously said that “if you want to find the secrets of the Universe, think in terms of energy, frequency and vibration”.

²⁶⁰ Tickell, P. (2022) Rewilding Imagination.

²⁶¹ “There is no one fixed future, given the choice between ‘the only solution’ and ‘possible options,’ solarpunk will always choose the latter.” Springett, J. (2022) A Container for More Fertile Futures.

²⁶² Springett, J. (2022) Interview via Zoom 25 August 2022.

²⁶³ Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future: 5.

present”²⁶⁴ as Raven – in both cases we encounter a future-present confluence whereby the imagined attractor is circuited back to interface with present horizons, thereby activating its fluid capacity for recomposition. Ontologically anchoring imagined futures in the sensible reality of vital bodies (which can only ever exist in the present) renders future fictions present-bound in a recursive sense: not only do they spring from the present, but they are also designed to pivot and return back to it again and again. Seeing it like that evokes a recyclical temporics characterized not by a closed, linear and future-bound limit but by an open, recyclical and present-bound limit. Takacs understands this when describing the ecology of Solarpunk as populated by “eddies and whirls of crystallized secrets”²⁶⁵, suggesting that the encoding of hauntological objects in transfigured timelines catalyzes rotational currents: spirals of hypertemporal affect seen and felt as more alive than the artefacts by themselves. The very same dynamism is captured in the widely-used trope of *proxy Solarpunk*, which reevaluates the purpose of solidifying the future: artificial sediments of imagined worlds are not seen as destinations, but as catalytic intermediaries – not for escaping into the future, but for rendering radical alterity tangible and sensible in the present, thereby propelling the springing forth of something else.

At the instance of an encounter, the artificial concreteness of a sedimented meta-position situated in an imagined future dislocates horizons of seeing which immediately backfolds as a dislocation on horizons of feeling: seeing the future and feeling differently in the present become somewhat indistinguishable. But that is not all. Springett’s view of Solarpunk as “a narrative strategy for creating this *feeling of a speculative present*”²⁶⁶ further suggests that the leap-like hijacking of our field of vision activated when contacting a hauntological artefact not merely goes hand in hand with an instantaneous sensorial reorientation. As artificial concreteness translates back into embodied virtuality, it simultaneously infuses the present with an overshoot in imagination: horizons of seeing not merely spring towards the crystallized scenario enfolded in the artefact, *but further*. Tasting rivers emanating from

²⁶⁴ Raven, P.G. (2022) The Unbearable Lightness of Solarpunk.

²⁶⁵ Takacs, B. (2017) Synthesis: This Shining Confluence, in: SunVault: 86.

²⁶⁶ Springett, J. (2022) A Container for More Fertile Futures.

radically altered futures we would love to see amplified activates the imagination's enthusiasm, inducing an auto-associational appetite for cascading speculative play: a catalytic surplus of euphoric desire that spontaneously infiltrates the present with contagious potencies for joyous experimentation.

The mode of interfacing a future alterity centering around a dislocation in feeling can be referred to as *vibratory estrangement*, as opposed to Suvin's formative sf-trope of *cognitive estrangement*. First contact is not established via thought from the future, but via futurity felt in the present: "It's the vibe that dislocates the present to re-future the future"²⁶⁷ as Springett argues. While this recognizes the affective primacy of a non-representational impingement over symbolic signification in the imaginal encounter, it would be backwards to see the vibratory estrangement of Solarpunk artefacts as substituting cognitive estrangement. There may be particularly atmospherical Solarpunk visuals, soundscapes and people who primarily emit intensities to absorb rather than signals to decode. But the underlying reason why it is so easy to portray, critique or adopt Solarpunk's tendential accentuation of the sensorial as *only a vibe* or "just another style"²⁶⁸ has to be situated in exactly those late-modern media-regimes of shiny-surface ocularcentrism and capitalism's ubiquitous commodification, which it at heart seeks to dismantle. Raven's framing of Solarpunk as "science fiction reduced to a visual aesthetic first and foremost"²⁶⁹ does not reflect how Solarpunk is perceived and enacted by those within the movement I have talked to. But rather than undermining the project, him playing the bad cop is a much needed effort to radicalize it. And he would never do that, would he not himself believe that his disillusioned take on the imagination's potentially blinding enthusiasm is only half true. Solarpunk must take such critiques very seriously, but exactly because it needs a nuanced awareness of its own shadow when betting on the other half.

The phenomenological problem I see with such narrations is that they neglect foregrounding how the sensorial encounter with a future alterity via vibratory estrangement can catalyze

²⁶⁷ Springett J. (2021) The Future is a Vibe, Talk at INTONAL Festival 2021.

²⁶⁸ SolariseCon 2022 Is Solarpunk Just another Style? (2022) YouTube.

²⁶⁹ Raven, P.G. (2022) The Unbearable Lightness of Solarpunk.

way more than mere alterations in feeling. Reducing the imagination to the domain of aesthetics not only ignores the imaginal and affective undergirding of all meaning-making processes, including future-oriented *cognitive mapping* as Suvin put it. It moreover eclipses how horizons of vision, by enabling us to see possibilities and affordances, profoundly prefigure what we might *do*. In other words: imaginal aesthesis is by default ethical (in the Spinozist sense), not only insofar as the imagination's "narrative and image-based templates [offer] sense-making tools that are *imperatively* (rather than indicatively) oriented"²⁷⁰ (i.e. they are *action-based representations*²⁷¹), but also insofar as the somatic presence of the imagination's tropes in the body – *the vibe* – immediately communes with the presence of potential as catalytic dynamism. In this light, when relocating the nexus of encountering the future to the sensorial, does not the sign of the future become more alive?

As I have come to see it, Solarpunk offers pathways for radically embracing the imagination's vibe-oriented capabilities in service of power-leveling collective capacities for becoming active. Critique remains crucial, for despite delivering the conditions of emergence of enactment, the *vision-vibe vortex* remains highly double-edged from the vantage point of reality: it not only affords for resourcing a renewable surplus in seeing and feeling, but thereby also offers endless possibilities for bypassing reality. When engaging with it beyond the superficial, it becomes apparent that such treacherous configurations of an imaginal aesthesis that spirals only around itself and indulges in the virtual omniverse of aesthetic vibe-landscapes populated as artificial pseudo-realities are exactly those which true Solarpunk seeks to dismantle. But as it negates such escapist tendencies *not* by policing experimental voyages towards speculative non-actualities, the dialectic remains. Rather than employing vibratory estrangement in order to substitute ethical confrontations with reality, Solarpunk is about tangling the renewable propulsion these strategies offer onto explicitly immanent and recyclical pathways, thereby relocating the nexus of imaginal aesthesis to tangible possibilities for shared earthbound enactments seen and felt in the present as catalytic surplus.

²⁷⁰ Asma, S.F. (2022) *Imagination: A New Foundation for the Science of Mind*: 2.

²⁷¹ Gallagher, S. (2023) *Embodied and Enactive Approaches to Cognition*.

*Imagining out into that most awesome future that has the most awesome vibe that I'm most excited about participating and just seeing and being around when it is brought into existence and the way I can use that excitement about that possibility to empower my feet to move in that direction. That navigational technology not only provides a fuel source which is incredibly useful in hard times, it also offers a way of salience-tagging reality.*²⁷²

Jeremy, vibe-chief at *Regens Unite DAO* sees the vibe as a liminal navigational technology connected via vision directly to the *feet*. Rather than evaporating upwards into some purely virtual, pseudo-transcendental realm of disembodied vastness, such a view circuits the vibe-induced sourcing of euphoric desire back onto ethical horizons to energetically initiate descendent sailing on reoriented routes towards trajectories of thriving, even and especially during stormy times. The vibe, according to Jeremy, functions as an *attractor* and as a *filter*: a kind of tuning fork for scouting, signaling and synchronizing future-oriented attunements, used to pool, 'chaordinate' and cohere scattered agencies around shared visions. The Solarpunk container here becomes visible as a collective transmitter for proliferating euphoria-inducing future alterities (*sharing vibes*) to infuse the present with a desirable dynamism, a surplus in propulsion used not in order to fly off, but to enter more deeply into co-creative enactments. Its artefacts facilitate distributed identification around future-bound solidarities, but the overarching purpose that brings people together is not the proliferation of fictions emitting pluri-sensorial signatures from imagined timelines by itself, but *turning them into actualities*.

Put differently, Solarpunk visions, fictions, tropes and prompts serve as *catalytic precursors* for collective action. Wilk captured this when describing Solarpunk during its early advent as "a moodboard for a politics"²⁷³, painting the image of triangular interplay between vision, vibe and action, whereby the first two are engineered to mobilize the third. This again emphasizes how the purpose of making altered futurities sensible and tangible is catalyzing something else. And that something else is certainly not merely aesthetic, but deeply ethical. Wilk's vision of Solarpunk, laid out in her 2016 essay *Is Ornamenting Solar Panels a Crime?*

²⁷² Akers, J. (2023) Interview 9 June 2023.

²⁷³ Wilk, E. (2022) *Death by Landscape*: 140.

does not center around aesthetics nor utopianism, but instead presents Solarpunk as a pragmatic, solution-oriented contrapoint to dystopian futility and the negative-sum hauntologies of fearing the future:

*(...) while Hollywood harps on every version of paranoia to construct a thousand dystopias according to formula, dwelling on dystopia could be seen as downright lazy. Along with the resources to sit around and ponder the future of humanity, shouldn't there come the responsibility to invent actionable proposals as opposed to cautionary tales?*²⁷⁴

Rather than standing out by enabling us to enter euphoric relationships with desirable futures on vibrant trajectories, according to Wilk, Solarpunk “distinguishes itself from what came before in its emphasis on *realizability*”²⁷⁵. Already in its birth-giving 2008 essay on *Republic of the Bees* it was noted that “solarpunk ideas, and solarpunk technologies, need not remain imaginary”²⁷⁶ but here, the recyclical tendency towards bringing the envisioned down to Earth has become even more explicit. Such a stance resonates with Verso, for whom Solarpunk “prefigures environments where (*pragmatically*) we might like to live, if we roll up our sleeves”²⁷⁷, giving us a pragmatic orientation which shifts the nexus of visioncasting operations from the vibe-oriented sailing of solar winds to plausible and possible near-future scenarios, urgent solutions, anticipatory intelligence and ethical capacities for actualizing the imagined. Vibratory estrangement may be leveraged as the entry-point for hypertemporal mediation, but the vision-vibe vortex’s renewable surplus is resourced for moving *from despair to strategy* as Future Fiction’s second anthology *Solarpunk: Dalla disperazione alla strategia* (2021) makes clear. In other words: learning to love the future has to be understood as the flip-side of *confronting the planetary*.

Facing this double-pole, it would be incomplete to place Pink and Salazar’s question *what does a future alterity feel like?* as the primary prompt of Solarpunk. Its center should instead be seen with the catalytic dynamism of how seeing the future and feeling differently in the

²⁷⁴ Wilk, E. (2016) Is Ornamenting Solar Panels a Crime?

²⁷⁵ Wilk, E. (2022) Death by Landscape: 147.

²⁷⁶ Republic of the Bees (2008) From Steampunk to Solarpunk.

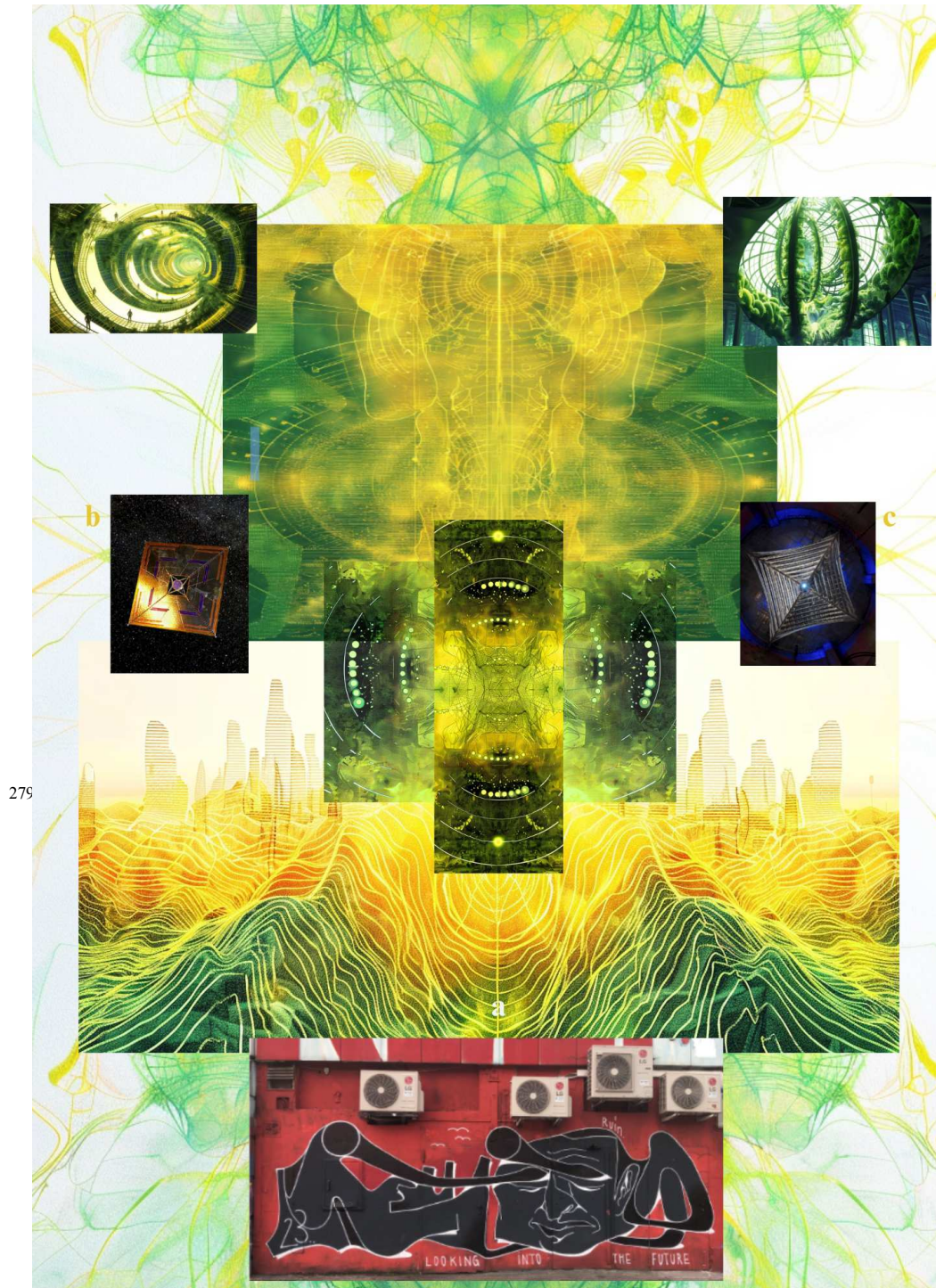
²⁷⁷ Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future: 10.

present can prefiguratively expand collective capacities for skillfully navigating horizons of a profoundly uncertain and increasingly dystopian present. Rather than looking at its future fictions primarily through an aesthetic lens, Solarpunk artefacts should be evaluated through the lens of *ethology*, where as Deleuze writes, “a thing is not to be defined by its form, its function or its organs, nor as subject, but through its *capacities to affect*”. Rather than a vibe or visual aesthetic by itself, Solarpunk is better understood as an *affective pedagogy* for learning to affect the future in regenerative ways and learning to get affected by regenerative futures. This entails asking (and answering!) the questions *how does a future alterity move us?* or *what does it enable us to do?*

Loving the future is a skill and Solarpunk offers a super-abundantly solarized multi-player game for excelling at it together, fast. With severe storms ahead, we urgently need viable collective methods for courageously and skillfully maneuvering the planetary rather than being devoured by its catastrophic specter. Leaning into the virtuous axis between joyous experimentation, clear-eyedness and pragmatic capacity by requalifying the sun as a shared attractor for bundling enthusiasm towards an autocatalytic positive sum hauntology, wherein the future-present vortex is recursively warped from closure and cancellation to a radical inversion thereof, seems like a move that could get many people excited about becoming active in service of planetary futures which are not shitty.

Whether this will indeed be seen, felt and enacted as indistinguishable from *love* cannot be answered in a paper. Only the present in the future can tell. But as this chapter sought to speculatively make visible, if we transpose Vervaeke’s understanding of *love* – a relationship of *reciprocal opening*²⁷⁸, onto the future-present axis, an intriguing recyclical pattern arises that I suspect many people would love to see more of.

²⁷⁸ Vervaeke, J. (2020) My best recent talk, YouTube.



²⁷⁹ Image sources: (a) Ruin mural at Danube Canal Vienna 2023, photographed by me. (b) Depiction of IKAROS space-probe with solar sail in flight, Wikimedia Commons. (c) Sunjammer solar sail prototype, Wikimedia Commons. All unsourced images made with Midjourney AI.

6. Memetic Engineering and Sun Worship

There's nothing new under the sun, but there are new suns. (Butler)²⁸⁰

Octavia Butler's stellar metaphor given in the epigraph to *Parable of the Trickster* captures intimacies of repetition in the arisal of radical alterity. The immanent impossibility of novelty ex nihilo does not render sudden unexpected emergences that entirely transvaluate what is considered at the center of a world impossible: the birth of a sun appears to be a universal possibility. With Solarpunk, this cosmic metaphor is transposed into the realm of *memes* – giving rise to a kind of *memetic orbit* where the flows towards and around an imaginary attractor imitate the gravity wells of immanent heavenly bodies. If in ancient days, our ancestors looked to the stars for orientation, in the age of the internet, our navigational dashboards have become littered with fictional tropes. Unlike the actual stars however, this virtual sky is forged by collective projections that can be altered and changed by the collective. With Solarpunk, an intriguing question is posed: which kinds of cosmo-catalytic potencies arise with a planetary hyper-project that roots its memetic dynamism directly in the star?

To speculatively answer this, the following chapter explores how Solarpunk's synthesis of *solar-mimicry* and *bio-mimicry* prefigures a memetic politics that fuses two complementary modes of regeneration: (1) the upspiraling movement of the imagination's quasi-infinitely renewable impulse recursively cascading towards the sky and (2) the downspiraling movement of speculatively sedimented surplus possibility descendently circuited onto tangible trajectories of earthbound enactment, whereby a vision lands on Earth and translates into actuality. But first, it will be examined how Solarpunk's key articulation of solar-mimicry offers pathways for voyaging from language to the sun and back to us.

In *The Limitations of Literacy*, Raven criticized UNESCO's *Futures Literacy* program's pervasive infiltrations at the hands of capital: "These are the same terms you find in any big

²⁸⁰ Canavan, G. (2014) *There's Nothing New / Under The Sun, / But There Are New Suns*: Recovering Octavia E. Butler's Lost Parables. LA Review of Books.

ticket consultancy slide deck: innovation, new ideas, identifying opportunities, targeting investment (...) the same old buzzword bingo (...) The medium is the message and the medium is capitalism right down to the very base layer of language”²⁸¹. He evokes Debord’s self-perpetuating Moebius-strip according to which “what appears is good (and) what is good appears”²⁸², to point out that what is good and therefore recursively amplified is predominantly that which sells. Similar issues were articulated by my interlocutor Pawel – a Polish hacker and *Solarpunk practitioner*, who uses Solarpunk primarily as a narrative strategy for telling *real stories* about collaborative communities in the Global South happening today “in a language which would make them sound possible”²⁸³. In our conversation, he diagnosed a representational vacuum for collaboration outside of capitalist logics: *we lack a hieroglyph for collective creativity*, he told me. This pressurizes non-normative, anarchist-leaning groups to morph as legacy organizations if they want their work amplified by legacy media or funded by legacy institutions. To illustrate perversities at play, Pawel shared a story of a hacker-collective in Sierra Leone that rewrote the entire banking infrastructure when it collapsed during the Ebola pandemic²⁸⁴ and according to UN-estimates saved more than half a million lives, but was later given a prize as a tech-startup. “They saved their country and we could not frame them in any other way than a business”²⁸⁵, he told me.

Both Raven and Pawel paint the image of the capitalist realist semioverse as a monoversal strand that prescriptively reduces evocable expressions to a singular bandwidth through the top-down imposition of hegemonic code. By axiomatically limiting the possibility space for writing ourselves into worlds beyond already carved-out corridors of status-quo approved representations, this traps us in the script written and controlled by someone else. And the Solarpunk consensus holds that it is the script of a shitshow. “Prisoners of code”, Taussig

²⁸¹ The limit(ation)s of literacy. 13.05.22 / FBTLVideo.

²⁸² Debord, G. (1967) *Society of the Spectacle*: 12.

²⁸³ Ngei, P. (2022) Interview via Zoom 20.06.2022.

²⁸⁴ How Open Source Software, second hand laptops and hackers helped stop Ebola (and stopped an apocalypse) (2016) YouTube.

²⁸⁵ Ngei, P. (2022) Interview via Zoom 20.06.2022.

argued, “evolved in pre-meltdown time. We are locked into the normal, not its exception. But then *how do you invent a new cultural form geared towards the exception as the rule?*”²⁸⁶ The answer he unfolds in *Mastery of Nonmastery in the Age of Meltdown* suspiciously reverberates with what I have encountered in the world(s) of Solarpunk: *memetic engineering towards the sun*.

*Memetic engineering is common, even impossible to avoid. Advertising is a form of memetic engineering, as is propaganda, political speeches, standard curricula — every organized effort to control the information people receive and how they feel about it. (Watson)*²⁸⁷

Understandings of memetic engineering²⁸⁸ in the world(s) of Solarpunk can be traced to T.X. Watson – an early voice in the movement, who in his MA-thesis on *Memetic Engines of Anticapitalism* explored the emergence, mutation and transmission of memes as social pacts that behave like “animals in the mimetic wild”²⁸⁹. To shift power from hegemonic memetic architectures “clever people will *frankenstein* together pacts with qualities heretofore unseen”²⁹⁰ he argued. This paints the image of memetic engineering as a kind of meta-game for collectively prompting imaginary entities into existence that assume a life on their own and display transvaluated features and affordance-landscapes. “It is my conviction that we can *feel* our way out of the mess of the early 21st century via the creation of generous memetic engines proliferating cultural ideas that bring more possibility into the world than they close down”²⁹¹, Springett then argued in Solarpunk Magazine Issue #1 (2022) where next to a narrative strategy and memetic engine, he framed Solarpunk as a *container for more fertile futures*. Note how when evoking Solarpunk as a collective device for pooling complicities with regenerative visions to co-creatively and mimetically infuse horizons with surplus potential, he again emphasizes that the pivotal liminal catalyst for mobilizing and maneuvering such infrastructures of proliferation is feeling. When transposed into the realm

²⁸⁶ Taussig, M. (2020) *Mastery on Nonmastery in the Age of Meltdown*: 29.

²⁸⁷ Watson, T.X. (2018) *Memetic Engines of Anti-Capitalism*.

²⁸⁸ The deviation in spelling between *mimesis* and *memetic* may be perceived as irritating, but I prefer using both rather than eliminating one at the expense of the other.

²⁸⁹ Watson, T.X. *Memetic Engines of Anti-Capitalism*.

²⁹⁰ Watson, T.X. *Memetic Engines of Anti-Capitalism*.

²⁹¹ Springett, J. (2018) *Solarpunk: A Container for More Fertile Futures*, in Solarpunk Magazine Issue #1.

of mimesis however, the dynamism of vibe must be expected to become explicitly reciprocal, intercorporeal and transsubjectively contagious.

“we could train our hands to speak and untie knots of extradimensional language”, we read in *light sail star bound*, now morphing into a cosmic song about the birth of an entirely novel language with “phonemes we cannot yet articulate” and “new vowels”²⁹². While Raven wants us to see Solarpunk less as the “discovery of the new, than the replication of the rare”²⁹³, nathaneal’s poem suggests that fictional permutations shapeshifting into synaesthetic spirals of otherworldly communication are not exactly policed in Solarpunk. Its heliocentric descendentalism instead suggests that experimental flights towards “new suns” are encouraged, but only *if* performed *not* at the expense of a pivot to return to earthly contingencies. The need for landing is recognized in nathaneal’s poem insofar as it dreams of a metamorphic language whose pedagogical impulse is anchored directly in the *hands*. Shifting the nexus of communication to the hands foregrounds how heretofore unseen significations not merely transfigure horizons of seeing, but the making visible of possibilities can also catalyze heretofore unseen modes of action. Through this lens, we begin to see the memetic orbit of Solarpunk as populated by a shared grammar: an evolving compendium of tropes which are however *not* to be seen as primarily representational, but as embodied *and* action-oriented (see: Gallagher 2008, Asma 2022). Solarpunk could thus be seen as a *language game community*, only with the entendre of language being anything but Wittgensteinian in the analytic or lingo-reductive sense. Its extradimensional view of signification is much more attuned to Taussig’s metamorphic understanding of mimesis, where “language becomes something else”²⁹⁴ and “acquires the properties of a metamorphosing virus”²⁹⁵. Put differently: Solarpunk is not to be spoken about, but rather to be spoken into existence – not in a primitively magical kind of sense, but rather in the sense

²⁹² nathanael, j. *light sail star bound*, in: Wagner, P.; Wieland C.B. (2017) *SunVault: Stories of Solarpunk and Eco-Speculation*: 85.

²⁹³ Raven, P.G. (2022) *The Unbearable Lightness of Solarpunk*.

²⁹⁴ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 10.

²⁹⁵ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 44.

that co-evoking its transfigured significations must inevitably erupt into building something together.

*The house of Tar, the Assyrian, that mighty fortress
Which, according to legend, could not be taken by any army, but
When one single, distinct word was spoken inside it
Fell to dust.
(Brecht)²⁹⁶*

In Brecht's poem, hegemonic rigidity is suddenly overturned from within through a kind of spell, suggesting that a single unit of contagion, when strategically punctuating even the most solidified arenas of empire, can dissolve it all at once from the inside. This pattern I see reflected in the Kairos of Solarpunk: an interventionist infiltration of reality with a co-evoked fiction that transfigures an arena's playing field, dismantling imaginaries of Petromodernity, capitalist cynicism and dysphoric futility and instead turns it into a fountainhead of collaborative possibility, beacon of regeneration or urgent solution (and often all these at once). Some examples: in Watson's *Boston Hearth Project* "a big fifteen-story Art Deco Revival temple with a custom-engineered closed ecosystem" which "was basically a first-class hotel, set up so that business people and politicians wouldn't have to go around interacting with the actual city"²⁹⁷ is broken into and opened for the neglected and freezing homeless people of Boston. In Bernardo's *Eight Steps to Steal a Yacht and Build a Hospital*, the yacht of a gun-loving influencer in a flooded Rio de Janeiro is hijacked and repurposed to "transform that gaudy colossus into a moving hospital, (so) people wouldn't have to die at home, unreachable for treatment"²⁹⁸. In Commando Jugendstil's *Midsummer Night's Heist*, a massive botanical art-installation is planted on a public square in Milan during the night before a far-right rallye, leaving police arriving at dawn "paralyzed by their almost-mystical

²⁹⁶ Brecht, B. (2018) yielding water poem, "The Ship", in: The Collected Poems of Bertolt Brecht: 174.

²⁹⁷ Watson, T.W. (2018) The Boston Hearth Project, in: Wagner, Wieland, SunVault: Stories of Solarpunk and Eco-Speculation: 16.

²⁹⁸ Bernardo, R. (2023) Eight Steps to Steal a Yacht and Build a Hospital, in: Solarpunk Magazine no. 8: 13.

experience”²⁹⁹. These early Solarpunk classics all unfold distinct entendres of a signature trope that A.D. Hudson named *guerilla gardening*:

*Guerilla gardening is the model, but look further. Guerilla solar panel installation. Guerilla water treatment facility restoration. Guerilla magnificent temple to the human spirit construction. Guerilla carbon sequestration megastructure creation. (Hudson)*³⁰⁰

Guerilla gardening signifies a botanical anarchism whose transgressions are explicitly *not* transgressions of overshoot. They are earthbound or descendent, suggesting that conventions, rigidities and laws are not broken for the hell of it, but to immediately bring already permutated imaginaries down to Earth. But Hudson also wants us to *look further*. This relocates attention to the imagination’s potency for getting caught up in spiraling overdrive: the mimetic propelling of a self-amplifying surplus wherein the interfacing of an initial unit of speculative alterity (*one single, distinct word*) can catalyze further roll-outs and roll-outs quasi ad infinitum – “a worlding process of conceptual bricolage (which) creates a polyphonic future texture from which even newer ideas of the future can emerge”³⁰¹ as Springett put it. The memetic engine’s quasi-infinitely renewable dynamism for bringing forth visions that generate even more visions corresponds with the movement patterns Taussig proposes for saving the planet: *mimetic excess* catalyzing *runaway metamorphosis*.

As mimesis carries “an inbuilt propensity to provoke a chain reaction in which things become other things in a process of mimetic fission”, by learning to skillfully maneuver reciprocal intensifications, snowballing “metamorphic back-and-forth reciprocities of personhood”³⁰² can be unleashed. But Taussig’s mimetic theory becomes even more intriguing for Solarpunk when interrogating its cosmic spin according to which reciprocal relays and escalating spirals of contagious imitation voyage not merely within and between bodies, but eventually *back to the sun*. Following Bataille’s heliocentric economy around *solar excess*, Taussig ontologically

²⁹⁹ Commando Jugendstil and Tales from the EV Studio (2018) Midsummer Night’s Heist, in Ulibarri, S. Glass & Gardens: Solarpunk Summers: 144.

³⁰⁰ Hudson, A.D. (2015) On the Political Dimensions of Solarpunk.

³⁰¹ Springett, J. (2022) Solarpunk: A Container for More Fertile Futures, in Solarpunk Magazine Issue #1.

³⁰² Taussig, M. (2020) Mastery of Nonmastery in the Age of Meltdown: 44.

roots *all* mimetic overdrive directly in the star. If we speculatively survey this hypothesis, solar-mimicry becomes visible as the most potent aspect in Solarpunk's source code. Planetary-wide co-creative visioncasting is anchored directly in solar super-abundance. The sun no longer rises only in the middle of the sky, but also in the future, a cosmo-temporal doubling giving rise to a *sun emanating from the future* – a hypertemporal stellar attractor seen not merely as the luminous source animating all terrestrial life, but as a shared hauntological tuning fork contacted by the collective to catalyze projective-prefigurative propulsion. This is not exactly a bad move, for insofar as the sun is recognized as the most sensible nexus of return³⁰³, it is both the ultimate immanent hauntological entity and the most immense emitter of hyperstitional force in the cosmos. As its cyclical reappearance quite literally signals the perpetually renewed dawn of tomorrow, projecting and prefiguring a *solar-mimetic hauntological reversal* appears to be the single best cosmo-catalytic strategy for an immanently-oriented planetary hyper-project or meta-game geared towards mobilizing the boundlessness of the imagination on a regenerative trajectory.

But solar-mimicry is not at all void of ambivalence. To begin seeing why, we can turn to the most troubling image for envisioning Solarpunk as a massively decentralized, planetary-wide solar-memetic engine for sharing and reciprocally proliferating regenerative possibility: that of *concentrated solar power*. CSP's are infrastructural mega-assemblages made up of concentric arrays of artificial solar reflectors that harvest, fold and bundle stellar influx into a shared container at its center which fires up to 550 °C, thereby giving rise to a mimetically incandescent mini-sun on the surface of the planet. While this at first glance may appear to be extremely Solarpunk, when assessing its ontological anatomy more closely, we find that the imaginaries encoded in the CSP enfold some configurations that Solarpunk at heart rejects. The mirror-bodies populating the world(s) of Solarpunk resemble anything but the perfectly identical, purely parabolic, sterile clone-armies, such as the half million trough mirrors constellated at Ouarzazate's Noor 1 in Morocco, the world's largest facility of this kind. But is it not just the shape of the mirrors. The CSP's inversed panopticon structure with a

³⁰³ See: Eliade, M. (1949) The Myth of the Eternal Return.

monolithic tower in the middle not only elucidates cyclical mimetic resonance around a shared container, but also enfoldes the monopolistic and totalitarian entailments of *solar singularity*. Rather than paving the way for top-down projections of a superior node violently imposing singular solutions peak of pyramid style, Solarpunk negates monoversality and Obelisk-type modes of governance. It is not about rolling out solar-panels as a one-size fits all ready-made solution in the name of regenerative salvation, but instead encourages pluri-perspectivalism, bundling visions cast into the world from a myriad of geographies, positionalities, identities and disciplines. Offering a radically inclusive zone for amplifying and synergizing projections from the margins (indigenous futurism, BIPOC futurism, neurodivergent futurism, post-colonial futurism, queer futurism etc.). Put differently, Solarpunk’s anarcho-mycelial mode of cultivating future-oriented solidarities under the sun *unifies without totalizing*. This *decentralized-but-concentric* orientation is symptomatic *not* of a solar singularity but of a *garden multiplicity*, again emphasizing that a pure solar orientation (solar-mimicry by itself) is not only insufficient, but antagonistic.

To dismantle the sun’s absolutizing tendencies, not merely within hegemonic institutions but also within itself, Solarpunk spaces should be infused with a critical awareness of what I call the *dark dialectics of solar-mimicry*. For solar tech has been weaponized at least since Archimedes used concentrating reflectors to set aflame a flock of Roman ships to save Syracuse from siege during the Second Punic War in 212 BC. While the actual occurrence of this event remains questionable (as numerous attempts to recreate it have yielded mediocre success), the Greek-Sicilian polymath’s mirror stunt enshrined often-echoed fantasies of omnipotence into the dreamscape of solar-mimetic devices, as visible in narrations of him having “transformed himselfe into Iupiter; thundering downe (...) lightning”³⁰⁴. Reverberations of this can be encountered in the solar death-rays of too many Bond villains, in Sankichi’s poem about a day in 1945 on which “the sun rose twice”³⁰⁵ and in classic sf stories: Asimov’s *Reason* (1941), next to the now eerily at-the-horizon trope of the machine prophet, probed the concept of *solar power-stations in space* (SPSS), which he envisioned as

³⁰⁴ van Etten, H. (1633) *Mathematical Recreations*: 130.

³⁰⁵ Sankichi, T. (1945) *Mushroom Cloud over Hiroshima*.

beaming abundant stellar energies down to Earth, *but* “deviations in an arc of a hundredth of a millisecond (...) were enough to send the beam wildly out of focus – enough to blast hundreds of square miles of Earth into incandescent ruin”³⁰⁶. Or Clarke’s coal-black comical tale *The Stroke of the Sun* (1958) which gave an annihilationist example of solar-mimetic incandescence in a tale of a bribed referee grilled during a football match by fans using a synchronized swarm of reflectors smuggled into the stadium as seemingly harmless materials.

Becoming more aware of the salvational and annihilationist double-pole of the sun and its imitations (*nuclear fusion* comes to mind here), from where I am standing, only renders the cultivation of decentralized, anti-authoritarian and garden-oriented complicities with the sun even more existential. As we cannot not imitate the sun, it should be done consciously, decentralized and for the benefit of the collective. Solarpunk offers itself as a pedagogical device for learning to resource and maneuver stellar immensity in such a way as to immunize the hubristic shadow-side of heliocentric enthusiasm: pharaonic superiority, Ikarian infatuation and pyromad prophecies of Phaetonic proportion. To evade capture by malefically star-blind absolutist agents, the first axiom holds that the source-code of a *solar-mimetic multiplicity* cannot be purely heliocentric. Such an entity would soon run off as another heavenly desert Utopia hijacked by monoversal fantasies of power-concentrating wannabe pharaohs. Solarpunk only makes sense if seen as a device for undermining such totalitarian imaginaries. Historically speaking, the fall of solar absolutism is most emblematically expressed by the *decapitation of the sun* – which raises the tricky issue of violence, whose evasion might be too convenient to be affordable. Solarpunk most certainly is about the dismantling of solar-mimetic overlord singularities and the replacing thereof with a non-egoic rebirth of the solar hero archetype as a polycentral, transsubjective, mycelial identity that flourishes from the bottom up. But gardening, as LeGuin knew, is kind of the opposite of killing. As such, while it might be a little naive to assume that conquering without force will generally suffice to dissolve the workings of absolutist agents, what seems clear is that the co-evoked “frankenstein” of Solarpunk is explicitly *not monstrous*. Prefiguring a

³⁰⁶ Asimov, I. (1941) Reason: 72f.

prosocial and peaceful affect, its transgressions and contagions have nothing to do with the death-drive.

Here it should become visible how Solarpunk radically deviates from Bataille's dark solar economy, which celebrates *dépense* – the aforementioned cosmic law that the sun's overshooting surplus – if it cannot be used for growth, must be joyously *and* oftentimes violently expended. The young Foucault, who affirmed Bataille's primacy of *solar excess* as the constellation after religion³⁰⁷, described it both as a “solar inversion of satanic denial”³⁰⁸ and as a transgression that *affirms nothing*: a kind of negative super-abundance or excessive nihilism (negating something and affirming nothing are not the same). While this deeply resonates with today's evacuation of shared horizons from affirmable attractors and the allegedly alternativeless cyberpunk-cynicist affirmation of speed for its own sake, Bataille's stance that “we are ultimately nothing but an effect of the sun”³⁰⁹ furthermore displays a kind of heliocentric totalitarianism. The unsettling extrapolations catalyzed by such ontologies are most pronounced today in Land's kind of fashionable philosophy, which following Bataille posits that mass death at the hands of the sun is a good thing³¹⁰. Rather than making a case against these apparently somewhat seductive insanities, it should suffice to say that a cosmo-politics of annihilation-oriented black sun worship is classic Cyberpunk stuff: the sun's tremendous overdrive seen as a virulently nihilistic and ultimately destructive force, driving an increasingly bare and brutal acceleration without an attractor. But insofar as this fetishization of catastrophic overshoot is kind of what we already have, these philosophies of ceremonial meltdown could also paradoxically turn out to be pseudo-avantgardistic status-quo worship.

Solarpunk proposes something else. It finds exuberance beautiful, affirms the sun's super-abundance, the contagious enthusiasm of mimesis on overdrive and the outpouring of

³⁰⁷ In this post-Nietzschean narration – with *deicide*, the paradigmatic Event of Modernity “the limit of the limitless” (transcendental source of creation) was replaced by “the limitless reign of the limit” (immanent source of excess). Foucault, M. (1977) A Preface to Transgression: 32.

³⁰⁸ Foucault, M. (1977) A Preface to Transgression: 37.

³⁰⁹ Bataille, G. (1949) The Accursed Share: An Essay on General Economy: 10.

³¹⁰ Land, N. (1992) The Thirst for Annihilation: Georges Bataille and Virulent Nihilism.

the imagination's boundlessness. But it is not about indulgent sandbox skiing and surfing storms of stellar glitter evaporating into nothingness. Boundlessness is not the enemy, but it affirms it not in order to waste it "for the hell of it"³¹¹ as Taussig translates Bataille. It celebrates and strategically resources the sun's quasi-infinite gifting and analogously resources the imagination as an inherently solar-mimetic force, which like solar energy does not run out if spent abundantly. But rather than propagating flight for flight's sake, the imagination's boundlessness is to be tangled into a fertile complicity with earthly cycles: a descendent pivot shifting from the overshoot-exhaustion axis towards abundant regeneration: a quasi-infinitely renewable *expenditure of non-exhaustion* ("consumption without loss"³¹² as Blumenberg put it). Contacting Solarpunk futures entails mobilizing and maneuvering cascading reciprocities towards a solar-mimetic attractor in the cosmo-temporal sky running on autocatalytic trajectories, but this quasi-infinitely renewable articulation by itself is *not* yet regenerative in a descendent sense. Making a garden requires a second articulation, without which the imagination's renewal remains a treacherous expression of overshoot, a line of flight exploding to implode into a line of non-flight: a spiraling spear accelerating towards the desert as LeGuin put it. An imagination that is solar-mimetic *and* bio-mimetic instead runs towards the sun in the future to recursively pivot back and infuse the present with a renewable surplus used for maneuvering towards the garden (*lines of landing*). By recursively tangling the imagination's escape velocities autocatalytically pouring out of the memetic engine via the hauntological anchor situated in the middle of the sky, the present becomes incrementally saturated with a super-abundance of sensible and tangible possibility: a contagious enthusiasm of reciprocal overshoot that needs to be recyclically translated into the good immanence of forestbound enactment.

³¹¹ Taussig, M. (2020) Mastery of Nonmastery in the Age of Meltdown: 47.

³¹² Full quote: "light remains what it is while letting the infinite participate in it; It is *consumption without loss*" Blumenberg, H. (1993) Light as a Metaphor for Truth: 31.



³¹³ Image sources: (a) Concentrated Solar Power, Wikimedia Commons. (b) Tobias Raschbacher, SDREAM visual. All unsourced images made with Midjourney AI.

7. Do Artificial Plants Photosynthesize?

The future (...) lies with our ability to learn to ‘work like plants’, meaning the ability to transform sunlight into the ordered movement of electrons (biochemical energy) and save this energy in complex molecules. The future (...) of humanity will greatly depend on our ability to develop artificial photosynthesis. (Ciamician 1912)³¹⁴

While the *hieroglyph* is a proper metaphor for a sign of the future insofar as it fluidizes bifurcations between language and image, I find Stephenson’s most-echoed account of them as “simple, recognizable symbols on whose significance everyone agrees”³¹⁵ a little too solar for Solarpunk. How do I mean this? Shared intelligibility should not be replaced by idiosyncratic obscurantism but this must not entail the imposition of univocity³¹⁶. For who would dictate or implicitly prefigure the playing field of a monoversal grammar of futurities? But it is not only that: Solarpunk’s garden-metaphor turns out to be far too ambivalent, such that an eclipsing of complexity may come at a very high price. To explain why, this chapter interrogates the troubling trope I see at the heart not only of Solarpunk, but of our epoch at large: the *artificial garden*. To begin untangling the entailments of this archetypal hybrid between art(ificiality) and nature, we will turn to the aforementioned *Midsummer Night’s Heist*, where the fictional members of Commando Jugendstil³¹⁷ undertake “not just a little bit of guerrilla gardening or some night-time redecorating in a peripheral housing estate or private property”³¹⁸ but instead metamorphose a public square in Milan into a botanical temple before a far-right gathering. The vibe at early dawn the morning after is as follows:

³¹⁴ Ciamician, G. (1912) The Photochemistry of the Future.

³¹⁵ Stephenson, N. (2011) Innovation Starvation.

³¹⁶ See: Valentine, D., & Hassoun, A. (2019). Uncommon futures.

³¹⁷ Commando Jugendstil is a Solarpunk creative collective based in Milan and Reading who are “conjugating art, green technology, and bioremediation to produce energy and create communities”. I have talked to their key members Laura and Guglielmo and it is generally well known that they are situated on the more radically political pole of Solarpunk. Any piece of art enfolding botanical themes would have been salient for making my argument, I merely chose their story because it is a profoundly emblematic Solarpunk tale that themes the trope of the artificial garden in the most iconic way.

³¹⁸ Commando Jugendstil and Tales from the EV Studio (2018) *Midsummer Night’s Heist*, in Ulibarri, S. Glass & Gardens: Solarpunk Summers: 122.

*Piazza della Scala has turned into a garden overnight, as if by magic. Grass grows soft and inviting where the flagstones should have been and flowers fill their senses with a riot of colours and smells. (...) It is as if someone had stripped down a cathedral to its essential elements and planted it in the middle of a garden.*³¹⁹

Drawing Flynn's prompt of imagining Solarpunk on the long-term as "permaculturists in cathedral time"³²⁰ out further, this tale is recognized as one of the most outstanding Solarpunk stories to date, enfolding mimetic signatures that may propel cascades of imitation leaking into actuality over the next decades. But for the sake of the entire project's soul (this includes mine), a perhaps uncomfortable question must be asked: *was the garden ever actually planted?* Far from cynically exposing the ontological lie at the premise of speculative fiction, the intention here is to phenomenologically trace entanglements arising when planting a garden via imagination to better understand the artificial garden's profoundly ambivalent virtual fertility. When I spoke with Francesco (Verso) about the magical dimensions of the imagination, mentioning Clarke's law that *any sufficiently advanced technology is indistinguishable from magic*, he protested and echoed Schroeder's bio-mimetic modification: that any sufficiently advanced technology becomes indistinguishable not from magic, *but from nature*. In consonance with many of my interlocutors, Verso sees Solarpunk as a pragmatic science-fiction and does not want it to run off as a fantasy cli-fi, naively enchanted solar ersatz-religion or childishly subversive green gadget-cult. "We are not talking about floral fantasies or a return to a sort of "primitivism"³²¹ he writes, cautioning against a regressive fetishization of the pre-modern mind. This warning is relevant, *not* because Solarpunk is void of phantasmagorical enthusiasm and animist longings, but exactly the opposite: because it is impossible to believe that its worlds are disenchanted. The other pole becomes visible in one of the more-echoed pieces of Solarpunk poetry, where Bogi Takacs invites us to "merge – unify, as you are unified by *this shining confluence of technology and*

³¹⁹ Commando Jugendstil and Tales from the EV Studio (2018) Midsummer Night's Heist, in Ulibarri, S. Glass & Gardens: Solarpunk Summers: 140.

³²⁰ Flynn, A. (2014) Solarpunk: Notes Towards a Manifesto.

³²¹ Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future: 18.

magic”³²². This paints the image of a radiant convergence towards an artificially-augmented interdependent planetary consciousness glowing with pan-illuminationist and green techno-utopian reverberations. The observation that these deviating stances (*bio-mimetic pragmatism* vs. *radiant techno-magic*) find room in the spectral pluriversality of Solarpunk might irritate some, but is here seen less as contradictory, than as indicating a strategic ambiguity needed for prefiguring a distinctly *metamodern* synthesis³²³. But this renders the issue of right relationship between the two poles even more pivotal.

The most salient nexus of intersection between nature and magic is the often-evoked *reenchantment of nature*. “We dug deep and pushed seeds from locked away vaults into the earth so gentle we pushed and we wondered if the past could be reborn. And we whispered to the not yet born grow, grow, once upon a time, you would grow”³²⁴ we read in *Fairy Tales & Other Species of Life*. And some of us might find this enchanted plant animism where fictional tropes are seen as vital bio-mimetic agencies a little strange at first (and so have I). But do not the very same people take it for granted that fruit appear in a store as if by magic? Also: evoking a kind of spell towards nature’s fading capacity for renewal is not exactly a fairytale in an age where marine biologists play “recordings of healthy fish (...) transmitted to attract heat-tolerant larvae back to degraded reefs”³²⁵. With such simulated musicalities serving as ultra-hybrid augmentations of ecosystems apparently needed for postponing runaway disequilibrium, would it not be a little too simple to discard the reenchantment of nature as pretentious plant romanticism?³²⁶

My hypothesis holds that with the hand-in-hand advent of disappearing ecosystems and ubiquitous affordances for artificial simulation indistinguishable from reality, we have never been more confused about what nature, and becoming indistinguishable thereof means. The

³²² Takacs, B. (2017) Synthesis: This Shining Confluence, in: SunVault: 86.

³²³ This is discussed in Freinacht, H. (2022) When Irony Saves the Faithful.

³²⁴ Clark, C. (2017) Fairy Tales & Other Species of Life, in: SunVault: 135.

³²⁵ Ferguson, D. (2024) Scientists’ experiment is ‘beacon of hope’ for coral reefs on brink of global collapse, The Guardian.

³²⁶ Going further, it feels reasonable to claim that anyone who seriously inquires upon the phenomenology of language in relation to the body will find that disenchantment was a myth all along.

most salient entry-point here is the *artificial*, which according to Oxford Dictionary refers to something “made or produced to copy something natural; *not real*”³²⁷. Few people will disagree that a painting of a fruit, when put into fertile soil, will likely *not* morph into a tree carrying the fruit represented in the painting. But that does not exactly mean that art is something that happens *outside* of reality. In his essay, Verso argued that “(instead) of mimicking nature with artificial tools (with Solarpunk) nature’s natural processes are imitated”³²⁸. This sentence still puzzles me, and I think it should puzzle all of us. Drawing this distinction in modes of mimicry is critical, only the reason I think it is, is exactly because the reality of Solarpunk is much more ambivalent. While the sharing of visual art has been playing a major role in its proliferation on the web, with developments in artificial intelligence picking up heretofore unseen techno-speed during the course of this research, I found that the Solarpunk art populating my feeds was not rarely created with visual AIs – which appears to contradict Verso’s stance on Solarpunkian bio-mimicry. There is no monoversal consensus about the role of AI in the movement, and there cannot be, just as its association with green techno-utopia cannot be taken for granted, as visible in the adoption of Solarpunk as a schelling point among the regeneration-oriented Web-3 community causing controversy³²⁹. Rather than unpacking deviating stances on the matter, what interests me more here is looking at a deeply troubling phenomenon, certainly not confined to Solarpunk, but somewhat emblematic of our age at large: a kind of *reenchantment of nature with the most artificial tools*.

The most fitting metaphor for interrogating bio-mimicry, virtual fertility and the ambivalent nature of the artificial garden is that of *artificial photosynthesis*. Artificial photosynthesis and the related notion of *photosynthetic humans* have been major themes in Solarpunk fiction

³²⁷ See: <https://www.oxfordlearnersdictionaries.com/definition/english/artificial>

³²⁸ Verso, F. (2022) Solarpunk: New Seeds from the Ashes of the Future: 18.

³²⁹ Further reading:

Owocki, K. (2022) Ethereum is Solarpunk, YouTube.

Kareola G. (2022) Planetary Infrastructure as Resistance: Solarpunk and Web3.

Hydroponic Trash (2022) Solarpunk: Diverging Paths And Where We Go From Here.

Williams, R. (2023) The Politics and Poetics of Solarpunk, Presentation at ETH.Prague, YouTube.

(see: *Watch Out Red Crusher*³³⁰, *When Kingdoms Collide*³³¹) and we can expect (or hope) to see such technologies becoming more viable and accessible in the foreseeable future³³². But when transposing artificial photosynthesis into the realm of the imagination, it comes to refer to something else. It then becomes a metaphor for the artificial fusion of light (phôs, φῶς) and image (phōtō, φῶτω → photography) i.e. the *making of visual art*. But there is a solar-terrestrial spin: if we mirror Ciamician's above-quoted formula for photosynthesis – (1) “the ability to transform sunlight” and (2) “(saving) this energy in complex molecules”³³³, this helio-chemical metamorphosis gives us a minimal recipe for making a solar-terrestrial artefact. Requalified as a strategy of imagination, artificial photosynthesis could thus be viewed as a central meta-articulation of Solarpunk: the visual sedimentation of more fertile futures concretized in speculative art. But insofar as the lens of seeing Solarpunk as a visual aesthetic first and foremost has to be recognized as reductive and insufficient (see chapter 5), it must be clear that artificially crystallizing such futures by itself does not (yet) qualify as Solarpunk.

The even trickier *entendre* of artificial photosynthesis has to do with the arising of the aforementioned language- and light-driven *prompt-to-image AIs* such as Midjourney, Leonardo, Stable Diffusion or DALL_E which render the omniversal boundlessness, artificial ubiquity and global interdependence of today's profoundly accelerated techno-imagination more immediately accessible than any creative tools that came before. To unleash endless visioncasting, we simply type */imagine* in the Discord-server of *Midjourney*³³⁴ to instantaneously translate any expressible linguistic input into digital visual artefacts that can be quasi-infinitely modified with almost zero iteration-intervals. Whether we love or hate AI (or both), vision-prompting with Midjourney can only be described as one of the strangest

³³⁰ In *Watch Out, Red Crusher*, we encounter an utopian community powered by bioluminescent solar-collecting nanites that makes their skin cells glow at night. Graves, S. (2018) *Watch Out, Red Crusher*, in: *Glass & Gardens: Solarpunk Summers*.

³³¹ Marcal, T. (2018) *When Kingdoms Collide* in Lodi-Ribeiro, G. (2018) *Solarpunk: Ecological and Fantastical Stories in a Sustainable World*.

³³² Machin et al. (2023) *Artificial Photosynthesis: Current Advancements and Future Prospects*.

³³³ Ciamician, G. (1912) *The Photochemistry of the Future*.

³³⁴ Midjourney was launched in July 2022 and is “an independent research lab exploring new mediums of thought and expanding the imaginative powers of the human species”. Source: www.midjourney.com

and most visually excitatory experiences ever possible. The server is open-access, so that anyone can see what others are prompting all the time³³⁵. From this springs an insanely spectacular, never-ending slot-machinic flood of randomly sequenced imaginal translations that swarm our visual organs at severely surreal speeds. The artificially-augmented dreamscape of the planetary imagination becomes interfaceable in a kind of cyber-mystical turbo-feed, where the most far-fetched fancy, totally-trivial trash, ethereal experiments of holographic fusion and sacred machine-art run downstream. *What about nature and magic?* While its affordances for simulating natural environments are probably even more problematic, one need not be a particularly fantastic mind to notice how prompt-to-image AIs do perform techno-magic in its perhaps heretofore most explicit form: for how exactly is a prompt that immediately morphs into an artefact phenomenologically distinguishable from a spell?³³⁶

Facing revolutionary metamorphoses of the technologically-mediated imagination, we can now say that Debord, when in 1967 he reiterated the first line of *Capital*, and framed modern life as “an immense accumulation of *spectacles*”³³⁷ rather than commodities, had not seen anything yet. And neither had Jameson, when in the name of postmodernism he described tendencies of a world threatened to become “a glossy skin, a stereoscopic illusion, a rush of filmic images without density” to ask “*is this now a terrifying or an exhilarating experience?*”³³⁸ Tuning into Midjourney’s simulated avalanche of endlessly renewable artificiality, the either/or distinction of his question dissolves alongside the very fabric of time itself: the only possible answer is *yes*. But the perhaps most unsettling prophecy was given by McKenna, who in the more techno-optimist 1990s saw the coming of “worlds not governed by the laws of physics *but by the laws of the human imagination*”³³⁹. Physics are of course not

³³⁵ There is a private mode too.

³³⁶ Further readings: Adorno, T. & Horkheimer, M. (1944) *Dialectic of Enlightenment*.

Davis, E. (1998) *TechGnosis: Myth, Magic and Mysticism in the Age of Information*.

³³⁷ Debord, G. (1967). *The society of the spectacle*: 1.

³³⁸ Jameson, F. (1991) *Postmodernism: Or, the Cultural Logic of Late-Capitalism*: 24f.

³³⁹ He hoped these would serve less as “an entertainment device so much as a way of perfecting the project of human communication (...) to make meaning something that people can see rather than hear”. Source: *The Future is Virtual* (Terence McKenna VR Documentary), YouTube.

overcome, but it nevertheless feels *as if* the omniversal virtuality of artificial environments increasingly enables negating earthbound limitations altogether, as psychoanalytically captured by Žižek, when in the context of immersive gaming environments he spoke of “a pre-Oedipal not-yet-castrated subjectivity that floats in a kind of *obscene immortality*”³⁴⁰. As the ubiquitous affordances for artificial world-writing invites for pseudo-transcendence, the demiurgical sandbox of prompt-to-image AIs casts a shadow that has everything to do with out-of-this-world imaginaries, the contingencies of boundlessness and the imagination’s troubling intimacy with reality. How does Solarpunk respond to these swirling ruptures gaping in the hyper-mediated web of techno-reality? Building upon Verso’s divergent modes of bio-mimicry, it will be argued that Solarpunk prefigures a unique retangling of renewable interplay between art(ificiality) and nature that hinges upon the critical distinction between two opposed modes of mimicry, here speculatively referred to as (1) the *artificial garden as pseudo-oasis* and (2) the *artificial garden as infrastructure of an imagination that learns to work like plants*.

In *The Heavenly Dream of Mechanical Trees* (2018) Nickel unfolded a hardcore techno-solutionist scenario of artificial photosynthesis: we encounter *Ailanthus*³⁴¹ – a tree “created by another hand” standing amidst “miles and miles of eight-armed trees-that-aren’t trees in a forest-that-isn’t a forest. A second Eden, created to save the world”³⁴². While Taussig pointed out that “we have excelled in mimicking nature so as to exploit it”³⁴³, Nickel extrapolates upon tendencies of *mimicking nature so as to substitute it*, by speculatively surveying how a top-down roll-out of renewable tech could turn out catastrophic, with the maintenance of the mechanical forest eating away more energy than it produces, while forests have largely disintegrated and are seen as no longer worth investing in. Rather than wasting her time studying botany – a thing of the past, Bitá’s aunt encourages her to become a scientist, continue the march of progress and “figure out how to make these trees reproduce

³⁴⁰ Žižek, S. (2017) *The Obscene Immortality and its Discontents*.

³⁴¹ *Ailanthus altissima* is also referred to as the *tree of heaven*.

³⁴² Nickel, W. (2018) *The Heavenly Dream of Mechanical Trees*. In: Ulibarri, S. (2018) *Glass & Gardens: Solarpunk Summers*, World Weaver Press: 87.

³⁴³ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 5.

so we don't have to replace their rusting and broken parts every decade". This stunning alienation from the fragile interplay of biospherical contingencies is in the tale facilitated by a language of bio-mimetic conflation: Bitá argues that "calling these mechanical structures 'trees' was like calling a light bulb the sun"³⁴⁴, but is scorned by a fellow future human for even pointing out the pseudo-nature of that which they refer to as fruit. "'We have fruit-' Steve looked insulted, as though her words were a personal slight. Bitá laughed. 'No we don't. We have blobs of protein injected with artificial flavorings and synthetic vitamins'"³⁴⁵.

Nikel's cautionary tale³⁴⁶ proposes the trope of the *dead evergreen machine-plant* as the world-image of techno-solutionist substitutionism: "Ailanthus' branches never rust. Her leaves are always bright. (...) Evergreen"³⁴⁷. Shifting attention to the perma-green appearance of the artificial tree critically reflects back onto the aesthetic horizon of Solarpunk, elucidating the potentially deceptive nature of digitally-mediated plants which abundantly populate its futuristic landscapes: shiny surfaces of juicy leaves appearing extraordinarily fertile as they radiate into our souls from perfectly rectangular liquid crystal displays – by themselves exactly as alive as the indifferent procedures imitating photosynthesis inside the tree of the machine-god Ailanthus. What this suggests is that in an age of ubiquitous artificiality and disappearing ecosystems, the perhaps most treacherous of imaginaries are those which masquerade as a garden, but in fact substitute the meta-affective capacities of earthbound renewal, a tendency of technologies to *extend* our creative capacities while *amputating* our natural ones³⁴⁸ as warned against by McLuhan. This configuration of an eco-tech imaginary characterized by mimicking nature with artificial tools so as to substitute, it I call a *pseudo-oasis*.

³⁴⁴ Nikel, W. (2018) The Heavenly Dream of Mechanical Trees. in: Ulibarri, S. (2018) Glass & Gardens: Solarpunk Summers: 88.

³⁴⁵ Nikel, W. (2018) The Heavenly Dream of Mechanical Trees, in: Ulibarri, S. (2018) Glass & Gardens: Solarpunk Summers: 91.

³⁴⁶ While it is explicitly not defined by futures whose actualization it seeks to evade, it would be naive to assume that Solarpunk can be void of strategic warnings. In fact, its anthologies are densely populated by some highly relevant cautionary tales.

³⁴⁷ Nikel, W. (2018) The Heavenly Dream of Mechanical Trees, in: Ulibarri, S. (2018) Glass & Gardens: Solarpunk Summers: 94.

³⁴⁸ McLuhan, M. (1964) Understanding Media: The Extensions of Man.

The *artificial garden as pseudo-oasis* is well known from cyberpunk dystopias (not just the fictional ones³⁴⁹), where hyper-mediated simulations substitute ecological environments, which in these scenarios are usually spiralling towards decay and implosion. The most iconic rendering of this is found in the *Matrix* films, where a holographically mediated pseudo-reality runs as illusory incarnation of the world, which those populating it experience not merely as “realer than the real”³⁵⁰ as the postmodernists used to say, but as all there is. While these films are set in the not-so-near future, an already pretty advanced scenario of techno-substitutionism playing out in only two decades is encountered in *Ready Player One*. In a 2045 ruinous US-midwest, the protagonist finds that “there’s nowhere left to go except the *Oasis* – a whole virtual universe” to which “people come (...) for all the things they can do, but they stay because of all the things they can be”³⁵¹. As terrestrial possibilities are dwindling towards closure and depletion, the *Oasis* offers itself as an escape hatch and boundless playground: a kind of artificial ersatz-paradise offering games that are much more fun to play than those of earthbound dystopia. Now imagine Ernest Cline’s original 2011 book which prompted the film serially handed to employees at Facebook’s *Oculus*³⁵² and we can begin to see the sf-induced autopoiesis of the virtual exodus: the self-fulfilling drift towards populating simulated (un)realities at the expense of investments tainted with the mortal contingencies of shared planetary realities.

Solarpunk proposes exactly the opposite. Against tendencies of artificially-mediated hyper-realities drowning out earthbound realities, it rejects cyber-mystical fantasies of pseudo-transcendental dematerialization that leave shared vital contingencies behind. It instead prefigures a reintegration of the artificial into a radical interdependence with the biospherical ground. But insofar as it is largely mediated via hyper-mediated art (and decentralized digital infrastructures), the ubiquity of artificial world-writing is not exactly

³⁴⁹ Think of Klaus Schwab’s vision of protein rich futures, or Gould, M. (2021) Billionaires See VR as a Way to Avoid Radical Social Change, WIRED.

³⁵⁰ Baudrillard, J. (1994) Simulacra and simulation.

³⁵¹ Source: READY PLAYER ONE - Official Trailer 1, YouTube.

³⁵² Facebook gives its Oculus employees a dystopian sci-fi book to get them excited about building the future (2016) Business insider.

negated. As such, the artificial garden as pseudo-oasis is not only the critical antagonist of Solarpunk, but it is simultaneously in danger of being misappropriated as one itself. But any regenerative futurism would be. It is indeed a little disturbing to see how the visual politics of Solarpunk, where as Williams points out, “the cities have the trees growing on them”³⁵³ can be seen as symptomatic of an age where *technology becomes the infrastructural substrate of ecology*. But it would be upside down to therefore see Solarpunk as the peak of hubris itself. Rather, would it not be naive to assume that a response to the hubris of an age where artificial environments are increasingly experienced by many as more natural than natural environments themselves could be void of ambivalence? In this light, the perhaps most useful theorist for critically reflecting upon the artificial garden’s dialectic is Guy Debord, who in *The Society of the Spectacle* (1967) argued that exchanging images about reality does not necessarily affect reality itself, but the feeling *as if* that were the case can end up protecting reality from ever changing. While the liminal ontology at the center of this thesis rejects any clean bifurcation between image and reality, Debord’s critique nevertheless remains indispensable for Solarpunk, insofar as it makes visible how the bypassing of reality through a spectacle spiraling primarily around itself can be a flip-side of imagination-oriented rebellion: art becoming a kind of ersatz-revolution that is fetishized at the expense of politics. Dismantling such configurations becomes increasingly relevant on a horizon where it has become the perhaps easiest thing in the world to walk into the digitally-enchanted candy-covered cottage in the virtual forest, filled with glittering artificial fruit which at the occasion of eating often turn out to be just as pseudo as Nickel’s “blobs of protein injected with artificial flavorings and synthetic vitamins”³⁵⁴, but even less nourishing.

With all this laid out, to actually provide futures “beyond cool toys for rich people”³⁵⁵ as Flynn put it, the critical project of Solarpunk must incorporate reliable methodologies for dismantling those kinds of *imaginary resolutions to real contradictions*³⁵⁶ which

³⁵³ Williams, R. (2023) The Politics and Poetics of Solarpunk, Presentation at ETH.Prague, YouTube.

³⁵⁴ Nickel, W. (2018) The Heavenly Dream of Mechanical Trees, in: Ulibarri, S. (2018) Glass & Gardens: Solarpunk Summers: 91.

³⁵⁵ Flynn, A. (2014) Solarpunk: Notes Towards a Manifesto.

³⁵⁶ Jameson, F. (1981) The Political Unconscious: Narrative as a Socially Symbolic Act.

treacherously circuit the sandbox of imagination with art(ificiality) to construct and populate a pseudo-fertile ersatz-reality at the expense of the actual garden. A simple razor for drawing this distinction was articulated by Springett, who in our conversation told me that “*you cannot LARP Solarpunk, you just plant a garden*”³⁵⁷. This first of all captures the obvious point that the bringing down to Earth of the vision cannot merely be artificially simulated via speculative fiction: it must be performed. Descendental translation into actuality can never be substituted nor happen in the future, and without this, Solarpunk morphs into a caricature of itself – a hopium, heavenly dream, pseudo-oasis and bag of dust. But Springett’s razor also offers a more nuanced entry-point into the dialectic. For if we interpret *you cannot LARP Solarpunk*³⁵⁸ as signifying something like *you cannot simulate Solarpunk*, do we not find that in its future fictions and speculative artefacts, it is being simulated the whole time? For does not the sedimentation of a fictive meta-position beyond present actuality at heart begin as a kind of simulation? Far from falsifying Springett’s razor however, I will argue that this nuance renders it even more existential for qualifying between a pseudo-oasis and an artificial garden constellated in regenerative complicity with forestbound actuality.

(...) symbols, like plants or any growing thing, have a career or a life journey. No sooner do they floresce in their full glory, like flowers in spring, than they metamorphose into material bodiedness, jettisoning the symbolic mechanism of meaning, replacing it with something quite different, which is thingness, actuality, bodiedness (...) In another language, transcendence creates its own demise into immanence. (Taussig)³⁵⁹

While the regenerative visions of Solarpunk at least in part blossom from the virtual fertility of the digital imagination, the specter of the garden presupposes a recyclical entanglement between artificial simulacra and the fertile substrate of the ecosphere, which can only ever be cultivated in the present. There may be manifestations of Solarpunk that are more high-tech or low-tech, more visionary or down to Earth, more pragmatic or prophetic, but they all non-negotiably revolve around “a future with a human face and dirt behind its ears”³⁶⁰ as

³⁵⁷ Springett, J. (2022) Interview via Zoom 25 August 2022.

³⁵⁸ LARPing = live action role playing.

³⁵⁹ Taussig, M. (2020) *Mastery of Nonmastery in the Age of Meltdown*: 155.

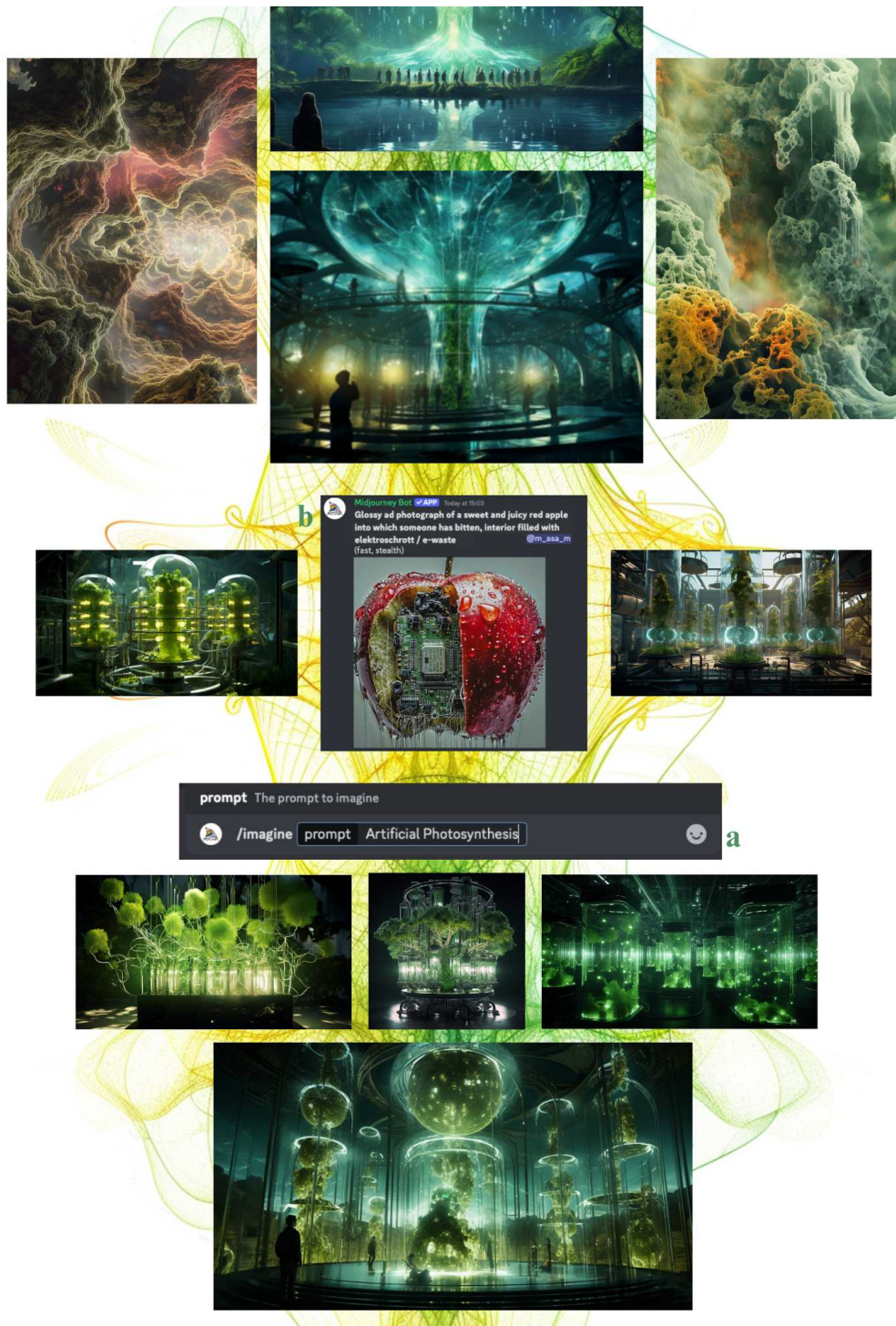
³⁶⁰ Flynn, A. (2014) *Solarpunk: Notes Towards A Manifesto*.

Flynn put it. Reembedding art(ificiality) into a creativity of compost indicates that the ultimate portal for entering the world(s) of Solarpunk remains embodied experience, “that portion of nature with which each moment of human experience intimately cooperates”³⁶¹ as Whitehead put it. The primary media technology or virtual reality device in Solarpunk is *not* machinic nor is it digital. Its first infrastructure for visions, metaphors, tropes, prompts and their metamorphic trajectories remains the *actual garden*, which here becomes synonymous with the decentralized vital body of the planetary collective itself as Solarpunk would never subtract the human body from nature. the actual garden is something like the decentralized vital body of the planetary collective itself. True Solarpunk can never be art substituting nature, nor the spectacle substituting the social, but only art serving as a portal for entering a radically renewed reality, and the spectacle serving as a Trojan horse for a more vibrant and ethical sociality. This signifies a shift away from the primacy of representation: rather than projecting a reductive univocity on what the artificial garden as hieroglyph signifies, what becomes more pivotal with Solarpunk is how we constellate ourselves in relation to it: *recyclical*.

*We can win the imagination battle and still lose, if we lose the material battle (...) fiction and imaginative work is necessary but not sufficient. (Hudson)*³⁶²

³⁶¹ Whitehead, A. N. (1938) Modes of Thought, Lecture Six: Civilized Universe.

³⁶² Hudson, A.D. (2022) Interview via Zoom, 17.8.2022.



³⁶³ Image sources: (a) Midjourney Discord /imagine prompt chat. (b) Midjourney Discord image example artificial fruit. All unsourced images made with Midjourney AI.

8. Infrastructures of the Imagination

How long does it take to make the woods? As long as it takes to make the world. It is always finished, it is always being made, the act of its making is forever greater than the act of its destruction. (Berry)³⁶⁴

My speculative synthesis suggests imagining Solarpunk as an *infrastructure of the imagination*. Building upon one of Flynn’s key prompts according to which Solarpunk “begins with *infrastructure* as a form of resistance”³⁶⁵, it will be argued that the artificial crystallizations of fictional Solarpunk futures (=its *art*) not merely revolve around (decentralized, community, energy, vital) infrastructure, but that they themselves serve a kind of infrastructural purpose. Offering an open-access (a) *container*, (b) *attractor*, (c) *engine* and (d) *vehicle* for envisioning and building regenerative futures on a planetary scale, Solarpunk not merely mobilizes and bundles co-creative efforts for bringing about altered infrastructural configurations, but it does this by constellating the imagination itself as a renewable infrastructure. But what exactly does that mean? Requalifying future fictions as infrastructures of the imagination first of all signals that their speculative solidification is only the first articulation: the establishing of an imagined meta-position in a transfigured timeline serving as a catalytic anchor for spinning a hauntological pivot to recursively propel future-present complicities on the projection-prefiguration axis. This recyclical movement reflects what I have come to see as the temporal meta-pattern of the imagination’s infrastructural function: a rotational double-articulation between (1) the *crystallization of the future* and (2) the *fluidization of the present*.

(...) a still image is actually a moving image temporarily stilled like a single frame in a movie. Incorporated into my body, the stayed image is then remobilized, as it were, and granted new life, like the one it had before the artist immobilized it. (Taussig)³⁶⁶

³⁶⁴ Berry, W. (1985) Sabbath Poem “1985, V”.

³⁶⁵ Flynn, A. (2014) Solarpunk: Notes Towards a Manifesto.

³⁶⁶ Taussig, M. (2020) Mastery of Nonmastery in the Age of Meltdown: 175.

The first articulation (*artificial translation*) is open to the imagination's virtual boundlessness: visioncasting can enfold freely designable and experimentally fused constellations of patterns, elements or coin flips: quasi-infinitely modifiable, combinatorially-explosive lines of extrapolation, intensification and mutation, speculatively conjoining beyond the horizon. Creating such artefacts entails encoding bundles of sensorial and symbolic traces into a *unit of contagion*³⁶⁷ – a transplantable time capsule that can be reopened and injected at later moments. This gives rise to hauntological objects, but not in the conventional sense. What arises are hypertemporal hybrids that backfold their designed imprints onto the present from the future. My understanding of how this artificial concretization of a fictional future constitutes an infrastructure of the imagination springs from a creative ontology of processual accumulation, as captured in McKenna's argument that "separating art from imagination is simply the exercise of separating cause from effect (...) art is like the footprint of where the imagination has been"³⁶⁸. Such a sedimentary view of artefacts as retrospective traces of the imagination's fluid currents can be found in Bergson, Deleuze and Massumi, who not only postulated the primacy of flow and intensity over solidity, signification and identification, but consequently saw space and matter as accumulated second-order afterimages of intense past flows. "Passage precedes construction but construction does effectively backform its reality"³⁶⁹ Massumi writes, making clear that while fluidization is prior, the conditions of emergence of flows are intimately tangled with past sediments subsisting in the present. The pivotal insight holds that the matrix of accumulation (the "positional grid") enfolds a hauntological dynamism. A *trace* – a kind of granular unit of past sediment, "determines a tendency, the potential, if not yet the appetite for the autonomic repetition and variation of the impingement"³⁷⁰ he writes.

Through this lens, interrogating the infrastructural dimensions of the imagination entails asking this: if past sediments carry inbuilt potencies for relaying forth their figurational relief, *what about traces of the future?* According to process ontology, the most basic answer to this

³⁶⁷ Carstens, D. (2011) The Image as Unit of Contagion: A response to the work of Mer Roberts.

³⁶⁸ McKenna, T. (1994) Appreciating the Imagination Workshop at Esalen, YouTube.

³⁶⁹ Massumi, B. (2002) Parables for the Virtual: 9.

³⁷⁰ Massumi, B. (1995) The Autonomy of Affect: 92f. .

would be that all future sediments are strictly speaking past sediments, and thereby not exempt from the recyclical logics of processual accumulation. But that is not all. The artificial crystallization of a fictional future alterity constitutes a kind of temporal doubling: the arisal of artefacts that are simultaneously (1) *actual sediments of the past* and (2) *artificial sediments of the future*. The movement we then get is that of afterimages of future sediments recursively reactivated in the present as preimages to catalyze openings. Constellating ourselves in relation to an infrastructure of the imagination could thus be seen as indistinguishable from cultivating and inhabiting a future substrate or architecture of hypertemporal circulation.

The artificial dunes broke up the Desert; the windbreak between the Dome and the Desert, the rain soaked grasses, the trees and the pools supporting them. Two or three temporary shelters shimmered bright electric blue against the landscape; encampments of Sunborn goatherds and shepherds who drifted from oasis to oasis to feed and water their flocks, picked the fruit Dawith and Ibra had spent years experimenting into sustainable crop.

(Mirov, The Desert, Blooming)³⁷¹

With an infrastructure of the imagination, the future is no longer above, but also below. But infiltrating reality with fictional sediments of hypertemporal alterities does *not* simply eradicate the positional grid of past accumulation³⁷². It instead entails cultivating a meta-layer within this retrospectively materialized matrix that becomes infused with the catalytic surplus of inversed hauntological dynamism radiating from imagined future timelines. Recognizing how exteriorized future visions infiltrating horizons with hypertemporal excess can deliver pivotal conditions of emergence for metamorphic departures in the present, suggests an interpretation of *refuturing* that surpasses the meta-temporal articulation of dismantling the grip of a defutured non-horizon evacuated of possibility. I therefore propose reimagining refuturing as a hypertemporal mode of signification running on the projection-prefiguration

³⁷¹ Mirov, L. (2017) The Desert, Blooming, in: SunVault: 108.

³⁷² And seeking to propel a hauntological reversal at the expense of addressing and confronting past issues and injustices would be a purely solar and upward reductionist strategy. See: Williams, R. (2019) 'This Shining Confluence of Magic and Technology': Solarpunk, Energy Imaginaries, and the Infrastructures of Solarity.

axis. For while “(the) presence of the sign is a contraction of time”³⁷³, the hauntological artefact or trace of the future does not represent realities that already exist. They carry signatures of larger realities yet to come. Constellating ourselves in relation to an infrastructure of the imagination thus enables recyclical mediations that transcend the map-territory distinction. Artificial traces are certainly not the actual thing, but neither can they be seen as external from reality. They don’t subsist within the present as pure virtualities, but as concrete materializations that can be revoked and transplanted. Foregrounding the infrastructural dimension of such crystallizations reevaluates them as liminal catalysts, not destinations for escaping into the future, but proxies: fictional intermediaries serving as hypertemporals portals for experimentally infiltrating the present with signatures of alterity emitting hauntological surplus.

The perhaps most catalytic framework for envisioning the stratifications and flows of such a co-created future sediment serving as a hypertemporal architecture of circulation for the planetary imagination is Deleuze and Guattari’s concept of the *multiplicity of plateaus* – initially formulated in Bateson’s work on Balinese culture as a renewable trope for mobilizing energy, in opposition to the Western temporics of climactic termination (what LeGuin called spear logics). Void of a beginning or end, with a plateau, the “heightening of energies is sustained long enough to leave a kind of afterimage of its dynamism that can be reactivated or injected into other activities, creating a fabric of intensive states between which any number of connecting routes could exist”³⁷⁴. What I find remarkable is that this is an infrastructural trope that not merely enables the running of rhizomatic lines of flight, continuums of intensities and flow conjunctions, but is itself seen as a sediment of incorporeal self-vibrating intensities. While this challenges the assumption that traces of the past are primarily characterized by extension, does not Solarpunk’s primacy of vibe present the same argument in relation to the future? This shifts attention from the evolving multiplicity of artificial materializations, to how the hauntological backforming catalyzed when interfacing them accumulates in the body of the collective as a vibratory substrate

³⁷³ Massumi, B. (1992) A user’s guide to Capitalism and Schizophrenia: 10.

³⁷⁴ Deleuze, G.; Guattari, F. (1987) A thousand plateaus. Capitalism and schizophrenia: xiv.

radiating with catalytic dynamism. The more sensible vibe-landscape of Solarpunk is then no longer its ecosystem of artefacts, but a massively decentralized multiplicity of accumulated potential pouring from the sun in the future as renewable surplus. The recursive closure of this circuit catalyzes exactly the opposite of closure: descendental translation i.e. the *birth of the future*.



9. Conclusion

“We are at a moment where we need to choose our future”³⁷⁵, Wolf-Meyer declared in his volume on speculative anthropology. *But that was in 2019.* With the non-linear destabilization of consensus reality, geo-politics and socio-metabolic regimes at the hands of capitalist overshoot, biospherical disequilibrium, political meltdown and exponential technologies pervaded by ever-greater immensities of AI, looking into the future rapidly becomes more unsettling than we can imagine. To prefigure capacious responses to such extreme climates, this MA-thesis has examined the science-fiction genre and speculative arts movement Solarpunk as a renewable futures research tool from the vantage-point of a future-oriented but present-bound speculative anthropology of mediation, seeking pathways to reconcile the imagination’s boundlessness with the immanent contingencies of shared planetary horizons. Through an affective, mimetic and infrastructural lens, it speculatively surveyed how Solarpunk cultivates regenerative relationships between the sun and the planetary body, between future fiction and present actuality as much as between art(ificiality) and nature’s fertile capacity for renewal, thereby promising to offer unique responses to the perennial-but-urgent issue, here referred to as the contingencies of boundlessness.

Starting from the stance that both status-quo worship (*denialism*) and indulging in dystopianism (*fearing the future*) are abyssmal approaches for maneuvering the age ahead, Solarpunk proposes an anti-anti Utopian turn: a reorientation and hijacking of shared horizons mobilized by a rigorous engagement with the euphoric promise and pragmatic possibility of post-fossil, post-dystopian, decentralized, decolonized, pluriversal and regeneratively thriving planetary futures that anyone under the sun can tune into. Rather an ancient innovation than a new discovery, by revisioning the sun as the most sensible immanent attractor for bundling enthusiasm towards futures that are not shitty, Solarpunk reminds us that the greatest gift ever given and the greatest story ever told is that of the sun. What arises here is a disentangling of techno-utopian and upward reductionist complicities

³⁷⁵ Wolf-Meyer, M. (2019) Theory for the World to Come: Speculative Fiction and Apocalyptic Anthropology: 14.

between sf and space (*transterrestrial techno-desire*) brought about *not* by becoming indifferent towards the cosmos, but exactly the opposite: by harnessing its immense energies to mobilize a pivot on the surface of the planet. Rather than going solar by itself, it proposes a cosmo-botanical vision of a future humanity that becomes a species of *quasi-infinite renewal* by becoming a species of *solar super-abundance*.

My central finding holds that Solarpunk's solar-terrestrialism offers a unique modality for revisioning and regrounding the imagination's troubling intimacy with reality – an ambivalence associated with its future-oriented modes of projection and prescription (or to use less negatively charged terms: visioncasting, flight and prefiguration). The trouble associated with these Utopian articulations springs from their initial opening of a rupture from present actuality which may or may not be closed. In order to land somewhere else, one has to fly first, but return is not guaranteed. The dialectic of the creature that fell because it rose too high, runs through the source-code of humanity as a vertical species gifted with the capacity to interface the infinite, but it is especially pronounced in those dangerously promising creatures of the future-tense with a hyper-active imagination. Disentangling futurity and upward reductionism, Solarpunk's heliocentric descendentalism offers a pedagogy for immunizing the ikarian, phaetonic and pharaonic pathologies of solar Utopianism. Rather than prefiguring another sky-oriented sun worship that privileges the future at the expense of the present, it prefigures a shift towards an *imagination of landing*. Rather than mobilizing the imagination's boundlessness to further accelerate on trajectories of overshoot, Solarpunk suggests to amplify a pivot towards *regeneration*. Instead of contacting the sun to sail towards a desert singularity, it seeks to propel navigations towards a garden multiplicity. All in all, Solarpunk's *solar inversion towards the garden story* was found to encourage abundantly solarized renewable relationships between the boundlessness of the imagination and its earthbound contingencies: a recyclical confluence between the sun's overshoot and its descendental translation spinning around a regenerative axis mundi.

Attuned to this transvaluation, the overarching tropes speculatively indexed as (1) *renewable imagination* and (2) *runaway refuturing* were identified as the most recyclically catalytic

movement patterns most worth paying attention to. These complementary articulations are characterized by a recursive contacting of a speculative meta-position situated in an imagined timeline used for turning the present into a spiraling doorway for projective-prefigurative propulsion. With this optimally-translated recyclical temporics, the imagination's boundlessness is brought down to Earth, thereby warping the future-present vortex from cancellation and closure to exactly the opposite thereof. Time has never been linear, and everything is an echo of something else, but the mimetic dynamism of future alterities enables a meta-orientational reversal of processual accumulation: *becoming haunted by the future*. And it seems far from accidental that Solarpunk finds the most viable nexus for a hauntological reversal in the stellar entity, whose eternal return has already been signaling the perpetually renewed dawn of tomorrow since the beginning of cosmic time. But solar-mimicry by itself does not yet constitute its quasi-infinitely renewable refuturing. The imagination's boundlessness projected via the sun is to be regeneratively resourced into a renewable surplus of euphoria felt and possibilities visible in the present, whose catalytic dynamism must not remain limited to the aesthetic vortex between vision and vibe. The garden demands a pivot towards tangling the memetic engine's autocatalytic escape velocities onto descendental trajectories of earthbound enactment, rendering learning to love the future inseparable from confronting the planetary. By confluentally fusing a vibe-orientation with a pragmatic pole, Solarpunk can be seen as a pedagogical device for dismantling the imagination's tendencies for pseudo-transcendental indulgence in omniversal boundlessness. The crucial nuance holds that it does this *not* by policing the imagination, but by strategically intensifying its contagious enthusiasm through incremental engagements with plausible, possible and desirable near-future scenarios, seen as the most catalytic precursor for propelling collective action in the face of runaway uncertainty.

This strategic ambiguity feels to be promising for enriching and renewing horizons of present-bound future-oriented anthropologies as well. Futurity still poses risks for anthropology, even to the point of it having felt to be a minefield. But insofar as risk is the flip-side of potentiality, would it not be even riskier not to attempt turning it into a zone for

experimentation? With the future shock we have so far seen expected to appear harmless soon, any present-oriented anthropology that fails to incorporate speculative, anticipatory and preconstructive methods appears to be at risk of suspending its agencies in the age to come. On such horizons, it feels more natural to risk making mistakes, than not playing at all. Anthropologies of the future must not cease addressing critiques of future-oriented tendencies raised in the past, but *not* at the expense of radically reimagining how the anthropological imagination can deliver uniquely relevant positionalities, lenses and strategies for informing and energizing collective thriving in the age to come. With its explicitly polyphonic, decolonized, pedagogical and down to Earth orientation for doing sf, Solarpunk offers itself as a promising partner for such ventures. Further cultivating the immense interdisciplinary potential between Solarpunk, sf and future-oriented anthropologies around the shared purpose of exploring the collective imagination such as to reconcile it with larger realities, good immanence and scientific plausibility could yield invaluable insights on the interdimensional liminalities of the imagination-reality axis. Attuned to Wolf-Meyer, who writes that “articulating futures – imagining them and bringing them into being – is an active process, and rather than a posture of resignation, theory for the world to come needs to instill *radical curiosity*³⁷⁶”, I would love to see more daring, speculative and massively co-creative anthropological work self-consciously positing at its horizons what Jameson saw at the heart of the science-fiction genre: “the vocation of giving us alternate versions of a world that has elsewhere seemed to resist even imagined change”³⁷⁷.

As any sufficiently advanced work openly invites for (well discerned) criticism, it should be noted that in light of its speculative orientation, the integrity of this thesis hinges upon the relationship between *creativity* and *critique*. It seems essential to recognize that while critique should itself be creative (but often is not), creativity must at times operate unbound by possible and even plausible criticisms (or else it shall remain mediocre). As a result, critisizing creativity tends to be much easier (and less dangerous) than being creative

³⁷⁶ Wolf-Meyer, M. (2018) *The Necessary Tension Between Science-Fiction and Anthropology*: 14f.

³⁷⁷ Jameson F. (2005) *Archaeologies of the Future: The Desire Called Utopia and Other Science-Fictions*: 270.

oneself³⁷⁸. It springs from the nature of the matter that those who read this thesis from a place of disenchanted literalism that judges and damns the imagination will likely be unable to relate. But who would expect an imagination-oriented work to be absent of sandbox leaps and invented tropes starts from projecting a caricature of creativity. Exploring the imagination is like freeing a caged bird, not about imprisoning and reducing the present by cynically eliminating even the possibility that the world could be entirely different. Rather than hiding its profound contradictions, this thesis explicitly unfolded how imaginative flight is not only existentially vital, but also dangerous. Therefore, while primarily addressed to those folks who take vision very seriously, I hope that those casting judgments against such future-oriented creatures will read this thesis carefully, rather than critiquing it hastily. There are many ways to misunderstand this material, as there are many ways for misunderstanding the imagination by failing to realize it is never the imagination by itself which catalyzes change. And no less nuances which needed to remain unarticulated, or else this project would have never seen closure³⁷⁹.

With the time for doing anything running out of hand, I have come to consider being happy that this thesis is not perfect. Utopian perfection is the immanent unreality par excellence and an absence of ambivalence symptomatic of totalitarianism. And how could a thesis about a blindspot itself be void of blindspots? Far from projecting such sterilities, the tricky truth radiating from the enticing promise of Solarpunk art holds that the ambivalence runs through the heart of the matter. It must not be eliminated, only continuously reflected. The more interesting strategy for reflection is not dismissal from afar, but intentionally intensifying an ambivalence, thereby betting on the arisal of a higher-order synthesis, which requires an exceptional awareness of how seeking to land on Earth while dipping into the sun is *not* a safe game. Hence the insane effort of writing this thesis in the first place, which I would never have done would I not need its insights for my survival. The most critical insight might be that a vision must never substitute or bypass reality, but should instead augment and

³⁷⁸ See: Deleuze, G. (1962) Nietzsche and Philosophy.

³⁷⁹ Had I had another year or ten, I would have for sure addressed Lunarity, the polarity between lightness and darkness or cosmic archetypes, another endlessly fascinating subject some of the brightest minds spent decades to barely wrap their heads around.

enlarge it in the most catalytic way. To drive this home, I will not cease reflecting how a highly abstract rendering of an anti-logocentric futurity by itself leads towards the desert, and the conception of an imagination of landing does not equate to landing itself, but is again merely the projection thereof. But exactly this conundrum mobilizes the projection-prefiguration loop in the first place. Landing without flying is a heavenly dream too, so the anti-anti-Utopian player needs to learn *renewable consecutiveness*. As future-oriented significations do not give us maps for territories that already exist, the speculative artefacts of Solarpunk are *not* ends in themselves, but hypertemporal interfaces or present-bound time-travel portals for entering the world in a radically altered way. It would be mistaken to expect this thesis to be anything more than a catalytic proxy, experimentally bundling constellations that necessarily remain treacherous simulations unless their signatures are used to infuse reality with the renewable dynamism it enfolds. Alike Solarpunk art, this work must *not* be conflated with the spear's end, but instead imagined as a Trojan horse for something else, whether that be the feeling of a speculative present, euphoric desire propelling catalytic surplus, the Ouroboros of sf becoming self- and eco-conscious, the metamodern protopia, the Regenaissance, the planetary DAO (*decentralized autonomous oasis*), the quasi-infinite renewal of worlds, the cancellation of the apocalypse, going beyond the omega-point as a garden, or something else, yet to be imagined.

Before I finally shut my mouth, it can impossibly be a secret that this work is permeated by severe autoethnographic undercurrents of quasi-mythic proportion, the disclosure thereof would easily induce epistemic meltdown of the more conventionally-oriented reality-tunnels, and I don't want to diffuse attention from the matter at hand by making it about myself. All I should say is this: as the process coincided with a slightly extreme kind of initiation, it at times became necessary to remember that *I am not this work* and that *this work is not about me* – not because the issues discussed were primarily personal, but rather because my personal experience became so consumed by the issues, that I no longer knew where the thesis ended and I began. It is less a confession than an epistemic necessity to report that this work could have never been created had I not morphed into the attractor, the container, the

portal, the landing patch etc. This overarching feedback loop bundled all the other feedback-loops, thereby anchoring all salience-qualification in a concrete, human-shaped and mortal singularity, which happened to be me. With this total complicity at my hands, it would be a little preposterous to claim that reading this thesis could be entirely distinguishable from looking into my soul, but the assumption that I ever was primarily or only an individual constitutes precisely the monoversal, single-player projection that Solarpunk at heart seeks to dismantle. With the nexus of liminality situated between myself and the larger realities encountered in its world(s) via deep participation in a profoundly polyphonic and pluri-perspectively porous membrane, it would be a little too simple to reduce this thesis to an insulationist nexus of projection. And yet, one has to be aware that anthropological knowledge production remains

(perhaps necessarily) involved in (1) the violent proliferation of fetish objects and fetishizing desires and (2) the reproduction of properties and governmentatlities through which some channels of proliferation are rendered legitimate and others illegitimate³⁸⁰

This tendency might be further intensified, perhaps even to an outrageous degree, when probing speculative (p)reconstruction and making one's own ethnographic artefacts. And still, I find it convincing that it would have been ever more preposterous had I not done it. I would not have written on this subject for thousands of hours, would I not believe that the future should belong to the many-faced multiplicity of a massively decentralized pluriversal consciousness. And anthropology can and must play a key role in bringing such transvaluated ontologies to life. But it is also concerned with contingency, and contingency has it that we can only walk through one door at the same time. This perennial tension between singularity and multiplicity was found to be running through the source code of Solarpunk, whose solar-terrestrial approach for decolonizing the future starts from the premise that the sun can serve as a shared attractor for pooling and unifying a multi-nodal ecology of visions without totalizing. Ironically, but perhaps unsurprisingly, even while immersing myself in its profoundly co-creative imaginaries, I still had to learn the hard way that rolling the sun up the

³⁸⁰ Williams, S. (1997) Ethnographic Fetishism or Cyborg Anthropology: 167.

peak by ourselves no longer works. Solarpunk teaches that this is excellent news. Old archetypes die hard, but more easily if we design future-oriented memes for resurrecting them as something else. Requalifying courage, enthusiasm and possibility as reciprocal categories by foregrounding the cultivation of loving the future as a skill we can only learn by becoming more joyous and capacious collaborators, Solarpunk's post-heroic and post-moniversal reactivation of the solar hero archetype shifts the nexus of art-making and future-building from late capitalism's ego-based specularization and fetishization of the individual towards community-based spectacularizations of collective thriving, the open-sourced sharing of abundant gifts and the non-dominational reign of massively multi-player positive sum games.

Just as the next Buddha is going to be the sangha, the next solar hero is not going to be a single male, nor an individual at all. According to the new lore of Solarpunk, it will spring from the body of the collective as a radiant contagion that emanates from the sun in the future. And like the sun, it will rise again and again and again. I hope I will be around to see and participate when that happens, for that will be the actual fruit(s) of this work. To get there now, Solarpunk can teach us the skill of remembering what LeGuin reminded us of – that “the Golden Age, or Dream Time (...) is, to those with the gift or discipline to perceive it, right here, right now”³⁸¹.

³⁸¹ Le Guin, U.K. (1983). A non-Euclidean view of California as a cold place to be: 3.

*The future is out there among the stars. But I am where I belong. I'm home.*³⁸²



³⁸² Wise, A.J. (2017) A Catalogue of Sunlight at the End of the World, in: SunVault: Stories of Solarpunk and Eco-Speculation: 235.

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