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The Ghost in the Machine

Historical Analysis of the Anthropological and Political Model of Humanity in the Whole Earth

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THE GHOST IN THE MACHINE¹

Historical Analysis of the Anthropological and Political Model of Humanity in The Whole Earth Catalog

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¹ The title comes from^(a) philosopher Arthur Koestler’s eponymous book^(b), where, through an interdisciplinary approach founded on philosophy of mind, psychology, neuroscience, criticizes the Cartesian dualism between a spiritual ghost-mind (*res cogitans*) that inhabits a material body (*res extensa*). Mind and body are *not* on the *same ontological plane*, interconnected one with the other. Instead, he proposes the notion of *holon*, an entity that is at the same time part and *whole*, gear and mechanism, *organ and organism*, like the atom, that is by itself a whole though simultaneously a part of a molecule, which can be by itself a whole, and also part of a cell, which is in turn a whole by itself, but also parts of a human, which is by *itself* a whole, but also part of a social system, and so on, *fractally*. Secondly, the concept of “ghost in the machine” gives the idea of “something hiding, not immediately visible” that nevertheless powers and moves an entire mechanism or, more generally, a set of dynamics. The meaning of these two claims will be clearer reading on.

^(a) Actually, the expression comes from philosopher Gilbert Ryle to describe Cartesian dualism between mind and body. Gilbert Ryle, *The Concept of Mind*, University of Chicago Press ed (University of Chicago Press, 1984).

^(b) Arthur Koestler, *The Ghost in the Machine* (Last Century Media, 2016).

Compass²

This is not a premise nor even a summary. Rather, it is a map, a compass for those who are about to read these pages. The thesis that follows is dense and crosses different disciplines: history, philosophy, anthropology, cybernetics, politics, semiotics; it has been not always possible to gently accompany the reader through the argumentations of this work: hence the need of this “compass”.

The aim of this thesis is not to describe an object, the Whole Earth Catalog, but to grasp what moves it from within: the paradigm that makes it not just a publication, but a signal of a larger cultural and anthropological model. This work does not assume the Whole Earth Catalog as a static object to be analysed, but as a series of traces that point back to a deeper pattern: the Catalog's words, images, and editorial choices are read here as signs of a broader cultural transformation. This cultural model is here called “organicism”: a way of conceiving the relationship between humans, technology, and nature that develops around non-linear thinking, networked structures, and forms of evolutionary adaptation and ecological interconnectedness. But why study the Whole Earth Catalog today? Because, although less well known than its contemporary derivatives, it was a crucial node in the transition from the 1960s counterculture to digital culture and contemporary ecological vision. Many concepts that pervade the way we experience technology, and the environment today find a matrix in it: the overcoming of the dichotomy between natural and artificial, the vision of information as a tool for emancipation, technology not as a mere means but as an organic extension of man.

² The problem with summaries is that they are almost always made by the authors, almost always after writing the work: though this enhances the accuracy of the summary (who would read a summary made before writing the work? Who knows whether the real intentions and meaning of the author corresponded to that of the summarizer?), one runs the risk of omitting information that is taken for granted because it is present in one's own mind but is essential to an outside reader without the same context. For this reason this (only!) section is co-authored with an AI (see note 3), which has been given the thesis and the prompt to write this compass, which has been later corrected and modified by the author, in the hope the introduction of a third would disentangle from this “cybernetic” halting paradox. For a fully authored, more programmatic summary see **Conclusions**.

Dedication, or the only “personal” part³

Honestly, I have never considered the extrinsic value of education, not because it is not there, or because it should not be considered, but because it has too much “value” (or, in another sense, nothing at all) that it cannot be simply enclosed in the utilitarian, capitalistic frame of *value*. «The functionary is trained. Training is distinguished by its orientation toward something partial, and specialized, in the human being, and toward some one section of the world. Education is concerned with the whole: whoever is educated knows how the world as a whole behaves. Education concerns the whole human being, insofar as he is *capax universi*, “capable of the whole”, able to comprehend the sum total of existing things»⁴: the knowing of the functionary is the knowing «that ha[s] a purpose outside of [itself], a purpose, to be more exact, which consists in a useful effect that can be realized through *praxis*»⁵: for this reason it is called *servile art*, for it *serves* another end beyond itself⁶: its substantiation is “work”, its anthropological type the proletarian (regardless of the occupation, “intellectual” or manual)⁷. But there is «an area of human action, of human existence as such, that does not have its justification by being part of the machinery of a “five-year plan”»⁸; shall it be called “liberal” or “free” art, as the set «of human action which ha[s] [its] justification in [itself]»⁹, which is without difficulty, always present, “gifted” and never realized, and in nature perfectly similar to play¹⁰.

³ The priority in designing the document format has been to facilitate the recognition of text units and enhance the reading experience in the digital format, suffering the author from screen-reading migraines. All writing choices should be clear; nevertheless, two clarifications for the benefit of the reader and the examiners. First, the double use of “these inverted comas”, used for neologisms, exotic words, words used in meanings that are different from the common one, words that are used in a critical sense, and «those inverted comas», used exclusively for academic quotes (academic quotes without quotation refer to *the first immediately preceding* quotation; the rule is page-sensitive, in the sense that it is true only if the page, too, is the same). *Italic* is used for book and article titles and for emphasis, as a way to “break the fourth wall” with the reader and hint at them relevant details. **Windsor font**, in-text (but non-diegetic) sub-titles at the start of each paragraph have the function of signaling the semantic *content* of the paragraph. Since this work will not be printed for ecological reasons, considerations for the use of blank ‘paper’ space have been omitted.

The entirety of the content of this work is 100% human generated (except for **Compass**). AI has been used only as (1) brainstorming or reasoning augments/facilitator (massively) (i.e. without it giving any additional information) and (2) web information crawler (more rarely) (i.e. like a powered-up browser for looking for sources): in these two functions it is really a wonderful tool. No idea in this work comes from an AI. No phrase is a rephrasing of one of an AI.

⁴ Josef Pieper and others, *Leisure, the Basis of Culture* (St. Augustine’s Press, 1998), p. 43.

⁵ Pieper and others, *Leisure, the Basis of Culture*, p. 41.

⁶ Pieper and others, *Leisure, the Basis of Culture*, p. 63.

⁷ Obviously, the true intention here is not to despise work in itself (not at all, since work «is the normal form of human activity»^(a)) or to elevate (in an egocentric and *mundane*^(b) way) the author or the class of “philosophers” or “intellectuals” to some new “higher” caste, “superior” to “filthy” proletariats: far from it, it is to despise the enslaving idea that work is the *only* thing, that effort is the figure of truth and “unevening” realization, and to advocate for the idea that the human has never been really *just* “human”, just *mundane*, and that the true figure of humanity is that of the *Ange*^(b).

^(a) Pieper and others, *Leisure, the Basis of Culture*, p. 43.

^(b) Gilles Grelet, *Theory of the Solitary Sailor*, Urbanomic / Mono Ser (Urbanomic, 2022).

⁸ Pieper and others, *Leisure, the Basis of Culture*, p. 42.

⁹ Pieper and others, *Leisure, the Basis of Culture*, p. 41.

¹⁰ Eugen Fink, Ian Alexander Moore, and Christopher Turner, *Play as Symbol of the World: And Other Writings*, Studies in Continental Thought (Indiana university press, 2016).

But one should also guard himself from the shadow of narcissism. As I believe, (and this will be linked to some of the thesis' concepts, too), the unbridled fulfilment of one's own individual narcissistic desire would be precisely an expression of the Phantom that grounds the period in which we live. Excluding extrinsic and intrinsic motives, then what to do? Here the need for a dedication, here understood in the dual dimension of addressing a certain audience and purpose and of what some might call an "affective dedication."

As for the first kind of dedication, excluding the fact that, from a pragmatic point of view, this thesis is addressed to the Luiss Degree Committee, it is surely dedicated to all those who believe that what the phenomena we see before our eyes are manifestations and, as such, manifestations of *something else*. Without this assumption, the entire thesis would collapse¹¹. It is not *redpilling*¹², but the belief that the things we see, particularly the human ones, are there or so for a reason, and that we cannot reach this reason by mere chatter nor the rant of the technicians or logicians, but through the intuition of the artist, the philosopher, the historian. To what end? No end at all; not because it is really of no use¹³, but because to give it an end, to make it useful, means to make it work, to *proletarianize* it, to destroy it.

The second, "affective", dedication is considered by some as a mere act of kindness, an affectionate thought for those close to us and, ultimately, a personal useless embroidery. Nothing could be further from the truth. The original meaning of dedication is sacrifice, and the original meaning of sacrifice is the transfer of merit. Through sacrifice, the religious human affirms that what he/her has hunted, cultivated, obtained through his/her hard work is not really his/her merit, but God's: superficially because God allowed him/her to find and hunt the prey, or granted him/her the right weather conditions for a good harvest; more profoundly because everything that exists, spoils included, cannot be his merit, since he is a *creature*, and so is a gift, received and not achieved, or divine manifestation.

¹¹ This belief will (obviously) be more formally investigated and presented as assumption of the thesis in the "Introduction" section.

¹² That of "red pill" is a social phenomenon born out of Internet culture (though anthropologically as old as humans) based on the same rhetoric of the film from which the expression is derived, *The Matrix*: "[...] that those who hold the beliefs internal to the [...]" mainstream political and social system "[...] have fallen for an illusion that cannot be internally detected, but only shown from the outside" ^(a). "To men's-rights activists, being red-pilled means throwing off the yoke of popular feminism and recognizing that men, not women, are the oppressed group. To the alt-right, it means revealing the lies behind multiculturalism and globalism and realizing the truth of isolationist nationalism. To conspiracy theorists, it may mean accepting the influence of the New World Order on society. To white supremacists, it means acknowledging that Jewish elites control the culture and are accelerating the destruction of the white race" ^(b). For all of them there is some knowledge, a *gnosis* that liberates them from the *ignorance* of the "mainstream", whose reiterated gibberish is just the temptation of a deceitful, *demonic* "System" that wants their death, or worse, their reintegration in the *world of illusions*. Differently from the "red pill" phenomenon, this research has no eschatological value or intent and its knowledge is not posited as gnoseologically superior compared to any other form of knowledge, thus accepting the common ground-rules of a civil, rational discourse.

^(a) Scott F. Aikin, 'Deep Disagreement, the Dark Enlightenment, and the Rhetoric of the Red Pill', *Journal of Applied Philosophy*, 36.3 (2019), pp. 420–35, doi:10.1111/japp.12331.

^(b) Alice Marwick Lewis Becca, 'The Online Radicalization We're Not Talking About', *Intelligencer*, 2017 <<https://nymag.com/intelligencer/2017/05/the-online-radicalization-were-not-talking-about.html>> [accessed 27 December 2024].

¹³ Is philosophy of any use? Is art of any use? Is culture of any use? But also, is even technology, science, work, money *really* of any use? Is life itself of any use?

That is why this thesis is not about “me” (though all the demerits are my only personal responsibility), but about all those who have allowed me to be able to write it, who have allowed me to be this way: from those who have “more” merit, like my mother, to those who have “less” merit, like a grain of sand on a Los Angeles beach held by a hippie phony faith leader 60 years ago, to those who have “negative” merit, like those (fortunately) very few who have despised me or made fun of me or of what I did.

But to devote the thesis to everything is to devote it to nothing, and equanimity is not a quality of partial beings. So, the only person to whom I want to make this “sacred” transfer of merit, is Ludovica, my love. You have been to me a little bit what Estelle was to Divine Right¹⁴, bringing me back to sanity when needed but acknowledging the need and meaning of my research. This thesis is dedicated to you.

Notice

This thesis has existed (in written and mental form) for a month and 14 days. A thesis written in six weeks delivered at the extraordinary session? Yes, because though this thesis is very young, the work behind it lasted directly from three years¹⁵. It consists in the attempt to clarify the author’s intuition that technological, religious and political main trends in the 21st century had all a common root.

But how is it possible that populism, cybernetics, secularization offset by gusts of twisted oriental spiritualism, technical depersonalization, and the raging social and political individualism can have one common basis? It seems quite difficult, if simply not possible.

Now this common basis has been (finally!) identified in what will be regarded as “organicism”. Whether it will be recognized as a useless set of truisms or an interesting work, this work will be the author’s appropriate (in the double sense of «agreeable» and «made own»)¹⁶ coronation of the university pathway, intended as a gentleman’s phase of life, rather than a means to access the labor market more profitably: a countercultural work on counterculture!

It will be up to the reader to ascertain its value.

¹⁴ See later, the paragraph Divine Right’s Trip.

¹⁵ Six weeks before the opening of the extraordinary session’s thesis upload slot was the extreme margin to stop researching and start writing without going “fuori corso”. Three years because the research started with the Bachelor’s degree thesis in Scienze Politiche with professor Sorice at the Luiss chair of Sociology of Communication on a linked topic.

¹⁶ The term comes from Grelet, *Theory of the Solitary Sailor*. Something that is “appropriate” in this sense is not “agreeable” in a heterodirected sense (hence “made own”), thus it means “what seems agreeable” to the individual. Yet, this (apparent) shift to the individual does not imply an asocial egotism nor the idea that “freedom is doing what you want to do”, since «the impulsion of mere appetite is slavery, and obedience to the law one has prescribed to oneself is freedom». (J.-J. Rousseau, *The Social Contract and Other Later Political Writings*, ed. V. Gourevitch (Cambridge: Cambridge University Press, 1997), 54).

Introduction: Epistemic Paradigm, Theory¹⁷, Object & Relevance of the Research

We are all too accustomed to hearing about machines in semi-human terms as well as humans in semi-mechanical terms, although we usually do not give much thought to these digital analogies and analog digitalities. In some of our daily language and expressions Nature and Mechanisms, the biological and the artificial are used so interchangeably that there seems to be no difference between one and the other and the very concept of a “nature” or “mechanism”, as opposed one to other, loses meaning.

“Analog digitality” Twenty years ago we would have never inaugurated, even to our worst enemy, his computer’s *memory* to get corrupted or, worse, to *die* in the middle of a work; today, fortunately that is not a big deal, because everything is on the cloud, and we can access it from another device of the *eco-system*.

Nowadays everyone is interested in and frightened by the so-called artificial *intelligence*. Interesting because of its potentials, but also for what *we can learn about our brain* through the study of *neural networks*¹⁸. Frightened because of its potentials, but also because they could become like us: *conscious*, or worse, *perfect will-less copies of ourselves*.

Without having to bring up impressive modern cases, in 1948 William Ross Ashby built and described in his *Design for a Brain*¹⁹, defining it as the «closest thing to a *synthetic brain* so far designed by man»²⁰ according to Time, where the discovery appeared: a machine that replicated the fundamental *biological* process of every living being, *homeostasis*. The *homeostat*, as Ashby called it, was able to adjust automatically its internal states to reach stability with the environment: it was a whole of itself. Cybernetics, or the discipline that fused biology and mechanics, was born, and the ground that supported the furious debate between vitalism and mechanicism started shaking. Years later, Time will define the computer as 1982 Person of the Year²¹.

Digital analogy Sometimes, instead, when we are *overloaded* with information (like now, maybe) and cannot *elaborate* anymore (“we do not connect anymore”), we just need to take a breath and *restart* or *reboot* our brain. If the stress, the *draining* is serious, we need to *recharge our batteries*, to *disconnect* and take a vacation.

Or maybe we want to relax attending some yoga or tai-chi class: in that case the master would immediately tell us two things. First, we should stop thinking about the body as a set of *separated* parts, where one part, usually the brain, governs all the others linearly,

¹⁷ In the triple sense of theoretical epistemic paradigm, theory, argument of the work and “theoretical part”.

¹⁸ “Networks” and “webs” are terms of both digital analogy and analog digitality, the semi-human and the semi-mechanical: first, networks became technical, digital *networks*; then, technical networks became *social* or *neuronal networks*.

¹⁹ William Ross Ashby, *Design for a Brain: The Origin of Adaptive Behaviour*, Science Paperbacks (Chapman and Hall, 1978).

²⁰ TIME, ‘Science: The Thinking Machine’, *TIME*, 1949 <<https://time.com/archive/6602078/science-the-thinking-machine/>> [accessed 20 January 2025].

²¹ TIME, ‘MACHINE OF THE YEAR 1982: The Computer Moves In’, *TIME*, 1983 <<https://time.com/archive/6697864/machine-of-the-year-1982-the-computer-moves-in/>> [accessed 25 February 2025].

hierarchically (the administrator of the operative system, or, in Ryle's words, the Ghost in the Machine²²), but rather as a *whole*, a set of "components" that influence one the other reciprocally, *circularly*²³, *horizontally*, so that physical wellbeing, correct posture, would benefit our mind and performance, as well as a correct, relaxed mindset would benefit a lot our health. Secondly, she would tell us that the reason why we are suffering mentally and physically, why we are psycho-physically imbalanced, is that *because of society*²⁴, we acquire a set of mindsets, concepts, expectations, postures, styles of life, emotional and physical restraints, that hinder our vital capacity, that we must *restore* through practice, by *reprogramming* the brain, just like meditation can *rewire* our brain to make us more focused, relaxed and loving.

We usually think of our brain as a *computer*, where the mind is our *software* and the body the *hardware* that makes the mind work, so that if we modify or eliminate the hardware, the software changes or disappears. We all enjoy free-to-access, free-to-use, free-to-play (why should we pay for something virtual after all?) virtual webpages, apps, games where, in order to make revenues, metadata on our navigation are collected to create *virtual behavioral models of ourselves*, that could be used to know our desires way before we may even start to desire: it seems we are *no less predictable than a machine*, right?²⁵

Intellectual discourse But let us shift away from trivial ways of saying that mean nothing to conscious, intellectual, reflections and scientific conclusions. Libraries are full of books ("pop" and more technical) that think a little biologically, a little informatically, speaking the language of networks, adaptation and evolution. Sloman's *The Knowledge Illusion*²⁶ refuse traditional view of intelligence and knowledge as something owned by the individual, believing it to be rather *distributed* in the network of individualities, *emergent* in a higher level than individuals. Through botanist Stefano Mancuso, plants may give us lessons on ethics, politics and social organization²⁷ founded on coevolution, horizontality and mutualism. Eduardo Kohn's *How Forests Think*²⁸ underlines the interconnectedness of all living things, their illusory separateness and their belonging to a greater *whole*. Of the same tenor is Albert and Kopenawa's *Yanomami, l'esprit de la forêt*²⁹. Evolutionary biology seems to have contaminated philosophy of mind, ethics and, apparently, politics, too. Our way of being, even the very way of thinking that produced these conclusions in the first instance, is

²² Ryle, *The Concept of Mind*.

²³ We all know that, if we experience internally joy, we will contract some facial muscles in a way, or smile, but try to do the opposite: try to force your smile, even if not genuine, or to bite a pencil during a neutral emotional state: after a while, you will feel (slightly) more joyous than before. Nicholas A. Coles, Jeff T. Larsen, and Heather C. Lench, 'A Meta-Analysis of the Facial Feedback Literature: Effects of Facial Feedback on Emotional Experience Are Small and Variable.', *Psychological Bulletin*, 145.6 (2019), pp. 610–51, doi:10.1037/bul0000194.

²⁴ ["but wait, are not we all society? Am I, at least in part, "society"?"]

²⁵ Note that the introductory presentation just made does not contain judgments of value but serves to present the psychological *habitus* of the research question that founds this work.

²⁶ Steven Sloman, Philip Fernbach, and Paolo Legrenzi, *L'illusione della conoscenza perché non pensiamo mai da soli* (R. Cortina, 2018).

²⁷ Stefano Mancuso, *La nazione delle piante*, I Robinson. Letture, Prima edizione (Editori Laterza, 2019).

²⁸ Eduardo Kohn, *How Forests Think: Toward an Anthropology beyond the Human* (University of California Press, 2013).

²⁹ Bruce Albert, Davi Kopenawa, and Emanuele Coccia, *Yanomami, l'esprit de la forêt*, Voix de la terre (Actes Sud, 2022).

evolutionary, hence resulting from contingencies, casual and emergent: there is no *Intelligent Design*, or any top-down design, *since everything is bottom-up*. Even the very idea of function, functionalism and instrumentality must be re-thought, because «the function of an artifact is what it is made for. Who decides what an artifact is for? Whoever designed it»³⁰: biological “functions”, such that of the heart of pumping blood, are effects of traits that permitted propagation, *adaptations*. This seems reasonable if applied to the human body, but what if we apply it to ethics and politics? According to Barbara Stiegler³¹, *adaptation* has become the new political imperative of this epoch.

Design and architecture, that enjoy the advantage of showing directly to the eyes of the people, without intermediate abstract concepts, the philosophy and ethos behind the design, show beyond doubt this intermingling between nature and technology that makes the first mechanical and the second biological. Famous Israeli American designer Neri Oxman’s mission is to rethink «design to empower a future of complete synergy between Nature and humanity»³². In her urban studies for Francis Ford Coppola’s *Megalopolis*, Oxman proposed *MAN-NAHĀTA*, an ideational fusion of actual Manhattan with the pre-1600s *Mannahatta* (as it was called), home of the Lenape people and 55 ecological communities living in there, where «[t]op-down master planning is braved by *bottom-up*- design in the place where the grid was once a garden»³³; «[i]nstead of a *linear* timeline, we offer a *circular* one, where the past is re-embodied in the future»³⁴. The same philosophy has found a real substantiation in the predating *AGUAHOJA* project (presented at SFMOMA) on a 3D printed biomaterial arranged in a cellular or textile-like biological structure by robots that could decay and be reintegrated in the eco-system, differently from plastics³⁵.

It should be now clear that in today’s discourse there exists an informal, diverse strand of thought that, by fusing interdisciplinarily biology, anthropology, philosophy, neuroscience, information technology, design and engineering, think about moral, epistemological relativity, human decentralization, *holism* and “whole-ism”.

The Whole Earth Catalog At the same time, almost 70 years ago, in the ‘60s, a bunch of weird middle-class youngsters, disgusted by the society there were living into, strengthened by the countercultural experience of the “Beats generation” started leaving their homes in search of meaning and a more authentic life. Some of them found it in the West Coast: was it the influence of the ocean, the fact they were closer to Asia than Europe³⁶ or pure casualty, the 60s counterculture started looking inward for truth, eastward for enlightenment, rightward for opposition, backward for style of living. A man that experienced the birth and development of the 60s was fascinated by the countercultural «everything goes, let’s try

³⁰ Sperber Mercier, Hugo Dan, *ENIGMA OF REASON: A New Theory of Human Understanding* (PENGUIN Books, 2018). But *if there is no designer*, how can we speak of functions?

³¹ Barbara Stiegler, *Bisogna adattarsi. Un nuovo imperativo politico*, 2023.

³² ‘OXMAN’, *OXMAN* <<https://oxman.com>> [accessed 18 January 2025].

³³ Emphasis added

³⁴ Emphasis added again.

³⁵ ‘Projects’, *Projects* <<https://oxman.com/projects>> [accessed 25 February 2025].

³⁶ Sebastiano Maffettone, ‘Contempla il cristallo e andrai in estasi’, *Corriere della Sera* (10 September 1989), section Il Pianeta «New Age». and Sebastiano Maffettone, ‘Medita e rinasceraì, sull’esempio di Shirley MacLaine’, *Corriere della Sera* (14 September 1989), section Il Pianeta «New Age».

stuff»³⁷ and wanted to give counterculture the *tools* to succeed in their endeavor. At the same time, however he had to “make order” in that countercultural chaos: the 60s counterculture was a very diversified and chaotic “movement”, made of acid tests, rock concerts, back-to-the-land communes and questionable reinterpretations of Eastern spiritual classics, where people were, at the same time, eschewing technology and intellectualism as instruments of the pressing “mainstream” while praising intellectuals like Marshall McLuhan, Buckminster Fuller or the Chicago or Frankfurt school thinkers; he felt the need to somewhat “correct” the counterculture where it was blindly following ideologies or act incoherently to make it a «counter-counterculture». This man is called Stewart Brand and is the founder of the *Whole Earth Catalog*³⁸. Unfortunately, he and his WEC are not so widely famous, at least not like Steve Jobs or Page & Brin’s Google. And yet, Jobs defined the Catalog as «one of the bibles of [his] generation»³⁹, «sort of like Google in paperback form, 35 years before Google came along», and one of his most famous quotes, “stay hungry, stay foolish” is actually a quote from Stewart Brand’s *Whole Earth Epilog*’s last page. And how not to mention that the expression “personal computer” was invented by him⁴⁰.

Brand, in his WEC, advocated for ecological interconnection, pragmatism, environmental activism, and many authors, like Fred Turner, saw the WEC as the founding moment of a way of thinking and approaching reality that would be alive until today’s information culture, though none of them expressed Brand’s/Californian approach in a full and coherent manner⁴¹. That is because the Whole Earth Catalog or Brand have never explicitly presented it, inasmuch he is as much a user as a creator of it. The work on the WEC will not be a descriptive one, rather an “investigative” one.

Scooby-Clue⁴² It is the belief of the author that behind the words of the Whole Earth Catalog⁴³ lies a fundamental dialectic. In other words, that Brand’s words are *manifestations*, signs of *something else*. Again, this is not redpilling⁴⁴, nor transcendence: the “something else” the signs refer to is “some-thing” else, some other thing in the world (of immanence) that we do not immediately see. It is like the 18th, 19th century concept of *Zeitgeist*: no one really believes that times (or more accurately, certain people in certain places in certain times⁴⁵) could have a spirit (*genius sæculi*), but rather that are characterized by shared attitudes towards certain aspects of life, certain widespread ideologies (like darwinism and

³⁷ Stewart Brand, Big Think Interview With Stewart Brand, 2009 <<https://bigthink.com/videos/big-think-interview-with-stewart-brand/>> [accessed 20 January 2025].

³⁸ Later just Whole Earth Catalog (without emphasis), Catalog, or WEC.

³⁹ ‘Steve Jobs’ 2005 Stanford Commencement Address’ (unpublished Commencement address, 2005) <<https://www.youtube.com/watch?v=UF8uR6Z6KLc>> [accessed 20 January 2025].

⁴⁰ John Markoff, *Whole Earth: The Many Lives of Stewart Brand* (Penguin Press, 2022), p. 258.

⁴¹ See the [Literature Review](#) to dive and verify.

⁴² The *Scooby-Doo!* media franchise was created in 1969, the same year of the second issue of the Whole Earth Catalog, a year later the first ever Whole Earth Catalog.

⁴³ And, reflexively, behind common sense and the very different social phenomena cited before.

⁴⁴ See note 12.

⁴⁵ This means that this approach is not a phenomenological one, like in Mircea Eliade’s approach. Although the result of the research is an extrapolation from multiple, different, small data, it is not universal, but strictly bounded to the times analyzed: no consideration on an a-temporally located “humanity” is taken. It is the work of the philosopher and the anthropologist, possibly, to universalize the conclusions of the historians.

social Darwinism for the XIX century⁴⁶), certain conceptions of the human (like the pluralist, decentralized notion of corporeality of Homeric Greece juxtaposed with the centralized and spiritual one of Classical Greece⁴⁷), the Universe or political relations. The historian Carlo Ginzburg has synthesized this intuition in a coherent dialectic: «[f]or millennia man has been a hunter. In the course of countless pursuits, he has learnt to reconstruct the shapes and movements of invisible prey from footprints in the mud, broken branches, dung pellets, tufts of hair, entangled feathers, stagnant smells. He learnt to sniff, record, interpret and classify infinitesimal traces such as threads of slime»⁴⁸. What, according to Ginzburg, the human has developed is a form of knowledge that consists in «the ability to trace back from apparently negligible experimental data to a complex reality that cannot be directly experienced»⁴⁹. This means that the traces are *manifest*, but they also are *manifestations* of something else, the «complex reality that cannot be understood» indeed, usually afferent to the past (“hunting paradigm”) or the future⁵⁰ («divinatory paradigm»⁵¹). The retrospective version of these two paradigms, the “hunting epistemic paradigm”, based on the knowing of the past, is what Ginzburg calls “circumstantial, or clue paradigm”⁵². It consists in «an interpretative method centered on deviations, on marginal data, considered as revealing»⁵³ and in its nature it is proper of, apart from hunters, art experts (Ginzburg presents Giovanni Morelli’s method of method of authenticating works of art), investigators (Castelnuovo juxtaposes Morelli’s method with the investigative method that Arthur Conan Doyle has Sherlock Holmes use⁵⁴), psychoanalysts (Sigmund Freud, speaking of Morelli’s method, says «It seems to me that his [Morelli’s] method of inquiry is closely related to the technique of psycho-analysis. It, too, is accustomed to divine secret and concealed things from despised or unnoticed features, from the rubbish-heap, as it were, of our observations»⁵⁵), medics that recognize the disease (the non-manifest) through the symptom (the manifest)⁵⁶. The symptom (as well as the clue, the

⁴⁶ Dolf Sternberger and Hortense von Happe, *Panorama del XIX secolo*, ed. by Lea Ritter Santini, trans. by Martha Keller, Intersezioni, 19 (Il Mulino, 1985).

⁴⁷ Bruno Snell, *La Scoperta Dello Spirito* (Luiss University Press, 2021).

⁴⁸ Carlo Ginzburg, *Miti, emblemi, spie morfologia e storia*, 2. rist (Einaudi, 2003), p. 163.

⁴⁹ Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 164.

⁵⁰ From the fact that the clue interpretations are always afferent to the past and the future one can already glimpse the “fantasmic” nature of the result of the clue paradigm: a narration, which is not ontologically “real” and does not have to be necessarily coincident to reality.

⁵¹ Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 166.

⁵² In Ginzburg’s work original language (Italian), *paradigma indiziario*. Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 157.

⁵³ Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 162.

⁵⁴ Enrico Castelnuovo, ‘ART (L’art et son objet) - L’attribution : Méthodologie’, *Encyclopædia Universalis*, 1968 <<https://www.universalis.fr/encyclopedie/art-l-art-et-son-objet-l-attribution/4-methodologie/>> [accessed 5 January 2025].

⁵⁵ Sigmund Freud, ‘The Moses of Michelangelo’, *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, XIII (1913-1924): Totem and Taboo and Other Works, pp. 209–38 (p. 7).

⁵⁶ There is also a strong connection between the clue paradigm and Charles Sanders Peirce’s “abduction”, a fundamental reasoning method between the more famous one of deduction (which starts from general premises to infer certain, true (in the logic sense) conclusions) and induction (which, from numerous observations draws a general law). Abduction is a non-deductive inference different from the inductive one^(a), in that it does not require numerous observations, but instead, just one. To put it simply, starting from just one *specific* observation, the abduction is the conclusion that the cause of that *specific* observation might have been the cause that generally causes that (type of) observation, e.g. the floor is wet (*sign*), then I abduct that probably have rained (narration/conjecture) because (usually) *the floor is wet when it rains*. As Peirce recognizes, differently

indicator, the trace) is a sign (σημείον) that, to be understood, must be “read”⁵⁷, hence why it can be called “semiotic paradigm” as the paradigm of “that which refers to” (the sign), rather than, as in common semiotics, “that which represents”⁵⁸.

“Belphegor”⁵⁹ knowledge Nonetheless, as Ginzburg himself points out (in a similar fashion to how Charles Sanders Peirce criticizes the pitfalls of the abductive reasoning⁶⁰), «historical knowledge is indirect, circumstantial, conjectural»⁶¹. It consists of «stories», «conjectures»⁶² that can at best be probable, at least pure inventions. In that nature, they are phantoms, in the original (yet creative) sense. The term “phantom” comes originally from the ancient Greek φάντασμα which in turn signifies “to show”, “to make visible” and comes from the same root of “phenomenon” (φαίνω, “bringing something into daylight”⁶³), which in fact signifies “showing oneself”⁶⁴. Thus, “phantom” does not originally (or mainly) signifies a ghost, “the spirit of a dead person that someone believes they can see or feel”⁶⁵ (although this modern meaning still retains, *in nuce*, the original sense), but rather (1) something that is evanescent, faint, not as real as what we usually define “real” (“modern” ghosts are «pale and evanescent»²⁷, too; they are not material, pertaining to people that only once were part of the world), though (2) still existing: ontologically, it still is a phenomenon, something that, like the modern ghost, while yet-not-fully-existing, can *show itself* to the living and haunt them. This original sense is also conserved in its adjective form, as «something which you think you experience but which is not real»⁶⁶, hence, «an illusion»²⁸. Such a conception of phantoms probably inspired Aristotle’s *De Anima*: φαντασία is the faculty of the mind that creates “mental images” (*phantasmata*) (necessary for the functioning of the intellect), which, although necessarily based on the data of perception, could be inaccurate, not fully overlapping with reality. Although one can consider every creation of the human mind as a phantom (but that is a debate for epistemology), for sure the

from deduction and far more than induction, this method is speculative, conjectural, probabilistic and hence yet to be tested: it’s validity stays in its creativity, although, according to Frankfurt, rather than being a mean of inventing hypotheses (as Peirce thought) it is a mean of *adopting* them^(a).

^(a) ‘Abduction > Peirce on Abduction (Stanford Encyclopedia of Philosophy/Summer 2024 Edition)’ <<https://plato.stanford.edu/archIves/sum2024/entries/abduction/peirce.html>> [accessed 5 January 2025].

⁵⁷ Like in the way of saying “reading the clues”.

⁵⁸ As said, the difference between a “symbolic” and “diabolic” language, between a language that “refers to” rather than “represents”, the idea of a language of the sacred, will be the theoretical foundation of the whole work and will present itself many times.

⁵⁹ *Belphegor, or the Phantom of the Louvre* was a successful 1965 French television miniseries on the mysterious appearance of a phantom at the Louvre at night. ‘*Belphegor, or Phantom of the Louvre*’, *Wikipedia*, 2023

<https://en.wikipedia.org/w/index.php?title=Belphegor,_or_Phantom_of_the_Louvre&oldid=1173615815> [accessed 20 January 2025].

⁶⁰ See note 56.

⁶¹ Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 168.

⁶² Ginzburg, *Miti, emblemi, spie morfologia e storia*, p. 166, 167.

⁶³ Martin Heidegger and Matteo Pietropaoli, *Introduzione all’indagine fenomenologica*, Il pensiero occidentale (Bompiani, 2018), p. 36.

⁶⁴ Heidegger and Pietropaoli, *Introduzione all’indagine fenomenologica*, p. 35.

⁶⁵ ‘GHOST Definition and Meaning | Collins English Dictionary’, 2025

<<https://www.collinsdictionary.com/dictionary/english/ghost>> [accessed 8 January 2025].

⁶⁶ ‘PHANTOM Definition and Meaning | Collins English Dictionary’, 2025

<<https://www.collinsdictionary.com/dictionary/english/phantom>> [accessed 8 January 2025].

historian's intuitions based on clues are "true phantoms", real narrations, that, at best, reflect and reconstruct the image of those gone that only once were part of the world.

Thinking, Linear and Non-linear By using the semiotic paradigm, it will be demonstrated that in the historical sources (the Whole Earth Catalog) there are indicators of an underlining culture that will be called "organicism". The fundamental element of organicism is what can be called "non-linear" thinking⁶⁷, its hallmark "the Whole". It will be asserted that interest in non-linear thinking is born out of the perceived philosophical fallacies of the linear one and the socio-political delegitimizing of the social system that was founded on it, the pre-war one⁶⁸. The distinction between these two modes of thinking resembles, according to Yuk Hui, the one between Kant's determinant and reflective judgment⁶⁹. Linear thinking is mechanic, top down (especially in its normative guise), connects linearly cause and effect. The religious⁷⁰ application of this type of thinking is Aristotle's unmoved mover: searching for the cause for everything, in order not to fall in the *regressus in infinitum*, there must be some exotic entity that can charge the mechanism of the Universe without being charged itself, hence from outside of the system (transcendence). The symbol of this type of thinking is the watch⁷¹: the watch is a mechanism whose functioning can be easily understood by looking at its gears which each have a specific *function* (the movement of the hands is caused by the gear train, which only releases energy when permitted by the balance wheel, which, through its oscillation and escape wheel, blocks the release of the energy of the gear train, which, in turn, receives this energy from the drive spring charge), but if we search for the *causa prima* of its existence and activity (life), we must postulate an exotic entity, external to the mechanism, that creates and "charges" the mechanism.

Non-linear thinking, instead, is circular, bottom-up, and organic, founded on adaptability and relativity rather than functionality and top-down, normative absoluteness. For this type of thinking there is no cause and effect: what we would call cause and effect are actually expressions of a much wider dialectic or dimension; that's also the case for the religious application of this type of thinking: there is no external, exotic God, rather it is *everything*, an immanent "sum of infinite finites", something that cannot be *anything* (otherwise it would be a finite phenomenon), because it is *everything*, a non-dual *Brahma* or *Deus sive Natura*. The symbol of this type of thinking is William Ross Ashby's "homeostat", a mechanism (or, rather, a mechanic organism) able to adapt autonomously to the circumstances: its

⁶⁷ The apparent artificial distinction between organicism and non-linear thinking serves (clarity exigencies excluded), a radical function for this thesis. This work is not a phenomenological one: the distinction between non-linear thinking and organicism serves to differentiate what *might be* a universal feature of human thinking from its rich socio-cultural, historic construction, that goes far beyond the abstracted modality of thinking that is behind it (see note 68).

⁶⁸ Main tenet of this work is the idea that one cannot understand completely organicism if he does not *situate* it in the historical context. Organicism is not a universal phenomenon, nor an abstract entity, but a socio-cultural construct which, as such, is historically situated. Hence, it is not possible to understand organicism if one does not consider it as a response to another socio-cultural model, the pre-war anthropological model, perceived by the counterculture as delegitimized. Without having this idea in mind, organicism will just be reduced to non-linear thinking, making impossible to understand, for example, the "cultural gateway to politics" (see later).

⁶⁹ Yuk Hui, *Pensare la contingenza: la rinascita della filosofia dopo la cibernetica*, ed. by B. Antomarini (Castelvecchi, 2022).

⁷⁰ Why the reference to religion? See note 83.

⁷¹ Sternberger and Heppe, *Panorama del XIX secolo*.

configuration was dependent on the environmental configuration; it can be said that it *co-evolved* with the environment⁷². What is important to note is that every configuration of the homeostat was not better or worse than the other, but just *different*: all configurations were equally right as long as they were *adaptations*, i.e. they allowed to reach *stability*. It is difficult to trace the origin of this type of thinking: it is probably as old and widespread in the world as the linear one, though it has been commonly linked to Asiatic thought, especially Chinese and Indian one, to the point to hazard the hypothesis that the Asians have invented it and then exported worldwide, and European instances of it are of Asian influence⁷³. What is true is that this type of thinking is typical of biological sciences; cybernetics and systems theory founded themselves on it and, as it will be demonstrated in the thesis, will become the theoretic basis of '60s counterculture: almost every facet of it will be imbued of non-linear thinking, giving post-war (re)birth⁷⁴ to "organicism"⁷⁵, through the Whole Earth Catalog magazine, as the social, ideological, political horizon of non-linear thinking and a new anthropological model which is strongly alive until today.

"Organicism" – Vitalism v. Mechanicism On the natural-artificial relationship, organicism proposed itself as an overcoming of mechanicism and vitalism: through cybernetic and systems theory, both the human pride and the anti-scientificity of vitalism and the degrading, reductionist aspect of mechanicism are solved in the concept of "organism". The organism is not a mechanism in that is not linear but based on non-linear feedback loops; but every non-biological "mechanism" is a form of organism (or, more frequently, organ⁷⁶), although simple. The human is no more sacred, and the machine is no more degraded, since its linearity (which would make it less-than-biological) depends just on the system of reference, as in reality it is circular, on the basis of a reasoning that is no different, in the form, from Nicholas of Cusa's *coincidentia oppositorum*. In this sense, the difference between the homeostat and the human is just complexity: that is the main tenet of cybernetics. In the words of Hans Jonas: «an overcoming of the dualism which classical materials had left in possession by default: for the first time since Aristotelianism, we would have a unified doctrine [...] for the representation of reality»⁷⁷.

"Organicism" – Environment/Ecology On the human-environment⁷⁸ relationship, organicism proposed two fundamental notions, organic functionalism and "ecological co-

⁷² Obviously, the homeostat was not a "complete" organism in that it limited itself to respond to the environment, rather than influence it in turn, too. In any case, that is no difference for the sake of example.

⁷³ Needham, *Science and Civilization in China*, vol. 2, *History of Scientific Thought* (Cambridge: Cambridge University Press, 1991), 291–92.

⁷⁴ According to Dolf Sternberger, what in this work has been called "organicism" has been the soul of the XIX century view of the relationship between the natural and artificial. See **Extra: The Industrial Origins of Organicism**. Sternberger and Heppe, *Panorama del XIX secolo*.

⁷⁵ Later just organicism, without the inverted commas.

⁷⁶ See next paragraph

⁷⁷ Hans Jonas, *The Phenomenon of Life: Toward a Philosophical Biology* (Northwestern University Press, 2001), p. 111

⁷⁸ Here intended not only in the ecological, but in the widest sense of the relationship between the human and the world, similarly to relationship between the *Leib* and the *Welt*^(a). This means that in this paragraph huma

evolution”. Organic functionalism is almost an oxymoron, since (in reality) there can be no functionalism in organicism: the expression is used to denote the idea that everyone is almost always, at the same time, organ and organism. Organism in the sense that it is a complete teleological entity made of organs that makes the organism able to work. Organ in the sense that in reality no organism is a complete entity, since it is ecologically interconnected with every other organism to form a *whole*, a higher-order organism whose existence it contributes to (there is the “functionalism”). Here is crucial Arthur Koestler notion of “holon”. The holon is «something that is simultaneously a whole in and of itself»⁷⁹ it has two fundamental (opposite) characteristics: it is a *distinct*, separable entity, though is a part of larger system (“a Whole”) that comprehends it and is necessary for its survival (though the supersystem too, needs the holon for functioning); the holon can be (and usually is) formed by other sub-holons, as well as the supersystem can be a holon itself. A holonic system then is characterized by a fractalic structure where the sub-parts are not real “functions” of the system like in instrumental rationality⁸⁰, but internal *organs* that constitute the very immanent, ontic and teleological existence of the organism⁸¹.

This leads to the organicist approach towards technology and tools: organicist thinking, on the basis of an “undressing” of the biological (now devoid of *élan vital*) and the mechanic, too, leads to an all-pervasive “**tool-ization**”, that is a countercultural return of entities to their dimension of use. Though, as already said, this does not degrade into instrumentalism, because these entities, biological or not, become organs, holons, instead of instruments: rather than means to end, they become *parts of an end*; the “degradation” is not towards the mechanistic, but to the organic. In conclusion, it is not just “tool-ization”, but “**tool-ism**”, the two figures of the organicist relationship with technology.

Since “we all pertain to the holon ‘human’”, technology should be rethought as a part, a sub-holon *of humanity*. Technology is and should be an *organ of humanity*, not differently from any other biological organ that is already inside the body that humanity can grafts itself with in order to strengthen its output capacity, *evolve* and *adapt* to the changing circumstances⁸². Everything can become (or has always been) technology in this point of view: books, meditation techniques, art, exoteric symbols, crystals.

For what concerns, on the other hand, the horizontal relationship between holons in a certain

relationship with technology and tools is contemplated, too.

^(a) Edoardo Fugali, *Soggetto, corpo e mondo in Edmund Husserl*, Testi e studi, 317, Prima edizione (Unicopli, 2022).

⁷⁹ ‘Holon (Philosophy)’, *Wikipedia*, 2024

<[https://en.wikipedia.org/w/index.php?title=Holon_\(philosophy\)&oldid=1260057067](https://en.wikipedia.org/w/index.php?title=Holon_(philosophy)&oldid=1260057067)> [accessed 9 January 2025].

⁸⁰ That is to achieve achieve internal ends through external means. Martin Heidegger, *Saggi e discorsi*, trans. by Gianni Vattimo, Biblioteca di filosofia. Testi (Mursia, 2014).

⁸¹ This notion of holon helps to understand more clearly the concept of holism (fundamental for the ‘60s counterculture): the functioning of some system cannot be explained, according to holists, just by referring to the (sub-)holons that make it, because the rules that governs the system at hand are not the ones that govern the holons, but they rather *emerge* only when “jumping” to the superior level. Rick C. Looijen, *Holism and Reductionism in Biology and Ecology: The Mutual Dependence of Higher and Lower Level Research Programmes*, Episteme, Volume 23 (Springer-Science+Business Media, B.Y, 2000), chap. 2.4.4.

⁸² Note that this is the theoretical matrix of transhumanism, intended as «the use of current and emerging technologies [...] to augment human capabilities and improve the human condition». ‘Transhumanism | Definition, History, Ethics, Philosophy, & Facts | Britannica’, 2025
<<https://www.britannica.com/topic/transhumanism>> [accessed 20 January 2025].

system, every holon, since it is interconnected with every other one, simultaneously influences and adapts to each other, thus establishing a regime of *ecological co-evolution*.

“Organicism” – religion On the religious point of view⁸³, organicism’s holon-ism takes the form of mystical participation and cosmic religiosity. The sense of being a composing part, an organ of a greater cosmos and, at same time, being a cosmos in itself⁸⁴, gains mystical connotations and resembles ancient forms of cosmic religiosity⁸⁵. It is not by chance, in fact, that organicist religion usually goes hand in hand with (not only) Eastern philosophical, esoteric, religious doctrines, like Indian Advaita Vedanta, Chinese Taoism or Japanese Mahayana Buddhism. Here the keywords of the organicist way of believing are two: *mysticism* and *immanence*. Mysticism because, as said, application of romanticism to holon-

⁸³ Why should one focus on religion? The easy answer is that one cannot treat Stewart Brand, the 60s counterculture and even organicism without referring to religion. But it is deeper than that. Religion and spiritualism will be treated in this work around four times, each case with a different aim in mind. The first use case has already been seen, in the **“Thinking, Linear and Non-linear”** paragraph: in that case, although still believing in the existence of a correspondence between one mode of thinking and one of believing, at least speaking in generalizations, (although Yuk Hui seems to be of the same opinion), the aim there was just to better illustrate the difference between the two modalities of thinking. The second case is the one you are going to read about: in that case the aim is to illustrate, *theoretically*, the extension of organicist thinking to religion and spirituality; “theoretically” not because it never happened, but because in Brand’s version of organicism there is no focus on religion, spirituality and transcendence whatsoever (if this statement seems too strong, wait for the fourth case). The third case, you will find it in the context chapter, **“The roots of the Whole Earth Catalog”**. In that case, an analysis (complete with reasoned value judgments) of hippie spirituality will be made, especially Leary’s version of “psychedelic spirituality”; again, although Brand was friend with him and tried many times psychedelics, not what he advocates for. Finally, the fourth case will be in the **Hermeneutic Analysis of the Whole Earth Catalog**, in order to shed some light on the relationship Brand’s WEC has with spirituality and answer the question: “if the Whole Earth Catalog is full of references to eastern religions, hippie “neospiritualism” and psychedelic experiences, should there be no spirituality nor religion at all?”.

⁸⁴ Obviously, no organicist would say that the human body is made of planets, stars, gravity and all the rest. Rather, the human body has *the same form* or the *same structural characteristics*, repeated in different *scale*: in respect to the cosmos, is *self-similar*. This view is “fractalic”, in the sense it is completely borrowed (and adapted) from fractal geometry: the term “self-similarity” comes from there, too, but helps understanding one fundamental detail. If we take a portion of a fractal, we will say that it is *self-similar* to the portion that contains it if we zoom out; but it is *self-similar*, in the sense both the small and the big portions *are the same image*. This is not just the ranting of the author, or an excess of phantasmatic conjecturing: from the more “moderate” or pseudo-academic works like William J. Jackson’s *Heaven’s Fractal Net: Retrieving Lost Visions in the Humanities*^(a), or Bieberich’s unpublished *Structure in human consciousness: A fractal approach to the topology of the self perceiving an outer world in an inner space*^(b), to those that fuse rigorous science and spiritual or personal growth philosophy, like Culliney and Jones’s *The Fractal Self: Science, Philosophy, and the Evolution of Human Cooperation*^(c), to the most esoteric and “creative” ones like Franz Emanuele’s *Le basi esoteriche della geometria frattale*^(d) (*The esoteric basis of fractal geometry*). If one then passes to analyze websites, one just needs to type on one’s browser the simple query “fractal spirituality” to find hundreds of sites on the topic. Benoit Mandelbrot himself, the founder of fractal geometry, although without the excesses of the other authors, believed in the wide applicability of fractal geometry, from finance to medicine, as well as its being interlinked with the human concept of beauty.

^(a) William J. Jackson, *Heaven’s Fractal Net: Retrieving Lost Visions in the Humanities* (Indiana University Press, 2004).

^(b) Erhard Bieberich, ‘Structure in Human Consciousness: A Fractal Approach to the Topology of the Self Perceiving an Outer World in an Inner Space’, 1998 <<https://web-archive.southampton.ac.uk/cogprints.org/79/>> [accessed 24 January 2025].

^(c) John L. Culliney and David Edward Jones, *The Fractal Self: Science, Philosophy, and the Evolution of Human Cooperation* (University of Hawai’i Press, 2017).

^(d) Franz Emanuele, *Le Basi Esoteriche Della Geometria Frattale*, Audax, 2008.

⁸⁵ Mircea Eliade, *Il sacro e il profano* (Bollati Boringhieri, 2016), p. 129.

ism leads to an “oceanic feeling” of “participation” with everything, to the *Whole*, an “Absolute” that is *infinite* and contains all there it is: what hinders this “obvious” perception is the ego, that makes humans think that they are a separate entity, making them think that (1) is impossible that something greater than them could exist since their action is voluntary (without thinking that their very deliberate action is the part of the macro-organism) and (2) that what is smaller than them is not like them because does not have “life” nor “will”. By eliminating the ontologic barriers of specialty of the human, raising the inanimate to the organic and depriving the animate of its artefactual specialty, the ego becomes just an *emerging* process of the brain, (again) no more special than that: there is no specialty, no absolute, no “permanent self” or “intrinsic existence”, everything is contingent and hence, redelivered or redeliverable to a use dimension. So, the ego (and everything else) becomes a mere *tool* for navigating the everyday that can be stepped aside through specific techniques (other *tools*), like meditative practices or psychedelics. This leads us to the second keyword, *immanence*. Though it can take on the most diverse meanings and still fall into the organicist category⁸⁶, here it means, similarly to Yuk Hui, that organicist religiosity cannot posit an exotic being like in linear causality, since the Universe, intended as *all there is*, cannot “not contain” something. Recall that the Absolute is *infinite* and that contains everything: this also

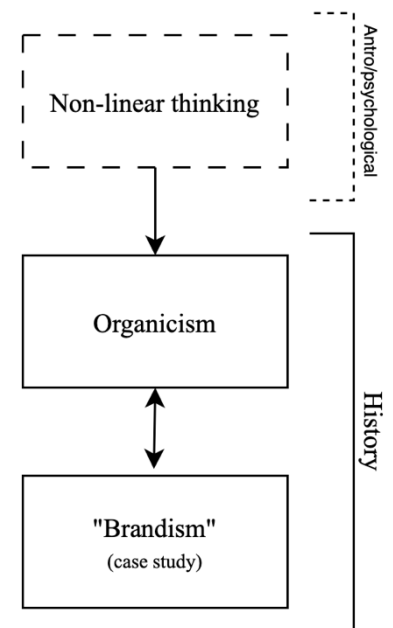


Table 1: relationship between "organicism", "non-linear thinking" and Brand's thought

⁸⁶ The reference is to two cases: hippie spiritualism and Brand's "position" on spirituality. When dealing with hippie's "neospiritualism" in the context chapter, it will be argued that their position, though an organicist one, cannot at all be defined as a true form of religiosity, but rather an *immanent* «pseudomorphosis»^(a) of it. These new forms of spirituality are usually forms of self-realization^(b), be they founded on "internal" practices (corporeal or mental, like *hatha yoga* or Buddhist meditation) or external means, like taking of psychedelics (like LSD), and consist of a "reunion with the world", the discovery of the "Deep Self"^(c), which is not differentiated between a self and an "external world", but part of a larger "Whole" of all things existing. These fusion, however, does not consist of a division between the immanent and the transcendent, the sacred and the profane, but it is completely immanent, in the sense that the (allegedly) transcendent is actually immanent: it is the individual that cancels herself, reaches the ultimate truth and fuses herself with everything existing to satisfy her own ("physiological") need of meaning and sense. This is achieved through her own actions or her own merits, her own "internal" research. It is usually a hard work of "self-transformation", where the body and mind are seen as *tools* or *systems* that can be finetuned or modified in order to reach ecstasy (in the more aesthetic versions of spirituality), psychophysical equilibrium or Ultimate Truth; it is hence not absurd the use of technical expressions like "rewiring" or "reprogramming", "meditation as a technology", because there is no difference between spirituality and cybernetics: since there is no eschatological or transcendent dimension, neospiritualism becomes a technology⁸⁶ for the existential wellbeing of the individual, hungry for meaning after the collapse and the delegitimization of the traditional sources of value.

For what concerns Brand, instead, his version of immanence should be understood as a "general", "total", immanence in its most basic sense, in the sense that he has no interest for religion except from an anthropological or utilitarian point of view.

^(a) Eliade, *Il sacro e il profano*, p. 130.

^(b) With the term "realization" it is meant a form of practice that is centered on "becoming" or obtaining something material or experiential that before was not in possession, like in the expression "The meditator 'realized' the non-dual nature of reality".

^(c) John Cunningham Lilly, *The Deep Self: Consciousness Exploration in the Isolation Tank*, Consciousness Classics (Gateways Books and Tapes, 2007).

means that the Absolute, which is the transcendent in which the spiritual organicist fuses itself into, is like that because it is the *infinite* set of all *finite* things, to the point of a collapse of the very notion of transcendence and immanence (ironically similar to that of the mechanic and biologic), because the immanent, as part of the transcendent, is as transcendent as The transcendent. In the words of Alan Watts, prominent figure of the spiritual facet of the counterculture⁸⁷: «there is nothing infinite apart from finite things». More, this coincides with some of the *mahāvākyāni*⁸⁸ of Advaita Vedanta that have become world-famous⁸⁹ *Tat Tvam Asi* (“You are that”) and *Aham Brahmāsmi* (“I am Brahma”⁹⁰).

(countercultural) “Organicism” – politics Lastly, politics. Why the last position for politics, which should be the center in a thesis of History of the Political? Because in this case more than any other politics cannot be understood without referencing to cultural dimensions and anthropological uses (like the relationship with technology, environment, meaning)⁹¹. For this reason, here, more than ever, organicism cannot be presented in a more “phenomenological” and theoretical fashion but must be fully put in its socio-historical context.

As Todd Gitlin underlines, «With left-wing politics in a state of collapse, most of these oppositional spaces were cultural—ways of living, thinking, and fighting oneself free of the affluent consensus»⁹². In a context where «most were indifferent or hostile to politics», where «[p]olitics [...] was yet another boring, pointless subassembly in the grotesque machinery of Moloch»⁹³, the only choice for the ‘50s Beats generation and the ‘60s counterculture was to sidestep it, «[withdraw] from political activity» and pursue opposition through culture, an aesthetic life funded on individual’s personal emancipation, be it through do-it-yourself and “off-grid living”, spirituality, drugs, artistic expression, sexual libertinism. That is why “counterculture”: born from political (and cultural) opposition, expressed and perpetuated through culture, outside the corner of political activism (differently from New Left, for example⁹⁴). But that did not mean that the counterculture was apolitical: the opposition to the traditional political framework was in fact political, a new form of political action and activism, that of «culture as politics»⁹⁵, a politics of identities, that started proliferating and advocating their recognition, as many as every new, emancipated individuality. As strange as it could seem, counterculture had, a “social” political design, that of communitarianism. According to counterculture, the “affluent consensus” came at the price of autonomy,

⁸⁷ Alan W. Watts, *Become What You Are: Expanded Edition* (Shambhala, 2003).. Watts is citing himself “a sage”, who knows who. It is probably D.T. Suzuki’s Essay in Zen Buddhism. Daisetsu Suzuki, *Essays in Zen Buddhism*, An Evergreen Book (Grove Weidenfeld, 1961).

⁸⁸ The “great sentences/aphorisms”.

⁸⁹ During the 60s counterculture.

⁹⁰ The Ultimate, transcendent reality according to Hindus.

⁹¹ More precisely, the reason has a twofold meaning: *formally*, this section had to be put at the end because of its necessity to be put in a more contextual fashion, and *content-wise*, because it needed to refer to cultural and contextual elements: because politics was exercised culturally, it had to be *after* speaking about all the cultural elements.

⁹² Todd Gitlin, *The Sixties: Years of Hope, Days of Rage* (Random House Publishing Group, 2013), p. 36.

⁹³ Gitlin, *The Sixties*, p. 54.

⁹⁴ Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (University of Chicago Press, 2008).

⁹⁵ Gitlin, *The Sixties*, p. 163.

individualism and meaning, the same meaning that the sons of the advocates and followers of the affluent consensus, accustomed to affluence and obscured to the privations of the war, started searching individually. The “affluent consensus”, according to them, was a “lonely crowd” of alienated individuals that moved in synchrony in the void, in superstructures that did not have linings. Counterculture’s “solution” hence could not just oppose individual liberation against group conformism but had to oppose a new form of social integration against the atomization of the alienated individual⁹⁶. Hence the do-it-yourself approach is socially declined in off-grid communities, of which “Drop City” is the paramount example: against the model of a mechanistic, inhuman and alienating community, counterculture established human-tailored, *organic* communities, where the very physical structure of the community, the city, was a *technology*, designed to satisfy the needs of the human⁹⁷. Unfortunately, the experiment of the communes ended early⁹⁸, because of the difficulty of sustaining utopian ideals and the tension between the rising exaltation of the individual and communalism⁹⁹.

Whole Sources Catalog The Whole Earth Catalog, the object of this work, is the magazine that represented the most and the widest the countercultural spirit and the first that found a synthesis in all the (countercultural and non-countercultural) ideational chaos of the 50s and 60s, coming up with a non-linear anthropological model of humanity that it is still recognizable today. The idea of the founder, Stewart Brand, was to create a new, organic way of dealing with life, technology, society that could be alternative to the now delegitimized “mainstream”. Hence, the WEC, which has the structure of Catalog, i.e. a magazine that lists many different products the reader can buy, is divided in very different sectors of human life: «Shelter and Land Use», «Industry and Craft», «Communications», «Community», «Nomadics», «Learning». Obviously, at the start of every issue there is a section based on theory, on «Understanding Whole Systems»: that is the theoretical center of the magazine as a project of humanity, a project centered on organicism. The content of this catalogs is mainly books, which consist of a double sign of organicism. The first sign is that the focus of the Catalog is not on things, but rather on information, intended in the most basic sense proposed by Claude Shannon, whose theory of

⁹⁶ Gitlin, *The Sixties*.

⁹⁷ This idea emerges throughout John Curl’s *Memories of Drop City*. For example, Clard Svensen, another hippie communalist, to Curl: «soon nobody in the world’s going to have to go out and get a job. Not just at Drop City, but everywhere. It’s inevitable. Technology’s creating a world where only a very few people will have to work. Soon everybody will get survival—at least survival—without working. Anything on top of that, maybe you’ll have to work extra for. Then what are most people going to do with their time? Become artists. There’s nothing else. Eventually most people will be paid to be artists. Unfortunately the world isn’t there yet. That’s why it’s absolutely essential that Drop City has the most advanced cutting-edge technology». This is not the standard idea in countercultural discourse, as many “traditional” counterculturals, like Curl, advocated for low, “appropriate technology”. In both of the two cases, the techno-optimist one (based on the “Brandian” idea that technology and accelerationism would have liberated humans) and the techno-skeptic one, the idea was still that technology, Drop City included, had to be human-tailored and human-centered. John Curl, *Memories of Drop City* (iUniverse, 2007), chap. 5.

⁹⁸ Curl, *Memories of Drop City*.

⁹⁹ And, slowly, as the 60s let the 70s go ahead, the “lonely crowd” became the crowd of identities.

communication¹⁰⁰ has become a point of reference for the WEC¹⁰¹. According to Shannon the quantity of information associated to an event is inversely proportional to its probability. In other words, it is much more informative an information about what we don't expect than what we expect¹⁰². This idea is enshrined in one of the five purposing elements of the magazine: «An item is listed in the CATALOG if it is deemed [...] *[n]ot already common knowledge*¹⁰³».

The second sign is the idea that, even if it is, as it has been said, mainly books, the Catalog is an «evaluation and access device» to *tools*. «An item is listed in the CATALOG if it is deemed [...] *[u]seful as a tool*»: that is the first rule of the WEC. The book is not anymore “a book”, but becomes an access device to information that the “human machine” researches, collects and stores in order to perform an operation. The book becomes the tool, just like any other, that is needed to perform an action, regardless the fact that action is cognitive, intellectual or contemplative, like understanding this very paradigm of thought.

Imagine we want to construct an Indian tepee or a geodesic dome¹⁰⁴, we would need tools, like hammers, shovels, ropes, metal, but first we would need information, knowledge (what today what be called “know-how”), in order to be able to build it. So, the book, or better, information, becomes the input needed for the realization of the output¹⁰⁵.

For what concerns the formal point of view, the issues of the Whole Earth Catalog that will be used as source for the historical, hermeneutic analysis are *all the issues that pertain to the first, strictly-countercultural wave*, i.e. the issues¹⁰⁶ from 1968 to the 1971 *The Last Whole Earth Catalog*, which (as the name suggests) Brand thought to be the last instance ever of the WEC experience¹⁰⁷. Furthermore, two articles that Brand published after the 1971 demise of the WEC in 1972 and 1973 for *Rolling Stone* and *Harper's magazine*, published together in the 1974 book *II Cybernetic Frontiers*¹⁰⁸, will be analyzed in the belief they are a relevant further evolution in organicist sense of Brand's “wholeism”.

Relevance The last point of this introduction concerns the relevance. Though political aspects *stricto sensu* have been already considered, up to this point there has been talk mainly of philosophy of history, science of religions, cybernetics and philosophical theory in general, while this is a thesis in History of the Political in a Political Sciences Department. This for three reasons. First of all, tautologically, this introduction is devoid of historical sources because otherwise it would have been the body: assertions without sources are at best theory,

¹⁰⁰ Claude E. Shannon, Warren Weaver, and Norbert Wiener, ‘*The Mathematical Theory of Communication*’, *Physics Today*, 3.9 (1950), pp. 31–32, doi:10.1063/1.3067010.

¹⁰¹ Markoff, *Whole Earth*, chap. 8, par. 13.

¹⁰² For example: if someone would told us that she had managed to know for sure that tomorrow the sun will still rise, that would of little use; instead, if she would told us that she had managed to know for sure that tomorrow a missile attack would be on our land, that would be of much more use to us.

¹⁰³ Emphasis added.

¹⁰⁴ All structures that are presents in the «Shelter and Land Use» section of the WEC.

¹⁰⁵ These two cases demonstrate the WEC richness as mine of signs, and its adequacy as a source for this study.

¹⁰⁶ Supplements will be ignored, not for their irrelevance, in fact they will be the design base for his next publishing experience, the *CoEvolution Quarterly* and «offered a window into the communal back-to-the-land movement that had captured the spirit of the counterculture», but *for the higher relevance of other sources*, like, for example, the articles of *II Cybernetic Frontiers*.

¹⁰⁷

¹⁰⁸ Stewart Brand, *II Cybernetic Frontiers* (Random House Publishing Group, 1974).

at least mere intuitions. For what concerns the exquisitely theoretical part at the start of the introduction, a theoretical statement is fundamental for a work in humanities (or “soft-sciences”), *a fortiori* if it is a standalone work.

Secondly, this thesis is, as said, a thesis in History of the Political¹⁰⁹; as such, does not have to be focused on strictly political matters (like decision-making, leaders, institutions) nor to follow the modalities or the ideas of political science, nor even not to think historically about the way and the modalities through which the political is thought¹¹⁰.

Thirdly, this work has much politics, as already underlined: the rise of individualism, relevant for the discourse on the crisis of democracy, the all-pervading paradigm of adaptation and resilience, the dialectic behind the ecological discourse, the crisis of normativity, the desacralization (beyond the religious one) of society and the human, disposable as a set of data economically relevant.

Literature review

The academic literature on the *Whole Earth Catalog* is generally focused on the influences the *Catalog* has had in three main areas: architecture, ecology, cybernetics and IT. This is predictable knowing Stewart Brand’s interests, lines of action, and theoretical positions, and underlines his strong agency in such disciplines.

Whole Systems Fred Turner, in his *Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community*¹¹¹ underlines the ideological problem behind technology: «those who headed back to the land suffered a deep ambivalence toward technology. On the one hand, like their counterparts of the New Left they saw the large-scale weapons technologies of the cold war and the organizations that produced them as emblems of a malevolent and ubiquitous technological bureaucracy. On the other, as they played their stereos and dropped LSD many came to believe that small-scale technologies could help bring about an alternative to that world»¹¹². Furthermore, back-to-the-landers fast acknowledged that they could not live without technology: the WEC functioned as the alternative for them. More than just an instance of a countercultural style of consumerism («While its pages did display products, the *Catalog* did not profit by selling those products to readers»¹¹³), the WEC, by displaying reviewed products, proposed a specific way «of thinking and speaking—about technology, commerce, information, and community in particular»; more than marketing goods, Brand marketed «a way of looking at how life ought to be lived». Sam Binkley argues, in his *The Seers of Menlo Park: The discourse of heroic*

¹⁰⁹ It is interesting to find an at least formal similarity between Grelet’s dyad of “the real” – reality^(a) and that of “the political” – politics.

^(a) Grelet, *Theory of the Solitary Sailor*.

¹¹⁰ Giovanni Orsina, ‘Political Science as a Modernist Project’, in *Combining Political History and Political Science: Towards a New Understanding of the Political*, Routledge Approaches to History, 52 (Routledge, 2023).

¹¹¹ Fred Turner, ‘Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community’, *Technology and Culture*, 46.3 (2005), pp. 485–512, doi:10.1353/tech.2005.0154.

¹¹² Turner, ‘Where the Counterculture Met the New Economy’, p. 488.

¹¹³ Turner, ‘Where the Counterculture Met the New Economy’, p. 492.

consumption in the *'Whole Earth Catalog'*¹¹⁴, that even when the WEC proposed a form of consumption¹¹⁵, it was filtered by an ideational purpose, by Brand's anthropological model, that is to propose a form of consumption radically different from "mainstream" consumerism; in the *Whole Earth Catalog* even the very act of consuming was a form of emancipation. While Turner, especially through his *From Counterculture to Cyberculture*¹¹⁶, gave an exceptionally complete vision of the WEC experience, embedding it in a precious *fil rouge* that goes from the 50's postwar "military-industrial-academic complex" to the '90s cyberculture, passing through hippies, counterculture, the *Catalog*, the "personal computer", the *WELL* and *Wired* magazine, he never addresses the ideational reasons behind one passage to the other¹¹⁷. For example, Turner explains how the WEC functioned as the solution of the technological conundrum counterculture had, by fusing counterculture with the cybernetics that powered the very "military-industrial-academic complex" the counterculture firstly opposed to, without explaining how, from an ideationistic point of view, Brand may have made such a "dialectical somersault". For sure the reason of this dialectical change is Brand and his WEC, but how come Brand came to this conclusion? It seems, at the eyes of the author, too incomplete to stop here, to stop at the mere development of facts, without reflecting on the ideas behind them: Stewart Brand was a Stanford graduate who read a tremendous amount of books since childhood¹¹⁸, a «cerebral type»¹¹⁹ «who lived in his head with the ideas he was passionate about»¹²⁰ who experienced on his skin the lights and shadows of the context in which he lived; he could not just "casually come up" to fuse one idea with the other without having first found an internal coherence, a personal model of humanity.

Turner masterfully described the historical interconnectedness of these historic events as a well-oiled machine, which, however, lacks the soul that animates it. This is the reason why this thesis exists: to find the ghost in that machine.

Dorien Zandbergen's *Acceleration and Gnostic Timelessness in Silicon Valley*¹²¹ is the attempt to put the contemporary "accelerated", hyper-technological and information-based society (perfectly exemplified in the Silicon Valley) into a cultural and historic point of view, to understand what could be the drivers that led instruments like the "personal computer", the iPhone or "this" entire society to life. First, she underlines some circumstantial elements for her analysis which are however fundamental for this one.

Firstly, she consecrates the link between today's information society and the 60s counterculture: for Zandbergen, in order to understand the very fabric of our informatized way of thinking, we must refer to its matrix, the Silicon Valley, which "is built upon",

¹¹⁴ Sam Binkley, 'The Seers of Menlo Park: The Discourse of Heroic Consumption in the "Whole Earth Catalog"', *Journal of Consumer Culture*, 3.3 (2003), pp. 283–313, doi:10.1177/14695405030033001.

¹¹⁵ As it obviously does, being still a catalog of goods to buy.

¹¹⁶ Turner, *From Counterculture to Cyberculture*.

¹¹⁷ Not at all for negligence, in all likelihood out of focus on historical factuality rather than on history of ideas.

¹¹⁸ Markoff, *Whole Earth*, p. 13.

¹¹⁹ Markoff, *Whole Earth*, p. 176.

¹²⁰ Markoff, *Whole Earth*, p. 184.

¹²¹ Dorien Zandbergen, 'Acceleration and Gnostic Timelessness in Silicon Valley: How Gnostic Spirituality Has Come to Matter in the "Information Age"', *Etnofoor*, 24.1 (2012), pp. 29–54, doi:<https://www.jstor.org/stable/23217870>.

physically and ideationally, on the ashes of the hippie culture of San Francisco and surroundings.

Secondly, differently from Turner, she does not see a real contradiction between countercultural opposition to the “cold” computer society and the later tecno-optimist exaltation of technology as a mean for human emancipation. In her words, «the student protest against mainframe computers¹²² was in fact part of a general countercultural critique of “technocratic society” [...] and not of technology itself»¹²³.

A last relevant item is the acknowledgement that «[i]n its ultimate form, the countercultural quest came down to nothing less than a search *for a new archetypical human being*»¹²⁴.

For what concerns the content of her analysis, she connects countercultural spiritual search and its anti-political, anti-conformist attitude in one, *gnostic*, dialectic.

Gnosticism, in brief and in general, is a dualist form of religiosity founded on the distinction between a mundane, degenerate world, constructed by an evil entity to enslave and enslave humans who, only through gnosis, i.e. spiritual, elevated knowledge given by God (the positive entity) can free themselves of worldly shackles. According to Zandbergen, counterculture is founded on such a dialectic where the world of the “squares”¹²⁵ is the mundane, degenerate world made to enslave and transform humans in grey-flannel suited robots, and countercultural ideas, notably LSD and Eastern philosophies, are the gnosis that can free them from it¹²⁶.

This conception then helps her in advancing the thesis that contemporary sense of time and view of technology is not actually, or not only an “accelerated”, hence linear one, but rather a gnostic one, that is *non-linear, circular and ecological*.

Although the gnostic conception is very interesting, it can be true only in the sense that it is based on the already presented distinction between sacred and profane, and even if that was the case it could not be Gnosticism, but plain religion¹²⁷. Instead, not only counterculture is not a religious movement from a formal point of view¹²⁸, but it also lacks the most fundamental

¹²² By “mainframe computers” Zandbergen referred to the idea, very different to the one is common today, of the 50s/60s computer: gigantic machine that had to be kept in locked rooms, used just by allowed people^(a). Apart from the intuitive, gut-responses that such a gigantic machine fed on punch cards by a bunch of mindless operators before it, the main problem of the mainframe computer for Zandbergen is in its concentration of power, the fact that, inevitably, computational power could not be “diffused” but instead remained locked behind “no access by non-authorized persons” doors, in the hands of few, who “God knows what did with them”. Note that, although people were still not aware of its implications or did not even know of its existence, social manipulation or forecasting through analysis of people’s behavioral data was already, even at that time, a (small) reality, through the work of the Simulmatics Corporation^(b).

^(a) ‘Mainframe Computers - CHM Revolution’ <<https://www.computerhistory.org/revolution/mainframe-computers/7/intro>> [accessed 18 February 2025].

^(b) Jill Lepore, *If Then: How the Simulmatics Corporation Invented the Future*, 1st ed (Liveright Publishing Corporation, 2020).

¹²³ Zandbergen, ‘Acceleration and Gnostic Timelessness in Silicon Valley: How Gnostic Spirituality Has Come to Matter in the “Information Age”’, p. 35.

¹²⁴ Zandbergen, ‘Acceleration and Gnostic Timelessness in Silicon Valley: How Gnostic Spirituality Has Come to Matter in the “Information Age”’, p. 39. Emphasis added.

¹²⁵ The way the beats and hippies called “the mainstream”, the “normal” non-beat/non-hippie people (usually the beats/hippies’ parents). More on this in the **The Historical Roots of the Whole Earth Catalog**.

¹²⁶ This, according to her, explains the countercultural dual anti-conformism and search for “truth”.

¹²⁷ Eliade, *Il sacro e il profano*. Counterculture, then, would have been a sort of massive religious awakening.

¹²⁸ In that it lacks the religious appearance.

religious element: transcendence. As it will be argued in the next chapter, for the “mainstream” of counterculture (exemplified by, for example, Timothy Leary) there is no real transcendence except from an immanent representation of it: not only no God gave no gnosis, but the countercultural neospiritualist “gnosis” is LSD-powered and consists of “experiences”, not differently from the experience one could gain from ascending a mountain or risking one’s life: a (probably) life-changing experience, but surely not transcendent but instead profoundly immanent.

Finally, in the point of view of the author, though this would need more research, it is too strict seeing (1) countercultural anti-systemic opposition as a gnostic demonization of society and (2) materialist neospiritualism as a gnostic path of salvation: more probably the two souls (the anti-conformist and the spiritual one) are “simply” interlinked, in the sense that the perceived emptiness of the 50s and 60s society triggered a diffused search for meaning, which ended in strange adaptations of eastern spiritualism and LSD experiences. In one point the author agrees strongly with Zandbergen’s juxtaposition of counterculture and Gnosticism: the fact that the countercultural critique of the “square” society is not directed to specific individuals, socio-political practices, but seems directed against a “dialectic”. The object of countercultural opposition is not a real entity *per se*, but a meta-concept, very similarly to the Gnostic evil demiurge or Gilles Grelet’s *world*¹²⁹. The clearest solidification of this ideal is Allen Ginsberg’s¹³⁰ *Howl*’s Moloch¹³¹, the «sphinx of cement and aluminum [that] bashed open their skulls and ate up their brains and imagination», the «heavy judger of man», the «incomprehensible prison», «[r]obot apartments», «blind capitals», «demonic industries», «spectral nations», «monstrous bombs», «whose mind is pure machinery», «whose blood is running money», «whose love is endless oil and stone», «whose soul is electricity and banks», «whose fingers are ten armies», «whose name is the Mind»¹³².

In conclusion, in the point of view of the author, Zandbergen’s analysis is straight on point *on the matter*, i.e. in stating that today’s view of technology is not a simple, *linear* one, but also a *non-linear* one; or in stating that neospiritualism is influencing society still today.

It is not shared by the author that the reason behind these phenomena is a gnostic vision of time; if anything, this “countercultural Gnosticism”, that influenced our way of seeing time, technology and environment, consists of an instance of organicism.

Ecology In *Counterculture Green: The Whole Earth Catalog and American Environmentalism*¹³³, Andrew G. Kirk founds the pragmatic, techno-optimist, liberalist environmentalism on the WEC’s original blend of cybernetics, ecosystem and Batesonian

¹²⁹ Grelet, *Theory of the Solitary Sailor*.

¹³⁰ Allen Ginsberg was an exponent of the Beat Generation. More on him and the Beat Generation in the next chapter, **The Historical Roots of the Whole Earth Catalog**.

¹³¹ Note that Moloch is the name of an «Ancient Canaanite deity, to whom human victims were sacrificed in the valley of Hinnom (Geenna) near Jerusalem and whose cult was strongly opposed by the prophets and in the historiography of Israel. In a figurative sense, a person or institution characterized by an insatiable thirst for destruction or brutal power». ‘Moloc - Enciclopedia’, *Treccani* <<https://www.treccani.it/enciclopedia/moloc/>> [accessed 30 January 2025]. Emphasis added.

¹³² Allen Ginsberg, ‘Howl’, *The Poetry Foundation*, 2018, chap. II <<https://www.poetryfoundation.org/poems/49303/howl>> [accessed 14 January 2025].

¹³³ Andrew G. Kirk, *Counterculture Green: The ‘Whole Earth Catalog’ and American Environmentalism*, CultureAmerica (Univ. Press of Kansas, 2007).

ecology. Henry Trim, in his “*We Are as Gods*”: *The Green Technical Fix*¹³⁴ demonstrates how the WEC, «an iconic magazine which merged back-to-the-land and Californian techie culture»¹³⁵,¹³⁶ helped reshape the environmental movement from a conservationist, anti-technological posture to a techno-optimist view, where technology, from capitalist instrument of environment degradation could become a tool for a better integration of humanity and environment, if *designed differently*. This is what the “appropriate technology” movement core idea, according to Kirk’s *Appropriate Technology: The Whole Earth Catalog and Countercultural Environmental Politics*¹³⁷, which moves from the same premises and characterizations of the Trim’s works. Baratta, too, in studying environmentalism’s evolution¹³⁸, recognizes the important role of 60’s counterculture and Brand’s contribute, which, according to him, led to a «new pragmatic approach» based on *interdisciplinarity*. If Baratta focuses on interdisciplinarity, Kendall, in his *Stewart Brand: On Governments, Guilds, and Getting Things Done*¹³⁹, focuses on pragmatism in environmentalism, which would be a result of Brand’s tool-centered approach, focused on practicality and problem-solving.

Cyber In *The Californian Ideology Revisited*¹⁴⁰, Uluorta and Quill speak of the existence of a «Californian ideology» in contemporary Silicon Valley, an «‘heterogeneous orthodoxy’ [...] that managed to combine contradictory elements into a pleasing whole: ‘the freewheeling spirit of the hippies and the entrepreneurial zeal of the yuppies’». They then proceed to analyze the evolution of such an ideology. Original “Californian ideology” started in the 60s/70s, deeply influenced by Brand and his *Whole Earth Catalog*, believed in the possibility to create new public spheres through a new form of communitarianism. The WELL (*Whole Earth ‘Lectronic Link*), the New Communalists, the *Whole Earth Catalog* itself, were all forms of, respectively, virtual (in the sense of “digital”), real and “virtual”¹⁴¹ communities. This communitarian view is powered by a new concept of technology spread by Brand, that Thomas Streeter investigated in his *Romanticism and the Machine: the Formation of the Computer Counterculture*¹⁴². The computer, from instrument of control and efficiency,

¹³⁴ Henry Trim, “‘We Are as Gods’: The Green Technical Fix”, 2016, p. 6 Pages, 1.85MB, doi:10.5282/RCC/7700.

¹³⁵ The expression, however effective in delivering the sense of a “crazy” fusion of hippie “back-to-the-land” and cybernetics-powered technological approach, suggests that the «Californian techie culture» predated Stewart Brand and his generation, while instead it was Brand and his generation that built that very “Californian techie culture”, and that it was *that* organicist culture that concretized in the cybercultural, ecological and architectural peculiar approach.

¹³⁶ Trim, ‘We Are as Gods’, p. 55.

¹³⁷ Andrew Kirk, ‘Appropriating Technology: The Whole Earth Catalog and Counterculture Environmental Politics’, *Environmental History*, 6.3 (2001), pp. 374–94.

¹³⁸ Chris Baratta, “‘Interdisciplinarity’ Achieved: A Brief Look at Interdisciplinary Environmentalism in the 1960s”, *Interdisciplinary Literary Studies*, 18.3 (2016), pp. 301–24, doi:10.5325/intelitestud.18.3.0301.

¹³⁹ Stuart Kendall, ‘Stewart Brand’, *Boom*, 2.1 (2012), pp. 65–71, doi:10.1525/boom.2012.2.1.65.

¹⁴⁰ Hasmet M. Uluorta and Lawrence Quill, ‘The Californian Ideology Revisited’, in *Digital Platforms and Algorithmic Subjectivities*, ed. by Emilian Armano, Marco Briziarelli, and Elisabetta Risi (University of Westminster Press, 2022), pp. 21–31, doi:10.16997/book54.b.

¹⁴¹ In the sense the WEC contributed to create, among the readers, a sense of belonging to a community, though imagined.

¹⁴² Thomas Streeter, ‘Romanticism and the Machine: The Formation of the Computer Counterculture’, in *The Net Effect* (NYU Press, 2011).

became a *tool* for personal freedom and expression: from user-friendliness to the hacker culture, everything reflected the “heroic” idea of “the countercultural” that, through technology, could contrast and emancipate himself from mainstream’s degeneration.

But later, Uluorta and Quill describe, “Californian ideology” was about to change. «By the mid-2000s, the original promise of the electronic agora was struggling against competing notions that saw it as a virtual marketplace of ideas and consumables»¹⁴³. By discovering the now famous «behavioral surplus»¹⁴⁴, virtual spaces were no more co-created emancipatory spaces for the individual, but virtual mines for data that could be converted into effective, profitable advertising, and where the individual, from subject-organism of whom technologies were emancipatory tools to not even a client, but a *resource*, of whom technologies are mere extractive devices.

Uluorta and Quill’s article is very precious in that (1) it connects the techno-optimist view of virtual community with their capitalist evolution, the social media, in an historical dialectic and (2) it explains why early cyberculture’s position on the Internet, carried out by Brand, according to which (A) the Internet was the virtual version of the communitarianism they tried to build through physical communes and (B) the personal computer¹⁴⁵ a way to diffuse power and empower the individual, become the opposite: a hyper-concentrated, medieval-like system where a bunch of oligopolist are becoming so strong to compete with statal entities. Nonetheless, the passage between Whole Earth Catalog, the WELL and the cyberculture, the Big Five concentration of power is not the scope of this thesis, but a cue for future research.

Design and arts As said, a big portion of the literature on Stewart Brand and the Whole Earth Catalog comes from architecture, design, and visual arts. More than ecology and cyberculture, these disciplines are much aware of the impact Brand and his Whole Earth Catalog had through his anthropological model, his focus on “Shelter and Land Use”, his fascination for Buckminster Fuller and the very appearance of the magazine, too. According to Brand’s organicist approach, the city or home could become a “technology for living”, a form of “appropriate technology” that was aware of its impact on both humans and the environment. This “biological” design (in the dual sense of designed for human life and Life, or the environment) is still very strong today in avant-garde designs that by now consist of a complete fusion of natural and artificial, teleological and mechanic, like those of Neri Oxman¹⁴⁶.

Simon Sadler states in fact, that a peculiar «Californian design culture» developed in California’s Bay region around the 60s¹⁴⁷ that continues influencing design until today, globally: suffice it to say the “designed in California” brand still bears much significance today¹⁴⁸.

¹⁴³ Uluorta and Quill, ‘The Californian Ideology Revisited’.

¹⁴⁴ Shoshana Zuboff and Paolo Bassotti, *Il capitalismo della sorveglianza il futuro dell’umanità nell’era dei nuovi poteri* (LUISS University Press, 2019).

¹⁴⁵ Remember that the term “personal computer” was invented by Brand.

¹⁴⁶ ‘OXMAN’.

¹⁴⁷ Simon Sadler, ‘A Culture of Connection’, *Boom*, 2.1 (2012), pp. 1–16, doi:10.1525/boom.2012.2.1.1.

¹⁴⁸ Seems strange? Never heard about it? Just take look at the back, or bottom, of your iPhone or Mac(Book), if you have one.

Californian design culture is more of an ethos than an aesthetic format: progressive, egalitarian, evolutionary, based on *reconciliation between nature and technology*, openness, interconnection, where design and technology are *tools* for «revealing and furthering life». In Peter Murray's interview to Stewart Brand in *Learning from the West Coast: Long-Termism and Change*¹⁴⁹, architectural house design is presented as a double, entangled circular feedback loop between designer & context and inhabitants & their homes: designers should build houses and cities that adapts to the context not only now but also in the future (long-termism), and, in order to make this materially possible, beyond “simple” climate change action¹⁵⁰, let the very inhabitants of the houses to modify their house, their environment, to adapt it to their needs and those of the greater context, establishing a cybernetic, bottom-up circular feedback loop. This is the approach of the «architecture of systems»¹⁵¹. Diaz focuses on the resurgence of one element dear to Brand, borrowed from Buckminster Fuller in the XXI century: geodesic domes. The contemporary recovery of the geodesic dome was inspired by ideals of alternative living, environmentalism and differently from Fuller's original vision, fighting homelessness. In another article, she reverses the dialectic, interrogating on Fuller's influence on contemporary artists, understanding that, despite utopianism and technocracy commonly attributed to Fuller, contemporary artists interested in sustainability, social justice or alternate living take it as a model, probably thanks to Brand's countercultural re-branding¹⁵² of Fuller's ideas.

David Farber, in his *Self-Invention in the Realm of Production: Craft, Beauty, and Community in the American Counterculture, 1964–1978*¹⁵³, focuses on how the countercultural movement strived to create an economic approach, opposed to the capitalist-consumerist one, focused on DIY, repairing and recovering, that, despite its short life, lives until today as a practice as well as ideology. The Whole Earth Catalog functioned as a social aggregator and instrument to facilitate the realization of this approach.

In *The age of insiders. The disappearance of the outside*¹⁵⁴, Helena Grande, underlines how the 60s counterculture and Brand's WEC were based on the individual empowerment, self-organization and a critic of capitalist structure which, however, ended reinforcing the very superstructure they wanted to oppose to, through the integration and “pop-ization” of the countercultural movement inside “capitalist” system, bringing to the end of “outsiders”.

In Tiago de Luca's chapter *Sublime Earth* in *Planetary Cinema* book¹⁵⁵, an examination of the concept of “Whole Earth” is made by starting from contemporary films that expose the concept of “planetary sublime” through visual representations of the *whole* Earth. The

¹⁴⁹ Peter Murray, ‘Learning from the West Coast: Long-Termism and Change – An Interview with Stewart Brand’, *Architectural Design*, 87.5 (2017), pp. 24–29, doi:10.1002/ad.2212.

¹⁵⁰ The architecture may think about her structure's environmental impact but cannot foresee all it possible uses or contexts and impact.

¹⁵¹ Murray, ‘Learning from the West Coast’, p. 24.

¹⁵² (No) pun intended.

¹⁵³ David Farber, ‘Self-Invention in the Realm of Production’, *Pacific Historical Review*, 85.3 (2016), pp. 408–42, doi:10.1525/phr.2016.85.3.408.

¹⁵⁴ Helena Grande, ‘The Age of Insiders. The Disappearance of the Outside’, *Re-Visiones*, 4 (2014).

¹⁵⁵ Tiago Luca, *Planetary Cinema: Film, Media and the Earth* (Amsterdam University Press, 2021), doi:10.5117/9789463729628.

“planetary sublime” experience is constituted of different elements: the perception of scale, the dual, ambivalent perception of humanity position in the cosmos of insignificant and powerful beings, the acquisition of a different spatial and temporal point of view, from a human to a geological one, environmental and ecological awareness, i.e. the acknowledgment that *we are all part of the same Whole*. This view, although fostered after the first photos of the Earth from space, especially thanks to the Whole Earth Catalog and Brand’s campaign “Why haven’t we seen a photograph of the Whole Earth yet?”, was already existent at the start of the XX century thanks to Alexander von Humboldt’s *Cosmos*¹⁵⁶.

Coming back to today, according to Farman¹⁵⁷, “planetary sublime” evolved in “planetary dread”, with the acknowledgment that the “whole earth” utopia, founded on interconnectedness and togetherness, was slowly transforming in a dystopian destruction of “spaceship Earth” by humanity. Farman delved into the said ambivalence that came with the discovery of the interconnectedness of things: not only cosmic participation, but also discovery of serious responsibility, as from space not only water, land and clouds was seen, but also pollution, deforestation and ecosystems crashing, linking definitively “planetary sublime” and the Whole Earth discourse to Anthropocene, as characterizing elements of this phase of humanity.

The Historical Roots of the Whole Earth Catalog

Before proceeding in analyzing the content of the Whole Earth Catalog, it is of paramount importance to analyze its historical *context* as any “text” is always cast in the social, economic, political setting where (or better, *when*) it arose¹⁵⁸. This is particularly the case of the WEC, which emerged from and was addressed to the USA 50s/60s¹⁵⁹ “counterculture” (whatever that means, for now)¹⁶⁰. In this chapter, some contextual information will be given on the period of the ‘50s, the ‘60s and the complex and elusive phenomenon of “counterculture”.

“Affluent Consensus” According to Todd Gitlin’s *The Sixties – Years of Hope, Days of Rage*, probably the most comprehensive historical accounts of the 1960s in the USA¹⁶¹, The

¹⁵⁶ Alexander von Humboldt, *Cosmos: A Sketch of a Physical Description of the Universe. Vol. 1 / with an Introd. by Nicolaas A. Rupke*, Foundations of Natural History (Johns Hopkins Univ. Press, 1997), 1. By extending this “planetary sublime” feeling as an expression of non-linear thought, one could say that “planetary sublime” feeling is as old as humanity, or the birth of non-linear thought, where ancient cosmic religiosities as the first form of gateway for “planetary sublime”

¹⁵⁷ Abou Farman, ‘Cosmos’, in *Anthropocene Unseen* (Punctum Books, 2020).

¹⁵⁸ Michael Z. Newman, *Media: Una Cassetta Degli Attrezzi*, ed. by Luca Barra and Simone Natale (Einaudi, 2023).

¹⁵⁹ For an analysis of the Whole Earth Catalog, the 50s are equally relevant (if not more) than the actual ‘60s. See later, especially note 162.

¹⁶⁰ Other periods like the 70s/80s will be cited, as well as some phenomenon related to those periods, like the New Age, the Ecological movement and the so-called “cyberculture”, but only in relation to counterculture (as antecedent or consequences or evolution). Secondly, the analysis will naturally shift to 70s and 80s because it will follow the evolution of the Whole Earth Catalog which, as said, extended its circulation until 1998.

¹⁶¹ Gitlin’s work has the specificity of being «at the edge of history and autobiography», speaking «from inside and outside the Sixties», «in first and third persons»; in other words, it is simultaneously a primary and secondary source, which, in the opinion of the author, is well suited for an historical work on an historical period that is just recently starting to shift from memory to history.

1960s were a tumultuous decade marked by social and political upheaval, with the counterculture and student movements at the forefront of change: especially in Europe, the '68 is still considered as the *annus mirabilis* (or maybe *horribilis*) for student mobilization and general social and cultural turmoil. As organicism cannot be understood without antipolitics and opposition, so the '60s cannot be understood without comparing them to the 50s and, especially, *without considering it as an answer to 50s' social arrangement*¹⁶². According to Gitlin, in a first approximation, the 50s were dominated by a «tension between the assumption of affluence and its opposite, a terror of loss, destruction, and failure»¹⁶³. Affluence, differently from “richness”, which implied also its opposite, poverty, was all pervading, was a «national condition»¹⁶⁴, and made possible to overlook the issue of inequality, since everyone was better-off. Secondly, affluence was not just an economic fact, it was the symbol of the overcoming of wartime deprivation and national glory: new commodities (TVs, fridges, washing machines, electric toasters, blenders, microwaves and, obviously, new and accessible automobiles) more white-collar jobs, baby boom, federal financing, low mortgage guarantees, cultural proliferation (museums, historical sites, travelling, reviews, coffee-table books, movies) were all facets of national «cornucopia»¹⁶⁵. The ideal of the “American way of life”, *in singular*, founded on the “American family”, composed of a backcombed young woman in apron (the fireplace angel) a handsome man in grey flannel suit, tie and briefcase living together¹⁶⁶ the “American dream” with one or (more frequently) many kids in one big suburban house next to many identical others comes from the 50s.

Insecurity and fear However, another of the «50s code words»¹⁶⁷, apart from “affluence”, was “insecurity”: in the 50s, «Americans were ill at ease in Eden»¹⁶⁸. This illness, called “maladjustment”¹⁶⁹, was considered to be linked to the absurd incapacity to adjust to the new way of life, and hence had to be treated like a «medical problem, susceptible to personal “cure” »¹⁷⁰. The ghosts of the 50s were (1) the fear of losing the Eden they were beginning to get used to¹⁷¹ and that the Great Depression could soon return, (2) the creeping worry that an economic system based on statal injection of dollars and the stacking of consumer debt¹⁷² would in the end collapse like a clay-footed giant, bursting the bubble of the “American dream”, (3) the invisible menace of the “alien” that profaned the sacred domestic fireplace

¹⁶² Furthermore, Stewart Brand is much more a “product” of the 50s (either in its traditional version and countercultural version, the Beat Generation) and a “producer” of the 60s than a full hippie. When the hippie phenomenon got wide, Brand was already “out of it”. Markoff, *Whole Earth*, p. 149.

¹⁶³ Gitlin, *The Sixties*, p. 19.

¹⁶⁴ Gitlin, *The Sixties*, p. 20.

¹⁶⁵ One of the expressions used by Gitlin to express this idea of “affluence”. Gitlin, *The Sixties*, p. 19.

¹⁶⁶ The ideal of “togetherness”, as underlined by Gitlin, was a central idea of that period. The “50s family” can be considered as a refrigerator-equipped version of the “domestic fireplace” myth.

¹⁶⁷ Gitlin, *The Sixties*, p. 24.

¹⁶⁸ According to U.S. Bureau of the Census, *Statistical Abstract of the United States: 1976* (Washington, D.C.: U.S. Government Printing Office, 1976), p. 499, tables 811-12, «while disposable family income rose by a considerable 49 percent between 1950 and 1960, sales of individual life insurance policies rose by more than 200 percent in dollar value»^(a). Americans were searching for economic and psychological security investing in life insurances that could grant an economic support to loved ones in case of unforeseen events.

^(a) Gitlin, *The Sixties*, p. 24.

¹⁶⁹ Giuseppe Di Gaspare, *Teoria e critica della globalizzazione finanziaria: dinamiche del potere finanziario e crisi sistemiche* (CEDAM, 2011).

destroying it or, worse, contaminating and bending it to its mean objectives, “taking possession” of the bodies, the form of every other one and infiltrating their houses¹⁷⁰, (4) the terror of full-scale reciprocal nuclear annihilation between USA and USSR, fueled by political discourse, testing of increasingly powerful bombs and air raid drills¹⁷¹, (5) vivid and *alive* memory of the horrors of WWII and Nazis in the Holocaust¹⁷².

There is one last element of the 50s that is relevant to this review: the (real or perceived) interinstitutional transformation. There are two relevant interlinked transformations: the transformation of the role of the university and the so called «military-industrial complex»¹⁷³. Let us start from this last one.

The “military-industrial-academic complex” Rather than a true institutional transformation, this is a change in interinstitutional relations and practices triggered by the Second World War. Before the War, science was quite autonomous and separated from the political sphere. Even if science did get funding from state or industry, there was a clear distinction between science (and, more generally, academic research), engineering, industry, politics and military. Military research, even if it was still scientific research, was conducted separately from civilian, university research¹⁷⁴. During WWII, the approach changes: for the first time, State, university and industry start collaborating strictly one with the other. «In

¹⁷⁰ The main reference here is to Communism. As widely known, the USA won the war but the shadow of the war still yet to vanish: widely employed espionage during Cold War brought the McCarthyist terror that “the neighboring couple, who are in every way like us, could be communist cold blooded assassins that took the place of the original owners and are plotting against us and the entire Country”. This fear was represented and exorcised through filmography on “alien invasion” that flourished in that period. *Invasion of the Body Snatchers*^(a), considered a *cult*, portrayed a parasite alien invasion conducted through the substitution of humanity with emotionless, inauthentic copies of themselves.

^(a) *Invasion of the Body Snatchers*, dir. by Don Siegel (Allied Artists Pictures, 1956).

¹⁷¹ Differently from the other “fears” which were (1) eventual (like economic default) or, in any case, only manifest at the psychological level and (2) having a specific object^(a), the “fear” of the Bomb was (1) real, vitalized through life practices and (2) a form of anguish, rather than just anxiety or fear, since without a specific object^(a): if it is true that the enemy was known, it was not known when it could attack and, furthermore, when the nuclear alarm ringed, it was neither known whether it was a drill or not, and there were just some minutes to save oneself. In Gitlin’s words: «[...] the Bomb actually disrupted our daily lives. We grew up taking cover in school drills—the first American generation compelled from infancy to fear not only war but the end of days. Every so often, out of the blue, a teacher would pause in the middle of class and call out, “Take cover!” We knew, then, to scramble under our

miniature desks and to stay there, cramped, heads folded under our arms, until the teacher called out, “All clear!” Sometimes the whole school was taken out into the halls, away from the windows, and instructed to crouch down, heads to the walls, our eyes scrunched closed, until further notice. Sometimes air raid sirens went off out in the wider world, and whole cities were told to stay indoors. Who knew what to believe? »^(b).

^(a) Umberto Galimberti, ‘Angoscia – Ansia’, *Nuovo dizionario di psicologia* (Feltrinelli, 2018), p. 1640.

^(b) Gitlin, *The Sixties*, p. 30.

¹⁷² Note that in the USA there has always been (1) a strong Jewish community, (2) many German-Americans, (3) the fact that during the War many European Jewish escaped to the USA and (3) the fact that the USA (and the Communists) were the first to uncover the horrors of the Nazis extermination camps. Thus, the USA were full of memories, images, memorabilia, war booties that made the Nazis still alive and menacing. In Meredith Tax’s words: «Every night I looked under the bed for men from Mars, witches, and Nazis».

^(a) Meredith Tax, ‘Speak, Memory: Primo Levi’s Living History’, *Voice Literary Supplement* (1986), March edition, p. 12.

¹⁷³ Clark Kerr, *The Uses of the University*, 5th ed (Harvard University Press, 2001).

¹⁷⁴ In line with the historical character of universities, as places dedicated to unbridled research free of any external influence, and the equally old distinction between civilians and military.

1940 former MIT professor and administrator Vannevar Bush persuaded Franklin Roosevelt to create the National Defense Research Committee, through which government dollars for military research would be funneled to civilian contractors, and to put him in charge of it. A year later the committee became the Office of Scientific Research and Development (OSRD). Over the next five years, the OSRD pumped some \$450 million into researching and developing war-related technologies. »¹⁷⁵ Through the OSRD scientists, engineers, industrialists, military, bureaucrats and policymakers collaborated one with the other and fused (or rather, confused) one with the other¹⁷⁶, developing a new way of seeing research, science and, curiously, speaking: historian of science Peter Galison described the OSRD as a «trading zone»¹⁷⁷, where interdisciplinarity touched language, too, generating «function-specific jargons», «semispecific pidgins», «full-fledged creoles». This information is relevant for this contextual review in a twofold way. Firstly, interdisciplinary collaborative spaces based on flexibility, absence of hierarchy fostered the idea that all forms of knowledge could be wired one with the other, that every form of knowledge was a part of or could be integrated in a greater *whole*, that *between them there were no ontological difference or specialty*, that what prevented this from happening, what prevented innovation from happening, were all the formalities, academic rigidities, social norms, (ethical norms?), taboos, hierarchical structures, top-down absolutism, public-private boundaries. «It was precisely this process and this institutional context that gave rise to the *computational metaphor* and the new philosophy of technology in which it made its first public appearance: Norbert Wiener’s cybernetics»¹⁷⁸. «By imaginatively transfiguring soldiers into mechanisms, Wiener and Bigelow suggested that human beings were at some level machines»¹⁷⁹, but «[a]t the same time, however, by means of the same imaginative transformation of men into information processing devices, Wiener and Bigelow offered up a picture of humans and machines as dynamic, collaborating elements in a single, highly fluid, socio-technical system. Within that system, control emerged not [*linearly*] from the mind of a commanding officer, but from the complex, [*non-linear*,] probabilistic interactions of humans, machines, and events around them»¹⁷⁷. Secondly, these new “vernacular” languages are an interesting indicator (*σημείον*) on how the interdisciplinary collaboration between very different researchers and non-researchers led to *de facto* incorporation of industry, engineering and (especially) research inside the state apparatus. Academia has descended from the island of Laputa to *wire* itself into the state’s mechanism, becoming the state’s brain and brain factory. In the words of Clark Kerr, «Intellect has [...] become an instrument of national purpose¹⁸⁰». The University has become, according to him «a mechanism—a series of processes

¹⁷⁵ Turner, *From Counterculture to Cyberculture*, p. 18.

¹⁷⁶ «Formerly specialized scientists were urged to become generalists in their research, able not only to theorize but also to design and build new technologies. At the same time, scientists and engineers had to become entrepreneurs, assembling networks of technologists, funders, and administrators to see their projects thorough. Neither scientists nor administrators could stay walled off from one another in their offices and laboratories». Turner, *From Counterculture to Cyberculture*, p. 19.

¹⁷⁷ Peter Galison and Peter Louis Galison, *Image and Logic: A Material Culture of Microphysics*, Nachdr. (The University of Chicago Press, 2000).

¹⁷⁸ Turner, *From Counterculture to Cyberculture*, p. 20. Emphasis added.

¹⁷⁹ Turner, *From Counterculture to Cyberculture*, p. 21.

¹⁸⁰ This very concept of interdisciplinarity exists and thrives until today. To present just one example, see Andrea Gilli, ‘Net Assessment: “Competition Is for Losers”’, *NDC Policy Brief*, 09 (2021).

producing a series of results—a mechanism held together by administrative rules and powered by money». To put it in other words, the university has become a part, a *holon*, of the greater statal cybernetic system¹⁸¹.

Universities For what concerns the other driver, the University experienced another dramatic change that reinforced the previously described view: the widening of the access and the rising of importance of university. Given the wider access to white-collar jobs and middle class, college and university became the «approved track for running faster and stretching faster»¹⁸², «the only sure tickets [...] to the affluent society»⁷⁶. The idea was that, if the parents were so better-off in the 50s, their children could aim to become even more successful than them, aim to upper-middle class and beyond: «the secretaries and clerks and low-level bureaucrats who made up the bulk of the white-collar sector shared the aspirations of the professionals and managers who made up the cream of it»⁷⁶. In conclusion, there was a bottom-up pressure to make sons join the university to improve their condition, and there was a top-down pressure from the State to produce the white-collars that powered the statal machine. The result is that the majority of the middle-class youngsters¹⁸³ frequented colleges or universities, which became the reference space for sharing and disseminating ideas, even the “unconventional” ones, and the very first “battleground” to conduct their personal struggle.

The “New Left” The «surprises of the Sixties»¹⁸⁴ were planted on the 50s¹⁸⁵. The youngsters, housed in university, accustomed to living at worst in modest comfort, ignorant of the deprivations of the war and the constant fear of losing everything again, despised by the alienating “gray flannel suit” society founded on the “affluent consensus” that traded fridges with individual freedom and meaning. Furthermore, in their view, they «may be the last generation in the experiment with living»: they inherited a world in the verge of a possible total annihilation and had to do something for it. Again, these youngsters were the sons of the very people that constructed and constituted the “gray flannel suit society”, that is the educated middle class that could frequent colleges and university, who were much more similar to their parents than to the rest of the country¹⁸⁶. The center and the hub of the «surprises of the Sixties»⁷⁹ is hence the youth movement, whose thrusting core was the so-called “New Left”¹⁸⁷. The New Left took example from the Civil Rights Movement and

¹⁸¹ Note that this is the root of Foucault’s Biopolitics: a state for which even the lives of its citizens become politically relevant. Michel Foucault, *La nascita della biopolitica*, II (Feltrinelli, 2015).

¹⁸² Gitlin, *The Sixties*, p. 27.

¹⁸³ Obviously, just like with “affluence”, one should not think the widening of University access as the substantial free access to anyone: university was still “a middle class thing”, just the whole middle class could now afford university equally.

¹⁸⁴ Gitlin, *The Sixties*, p. 19.

¹⁸⁵ Naturally, not everything that happen in the world, or even in the USA (or, as some could argue, in the Sixties’ turmoil) in the Sixties “came from” the 50s, though, considering the historical nature and the object of analysis of this work, it is an accurate approximation.

¹⁸⁶ «student radicals of the New Left shared many more sentiments and values with their parents than with the rest of American society». Gitlin, *The Sixties*, p. 26.

¹⁸⁷ “New Left” because it wanted to distance itself from the “Old Left”, discredited by McCarthyism, incapable to adapt to the changing circumstances for being frozen on the Cold War anti-communist rigidity. Instead of the general, multi-issue Old Left, the pre-Vietnam War New Left proposed itself as a single-issue movement that

presented themselves as a “movement”. They were driven by a belief in individual initiative and aspiration. They rejected communism and grounded them on liberalism, although criticized liberals and social democrats’ blindness to the dark side of the American dream and freed themselves from “Old Left” post-war rigid posture against Communism: if their formal and action model was the Civil Rights Movement, their content and political stance was modeled on Castroism. Castro was a revolutionary that opposed to a brutal American-sponsored dictatorship¹⁸⁸ and that proposed himself «in a freewheeling style [that] seemed far from both Stalinism and stolidity»¹⁸⁹ as leader of a revolution led by students, not the Communist party. Differently from the counterculture, they accepted the political struggle; differently from the “Old Left”, they refused traditional, institutionalized politics: their political action was based on sit-ins, marches, freedom rides (in the help to the Civil Rights Movement context), teach-ins¹⁹⁰, draft card burnings, semiological and culture warfare from a wider perspective. Universities were their hubs and homes, but also the very first field where the struggle against oppression and conformism had to be conducted. For the New Left, universities became bureaucratic structures, focused on careerism, on churning out mindless functionaries of the machine, rather than full-fledged humans, which, after entering the campus, were transformed in a matriculation number, «little more than an IBM card»¹⁹¹. One of the things the New Left was doing was to criticize a system that they perceived as an inhuman, alienating mechanism, where the new technologies developed in the interdisciplinary laboratories of the military-industrial-academic complex, like the new, imposing, centralized calculators, emphasized this view; «the mass university of today is an overpowering, over-towering, impersonal, alien machine in which he is nothing but a cog going through pre-programmed motions – *the IBM syndrome*»¹⁹². Against this model, they proposed a «social sense of *organicism*»¹⁹³: the rejection of egocentric individualism, competition, bureaucracy, hierarchy and other forms of top-down “verticality”, dogma, “absolutes” and conformism and the emphasis on “authentic”, i.e. personal knowledge coming from direct experience, personal transformation, engagement with the other and social issues, being part of a collective *whole*.

The New Left was the main actor of the 60s, but not the only one and especially, not the one that is the focus of this thesis. Another social phenomenon rose from the same «seedbed»¹⁹⁴ of the 50s: the counterculture.

What is “counterculture”? – “contraculture” The term “counterculture” was invented by Theodore Roszak’s *The making of a counter culture*¹⁹⁵, although John Milton Yinger has already used a similar term, “contraculture”, 9 years before. According to Yinger,

accepted the liberal framework but was bold enough to criticize it or take example from experiments like the Cuban revolution.

¹⁸⁸ The perfect symbol of the contrast between the New Left and the oppressive gray flannel suit society.

¹⁸⁹ Gitlin, *The Sixties*, p. 121.

¹⁹⁰ An “intellectual version of sit-ins”, designed to educate and raise awareness about issues (like the Vietnam War). They consisted in lectures, discussions, debates where scholars, activists, veterans were invited to speak.

¹⁹¹ Turner, *From Counterculture to Cyberculture*, p. 12.

¹⁹² Emphasis added.

¹⁹³ Gitlin, *The Sixties*, p. 121. Emphasis added.

¹⁹⁴ Gitlin, *The Sixties*, p. 19.

¹⁹⁵ Theodore Roszak, *The Making of Counterculture* (Doubleday & Company, Inc., 1969).

contraculture arises when cultural «norms [...] arise specifically from a frustrating situation or *from conflict between a group and the larger society*»¹⁹⁶ and consists of «a series of inverse or *counter values* (opposed to those of the surrounding society) in face of serious frustration or *conflict*»⁹⁰. “Contraculture” does not necessarily imply a major societal phenomenon, it can just be, for example, a set of values born out of the struggle between adolescent and parents^{197 and 198}. We can hence derive from Yinger’s definition that a contraculture is such *only* in the presence of an opposition, a frustration, a conflict with another group and that in absence of such a conflict, contracultural values fade off. This could be the case of a subculture that develops a contraculture in response to frustration generated by another group, which then dissolves when the source of frustration is removed, leaving only the subcultural elements alive. It is difficult to ascertain whether the 60s counterculture was actually a contraculture: for sure the Beat Generation was such, and even the 60s counterculture (at least that of the starts); the Whole Earth Catalog surely was born on contracultural basis, but for sure one cannot define contraculture the descendants of the 60s counterculture, the New Age, the cyberculture and the ecological movement, although it has retained contracultural mores even up until today. Let us start analyzing this culture from a more neutral point of view.

What is “counterculture”, then? First of all, the name. Apart from the inventor or the real intentions behind it, counterculture is the fusion of two different words, that can tell us a lot about its nature. First “counter”: as it has been already extensively said as well as analyzed with Yinger’s definition, the counterculture is mainly an historic response of opposition towards the “affluent consensus”, “the technocracy”¹⁹⁹, the “military-industrial-academic complex” of the 50s; in this is no different from the New Left, and consists, fundamentally, in a deconstructionist project, intended as «a reading strategy that [...] seeks to highlight those conceptual [...] contradictions that prevent it from emitting a “full” and coherent message»²⁰⁰. The origin of the term comes from the critical-literary field, though it can be applied to historic phenomena too, if one considers them semiotically, as “signs”: although the semiotic paradigm has been presented as an (hopefully) useful epistemic paradigm for historiographic research, this does not mean that it could be (consciously or unconsciously) used to decipher actuality. In this sense semiotics becomes politics and

¹⁹⁶ J. Milton Yinger, ‘Contraculture and Subculture’, *American Sociological Review*, 25.5 (1960), p. 625 (p. 627), doi:10.2307/2090136. Emphasis added.

¹⁹⁷ Imagine an adolescent that develops or acquire a certain culture or personality, different from the values of the parents, which respond in an «“ethnocentric”» way: the adolescent and the group of reference may develop certain inverse values «product of tensions in the relationship of younger people and adults». Yinger, ‘Contraculture and Subculture’, p. 631.

¹⁹⁸ The term is extremely interesting because, although this is an historical work, opens to the possibility of seeing the 60s counterculture in sociological terms, as a “contraculture” that is the product of cultural conflicts between the young “baby boomers”, born in a socio-economic (and hence, cultural) very different to the one of the parents, who responded “ethnocentricly” to the new values, generating tension. Actually, if one does not it reduces to an adolescent conflict, this argument becomes congruent to the historical one.

¹⁹⁹ The idea of the 50s socio-political asset as a technocracy is Roszak’s. Roszak, *The Making of Counterculture*.

²⁰⁰ ‘Decostruzionismo - Enciclopedia’, *Treccani* <[https://www.treccani.it/enciclopedia/decostruzionismo_\(Enciclopedia-Italiana\)/>](https://www.treccani.it/enciclopedia/decostruzionismo_(Enciclopedia-Italiana)/>) [accessed 12 January 2025]. Author’s translation.

concepts like Umberto Eco's "semiological warfare" and Stuart Hall's "oppositional reading" arise from the dead world of media discourse to inhabit the alive world of History²⁰¹.

Counterculture could be hence understood as an eclectic, extensive and ambitious critical, deconstructionist reinterpretation of the society countercultural youngsters were born into. Secondly, "culture". Differently (in this case) from the New Left, the counterculture eluded political action. First, because counterculture was not even a movement, so that every individual that opposed to the system in a non-political way (or was in the New Left) was considered countercultural. Secondly, because, as already anticipated in the introduction, "counterculturals" were also disillusioned with "movement" politics: the only way to conduct opposition was to do it culturally. This did not mean that many counterculturals were not interested in politics: personal exploration, sexual libertinism, LSD and all the quirks that characterized the 60s counterculture were finalized to moving consciences and build a new sense of community, the same to which the New Left aspired.

"Beats and squares" Counterculture is rooted in the so-called Beats Generation, which was also a reaction against the perceived materialism, conformity and spiritual emptiness of postwar American society during the 50s. The Beats, «as the first embers of hippie culture»²⁰², are «a natural point of departure for this exploration»⁹⁷.

Most of the "beats" were middle-class young people who refused to live according to the "squares"²⁰³ and hence lived outside the social, conformist grid²⁰⁴, in relative solitude and discretion, traveling around the States, using drugs, being sexually free, researching various eastern spiritual systems and practices, mainly Japanese Zen Buddhism²⁰⁵, and experimenting

²⁰¹ Is not this what the Frankfurt school had done with its "critique"? But more than that, has deconstructionism, intended as the attitude, the acknowledgment, the state of mind or the ideological stand that "the state, social norms, common knowledge, diffused beliefs, ideologies, practices are not an absolute (in the sense of somewhat that is unbound by circumstances), but rather an arbitrary product of the historical and sociocultural climate or, (more specifically and more often) of the 'dominant' classes, courts or persons", always been a part of history and of humans? Stepping aside the most famous or recent, John Lilburne, 17th-century English activist and Leveller leader, champion of civil liberties against monarchical and parliamentary authority, Girolamo Savonarola, 15th-century Dominican preacher, advocate of moral reform, and critic of ecclesiastical and political corruption in Florence, Arnaldo da Brescia, 12th-century religious reformer, opponent of papal temporal power, and advocate for the separation of spiritual and political authority, John of Salisbury, 12th-century philosopher and political theorist, proponent of natural law and critic of tyranny in church and state governance. Is the cynical school of Diogenes of Sinope still today one of the most extreme and complete accounts of deconstructionism? Was not Socrates' *ti esti* the fundamental form of (philosophical but also social, political, spiritual) deconstructionism?

²⁰² Micah L. Issitt, *Hippies: A Guide to an American Subculture*, Guides to Subcultures and Countercultures (Greenwood Press/ABC-CLIO, 2009), p. xi.

²⁰³ The term "square" was used in the Beat culture to describe those people that followed the traditional social and cultural conventions, as opposed to the values of freedom and rebellion promoted by the beats.

²⁰⁴ The Beats «didn't want to change society so much as sidestep it», «there is no desire to shatter the "square" society so much as sidestep it»; «[p]olitics, they declared, was yet another boring, pointless subassembly in the grotesque machinery of Moloch». In this there is a strong difference with the counterculture, and the reason why, in the point of view of the author, it cannot technically be defined as a counterculture: between the beats and the squares there was no real conflict, just refusal. Gitlin, *The Sixties*, p. 54.

²⁰⁵ In that period (from 1950 to 1958), Daisetz Teitaro Suzuki, historian of religions and Japanese philosopher, famous disseminator of Mahayana Buddhism, especially Japanese Zen Buddhism, was in the USA, in New York, to give lectures at the Columbia University. «At the same time, a number of Americans, such as Ruth Fuller Sasaki and Gary Snyder, went to Japan and began to seriously study Zen Buddhism. Snyder, a Beat poet, stimulated an interest in Zen among leaders of the growing countercultural movement, including Allen

artistically with poetry and music improvisation. Everything was different from the “squares”: clothing, employment (or rather, non-employment), music, relationships. «The beat generation is a vision we had, J.C. Holmes and I [Jack Kerouac,] and Ginsberg in an even more unbelievable way, in the late 1940s, a vision of a generation of beautiful, enlightened hipsters suddenly rising up and setting out across America, earnest, curious, wandering and arriving everywhere hitchhiking, ragged, blissful, beautiful in their new grace-filled ugliness - a vision inspired by the way we had heard the word beat used on Times Square corners or in the Village, in other parts of the city on nights spent in Downtown in post-war America - blissful in the sense of beaten but full of firm convictions [...]. He never designated the juvenile delinquents, he designated the individuals endowed with a different spirituality who never formed a gang but remained solitary, looking out the blind window of our civilisation, the underground heroes who had finally turned their backs on the western “freedom machine”»²⁰⁶. This quote from Jack Kerouac, one of the founders of the movement, is self-explanatory. Allen Ginsberg’s *Howl* and *Footnote to Howl*²⁰⁷ is considerable the manifesto of the most fundamental elements of the beats, which will be taken up by the 60s counterculture: critics of “Moloch”, or the “squares” technocratic society, the fusional spirituality that consider and consecrates everything as part of a holy *whole*. As it will happen for counterculture, too, the Beat culture went from “bop” to “pop”: the social phenomenon got bleached and gentrified to meet the tastes of the “square” youngsters searching for individualization and a “contraculture”²⁰⁸ that could express their momentary conflict with the parents²⁰⁹.

Finally, the “hippies”²¹⁰ The 60s counterculture, as said, was a very heterogenous movement. Actually, it was neither a movement, but a name given to a “social phenomenon” which in actuality, manifested itself in very different manners. Members equally worthy of being considered as part of the counterculture are the so-called “hippies”²¹¹, student activists, civil rights groups, anarchist groups, motorcycle groups... The focus of the work will be on what are generally called hippie, although one should keep in mind that «these divisions are largely arbitrary, as each group blended and mixed with the others»²¹². Two other elements (apart the Beats’ literature diffusion in colleges and the 50s context) could be considered as

Ginsberg, Jack Kerouac (who then wrote Dharma Bums), and Philip Whalen». ‘Zen Boom’ <<https://pluralism.org/zen-boom>> [accessed 9 January 2025].

²⁰⁶ Jack Kerouac, *Scrivere bop* (Mondadori, 1999), p. 41. Author’s translation.

²⁰⁷ Which could not be reproduced here because too long, but available at the time writing, [here for Howl](#) and [here for Footnote to Howl](#). Ginsberg, ‘Howl’. and Allen Ginsberg, ‘Footnote to Howl’, *The Poetry Foundation*, 2017 <<https://www.poetryfoundation.org/poems/54163/footnote-to-howl>> [accessed 14 January 2025].

²⁰⁸ Here is why the term contraculture is difficultly applicable to the phenomenon of counterculture: it is just needed a conflict situation to be considered as contraculture, so that the Beat Generation is no different from adolescent conflict.

²⁰⁹ Gitlin, *The Sixties*. And Issitt, *Hippies*, p. 3.

²¹⁰ Note how “hippie” it feels the word «hippie» typed in the “Windsor” font. Wonder why? Ask Stewart Brand. (see **Hermeneutic Analysis of the Whole Earth Catalog**)

²¹¹ The term “hippie”, together with the (different) term “hipster” (coined in the ‘40s and still used to denote some subcultures of the 50s, sometimes even beats, though they wished to deviate and distinguish themselves from hipsters *strictu sensu*), comes from the term “hip”, which comes «directly from a much earlier phrase, “to be on the hip”, to be a devotee of opium smoking—during which activity one lies on one’s hip.». Ned Polsky, *Hustlers, Beats, and Others* (Aldine Publishing Company, 1967), p. 151.

²¹² Issitt, *Hippies*, p. xi.

the first drivers of counterculture, one factual, the other more ideological: the establishment of diverse, blue-collar communities in certain cheap-housing areas in the States, and the “psychedelic movement”. In specific areas of the USA metropolises where housing was cheap, notably, Haight-Ashbury²¹³ in San Francisco, Greenwich Village²¹⁴ in New York, Sunset Strip in Los Angeles, there established very diverse communities of «African Americans, whites, Hispanics, gays and lesbians living in relative harmony»²¹⁵. A little later, in the early 60s, two figures, former beat Ken Kesey²¹⁶ and Timothy Leary, psychology Ph.D., became the major proponents of “psychedelic spirituality”, the first through his “Furthur” bus tour through the country, the second through scholarly studies on hallucinogens at Harvard University¹⁰⁷.

Harvard, (much) LSD and a Tibetan “Book of the Dead” It is relevant to dwell a little bit more on “psychedelic spirituality”, to better understand its nature, since it will be an important element and influence in Stewart Brand’s life. The main focus will be on just one²¹⁷ work, *The psychedelic experience*, a 1964 «self-declared “manual”»²¹⁸ on the stages of the psychedelic experience modeled after the *Tibetan Book of the Dead*²¹⁹ started in the 1962, after Leary’s first, lifechanging experience with psychedelics in Mexico, prior his ouster from Harvard (in 1963), at the start of his “research projects” on psychedelics, together with Richard Alpert (“Ram Dass”) and Ralph Metzner. Although it did not end becoming a “classic” like Aldous Huxley’s 1954 *The Doors of Perception* or Alan Watts’ 1962 *The Joyous Cosmology* (for reasons that will be soon clear), it became the 60s “reference textbook” for their inner spiritual quest through psychedelics and hence the cornerstone of the newborn «entheogenic esotericism»²²⁰ that characterized the 60s. The work is based on the

²¹³ Famous San Francisco district, named like that because on the intersection between Haight and Ashbury streets.

²¹⁴ New York’s district that was previously frequented by the Beats Generation; in fact it experienced the passage from Beats coffee shops to hippies’ dens.

²¹⁵ Issitt, *Hippies*, p. 3.

²¹⁶ Close friend of Stewart Brand.

²¹⁷ To analyze every form of countercultural spirituality would require a thesis of 950, not 95. Considering, furthermore, that the main focus of this work is not on spirituality and that this work has been one of (if not the) most influential books on countercultural spirituality, it has been recognized as a just compromise.

²¹⁸ Erik Davis, ‘The Psychedelic Book of the Dead’, *Nova Religio*, 21.3 (2018), pp. 47–73 (p. 49), doi:10.1525/nr.2018.21.3.47.

²¹⁹ From the World History Encyclopedia, «*The Tibetan Book of the Dead* is the English translation of the Tibetan texts known as *bar-do thos-grol* (*Bardo Thodol*) – “Liberation Through Hearing During the Intermediate State” – and serves as a guide for the soul of the deceased after it has left the body and before it is reborn. The texts were first written in the 8th century CE, discovered in the 14th, and translated into English in the 20th century by the American scholar and anthropologist Walter Evans-Wentz (l. 1878-1965), who was also a spiritualist. Evans-Wentz’s translation became the standard English version most people in the modern day are familiar with and the one other English-speaking authors usually draw from.

Evan Wentz’s Theosophical understanding of the work, supported by the Swiss psychiatrist and analyst Carl Gustav Jung (l. 1875-1961), has established the book as a popular guide in self-transformation, in recognizing the illusory nature of existence, used to free oneself from misconceptions which keep one bound to repetitious cycles of self-destructive or self-limiting behavior. This was not, however, the original purpose of the work», which was to be read aloud by a Tibetan Buddhist monk to the deceased ones to calm the frightened souls that had to confront with their worldly deeds, their *karma*, before transitioning through the *bardo* into another worldly life form. Joshua J. Mark, ‘Tibetan Book of the Dead’, *World History Encyclopedia* <https://www.worldhistory.org/Tibetan_Book_of_the_Dead/> [accessed 16 January 2025].

²²⁰ Wouter J. Hanegraaff, ‘Entheogenic Esotericism’, in *Contemporary Esotericism*, Gnostica, I (Routledge, 2014).

so-called “perennial philosophy”, that is the belief that every religious phenomenon comes from a common, eternal matrix. Perennialism is usually intended in a “traditionalist”²²¹ way, though, in the belief of the author, psychedelic spiritualists believed in a slightly different “experiential”²²² version of it. According to the experiential view (see note 222), it is perfectly possible to (1) interact with religious *corpus* belonging to other cultures and peoples and (2) “undress”, emend, truncate it in order to adapt to the new culture, insofar one is in tune and had recognized its “experiential core”: this is what Leary does when reframing *bardo* and the wider *Tibetan Book of the Dead* in his *The Psychedelic Experience*. In the words of Erik Davis «the most striking aspect of the book [...] is how brazenly and indelicately the book borrows and then reframes a core text of Tibetan Buddhism for contemporary purposes»²²³, offering «historians of religion an unusually stark example of cross-cultural appropriation—East to West, medieval to modern, esoteric to pharmacological»²²⁴. That is why, then, «even within the esoteric world of countercultural discourse, which has a high tolerance for weird cross-cultural sampling, Leary’s audacious cut-and-paste revisions have helped prevent the book from achieving the “classic” status»²²⁵ and «all three of *The Psychedelic Experience*’s authors even felt compelled to distance themselves from its incautious pages»²²⁶. It is this view of perennialism that consecrated the

²²¹ “Every religion is an unveiling by the same heavenly entity”. According to this vision, every religion is a branch of the same original tradition, the same original *non-human* gnosis, which had been handed by God to humans to be jealously preserved and handed down *in saecula saeculorum*. In this point of view, Tradition is the anchor of salvation for all times, the center where one could return despite the surrounding degeneracy in the world. What is “perennial”, in this conception of perennialism, is the whole Tradition, as granted to humans by God in its infinite grace. Note, in the next note, as in the “experiential” version of perennialism the shift changes from the centrality of God to the centrality of the human. Paul Draper, ‘Perennialism and Religious Experience’, *Religious Studies Archives*, 2020, pp. 1–7.

²²² “Every religion has the same experiential core”. This is usually the thesis of the 60s perennialists, a sort of fusion of traditionalist perennialism with “Eliadean” phenomenological approach. Here, what is really “religious”, in the sense of “transcendent”, is not religion *per se*, but its experiential core, the “experience of the true nature of reality”: religion is just the “description” in the terms of the culture of reference (hence the apparent differences between religions) of that same transcendent experience (tradition as description), that is made *by the human*. Here God or Brahma are not eliminated, since *they are* the transcendent experience, the Ultimate Reality, but they are hidden, yet to be found: it is the human that, *motu proprio*, decides to “reach” it. What is “perennial” in this conception of perennialism is just the transcendent experience of the divine that every human can have, as intrinsic right or feature of their humanity, by looking *at themselves*, at *their interiority*.

²²³ Davis, ‘The Psychedelic Book of the Dead’, p. 49.

²²⁴ Davis, ‘The Psychedelic Book of the Dead’, p. 50. A very simple but clear example is the juxtaposition between the experience of dying in psychedelic experiences and the *topos* of the death and rebirth of the initiate of an esoteric cult.

²²⁵ Davis, ‘The Psychedelic Book of the Dead’, p. 49.

²²⁶ Note that, as said, this is a description of the features of the so-called “psychedelic spirituality” through Leary’s work, in the belief that this could help better understand the context where the Whole Earth Catalog—and organicism—developed, so, for example, the issue of cross-cultural “creative” referencing is relevant only in its being a feature of psychedelic movements, as well as its being originating from an “experiential” version of perennialism. Nonetheless, some brief comments can be made on the matter. Cross-cultural “creative” interpretation of Eastern texts should not be immediately defined as “cultural appropriation”, at least if one does not want to risk falling in the “westcentrism” one is criticizing. The notion of “tradition” in the East is not always the same of the West: sometimes, if not usually, that is the case. For some Eastern religious or esoteric disciplines, the term “tradition” does not merely mean conservation and transmitting of old scriptures with their fixed interpretations, but passing on living word, that knowledge that has to be adapted to the changing circumstances. It is widely known the widespread belief that Bodhidharma, the legendary monk who, supposedly, brought Buddhism to China, diffused teachings very different from the original ones (much less

hippie tendency to look eastward to connect their psychedelic (and not) inner search with eastern philosophy.

This, in turn, ironically generated a feedback loop in that many back-in-the-day hippies, later become scholars, gurus, monks or simply translators of Eastern works, started writing western versions of Eastern works that were (consciously or unconsciously) influenced by hippies' re-elaborations. An example²²⁷ is 2000 book *You Are the Eyes of the World*, a translation of the *The jewel Ship: A Guide to the Meaning of Pure and Total Presence, the Creative Energy of the Universe*²²⁸, Longchenpa's synopsis of a tantra introduction of Dzogchen, the highest *yāna*, or liberation vehicle of Nyingma Tibetan Buddhist school, by Kennard Lipman and Merrill Peterson²²⁹, where the title of the Western translation is taken from Grateful Dead's song *Eyes of the World*²³⁰. There is no risk of coincidence, since in the very first written page, even before the page with the title and authors, appears the full refrain of the song: «wake up and find out / that you are the eyes of the world, / Wake now, discover that you are the song / that the mornin' brings».

The second element that is relevant to note in order to fully understand the dialectical characters and the religious implications of this work and modality of thought is that *The Psychedelic Experience*'s interpretation is a *materialistic* one²³¹, in the sense that the peak through the “veil of Maya” into the “fundamental nature of reality”, Ultimate Reality «can be accessed *through spiritual techniques*»²³². In other terms, as it also commonly expressed, it is a form of *realization*, as Gilles Grelet has clearly described in his *Theory of the Solitary Sailor*²³³. Enlightenment is a *not-yet* realized state that could *obtained* through the manipulation of the brain's neurotransmitters. Enlightenment is not something that is “out there”, in a transcendent plane of existence, but something that is “right here”. It is not the Buddhist Mahayana ideal that “one is already a Buddha”, because there is a *Streben*, a doing, an effort as symbol of truth²³⁴, and not a non-doing (*wu wei*), to reach the “liberating experience” nor it is neither a strictly transcendent experience as it can be obtained through “material” means. The LSD experience, however much of “an incredible” or “transformative” experience, it remains an experience: in this the LSD experience is similar

philosophical and contemplative while more practical and straightforward) to appeal to the more practical Chinese people^(a). Even more so in the case of the *Bardo Thodol*, which was a *terma*, a sacred text that had been, allegedly, kept secret, “hidden” by the author until the right time, when certain qualified “treasure hunters”, the *tertön*, could discover them through profound states of meditation and transcribe them in written form (in case it was not clear, there was no “original” scroll found hidden in some physical cave: the *tertön* discovers them hidden in the spiritual realm)^(b). What, for a commentator, could be the “real” problem in Leary's account, is the second element of this review.

^(a) Red Pine, *L'insegnamento zen di Bodhidharma* (Ubaladini, 2006).

^(b) Davis, ‘The Psychedelic Book of the Dead’, pp. 55–58.

²²⁷ Erik Davis, ‘You Are the Eyes of the World’, *Techgnosis*, 2024 <<https://techgnosis.com/you-are-the-eyes-of-the-world/>> [accessed 16 January 2025].

²²⁸ In Tibetan *byang chub kyi sems kun byed rgyal po'i don khrid rin chen sgru bo*.

²²⁹ Klong-chen-pa Dri-med-'od-zer, Kennard Lipman, and Merrill Peterson, *You Are the Eyes of the World: Longchenpa ; Translated by Kennard Lipman and Merrill Peterson under the Inspiration of Namkhai Norbu* (Snow Lion Publications, 2000).

²³⁰ Grateful Dead, *Eyes of the World*, Wake of the Flood, 1973.

²³¹ Davis, ‘The Psychedelic Book of the Dead’, p. 50.

²³² Emphasis added.

²³³ Grelet, *Theory of the Solitary Sailor*.

²³⁴ Pieper and others, *Leisure, the Basis of Culture*.

to the one that mountaineers have when attempting ascents of the highest and deadliest mountains of the world; their experience is usually described as “deeply transformative” for the difficulties, the fears, the emotions they had to deal with²³⁵ and the grandeur of the giant massifs they attempt to climb, that changes their point of view, making them “feel small” and “part of something much greater” than them, or just an occasion to know about themselves, externally and internally.²³⁶ Despite the grandiosity of mountaineer’s enterprises²³⁷, in general they do not come down presenting themselves as enlightened being. As Mircea Eliade briefly and generally says, «neospiritualism» is a «pseudomorphosis» of traditional religions, an a-religious echo of cosmic religiousness²³⁸.

The height of the Haight While the '68 was the paramount year of the Sixties in Europe (for young mobilization), the 1965 was the paramount year for hippies in the USA: on the West Coast hippies were more on the psychedelic and spiritual side, on the East they were more driven by intellectual activism²³⁹, although it was not a rigid rule. The Diggers, symbol of the hippie’s political involvement in cultural revolution, were born in San Francisco. Their idea was that «of the Haight²⁴⁰ community», which in the meantime developed tremendously, between “flophouses”, concert halls, psychedelic rock groups, hippie clubs, parties and acid tests: «work[ing] together, they could create a society free from consumerism, where food and other goods were given free or in return for other services»²⁴¹. Again, the hippie’s ideal was not different from the New Left’s, consisting in an activist concretization of the Beats’ dream: a form of post-capitalist communitarianism, that could overcome either the hypocrisies and individualism of the liberal capitalist “freedom machine” as well as the totalitarian, fascist and communist ideal of the collectivity as a monist entity. Using Koestler’s vocabulary²⁴², hippies’ communitarianism was the perfect balance between the

²³⁵ This is not supported by any academic psychological proof (known by the author), but in this aspect the experience of climbing could be indeed (strangely) similar to that of meditation or psychedelics assumptions (which, in themselves, if seen outside the neospiritualist perspective are a quite strange duo, at least as meditation and mountaineering). Highly dangerous situations, that trigger strong feelings of fear and force the body into strenuous positions or tight spaces could generate an experience of “dispossession”, where the alpinist develops “a distance” between “herself” and her thoughts, emotions, body, which become “managed”, in the same way some Buddhist-inspired meditations are focused on developing “distance” between the Self and his “aggregates”, or the LSD experience of “ego death”. This seems, for example, the sensation described by Denis Urubko: «Lack of oxygen, cold and wind. The higher you go, the more complicated the conditions are. It is difficult to survive there. In such circumstances, a person must always remain a person. [...] Often in mountaineering, the sense of survival takes second place. In the Himalayas this is accentuated by the lack of oxygen. In those circumstances you stop caring too much about your personal safety and act for the accomplishment of the predetermined goal. Perhaps this is a very specific condition, comparable to the attitude of someone going to war or in battle, when you are ready to do anything in the name of the ideal. You simply ‘annihilate’ yourself, you do your duty and, looking back on the path you have travelled, you realise that in a different state of mind you would not have acted as you did. [...] The mountaineer is in full control of the situation, he is able to withstand it, to manage its most complex aspects, but at the same time he is more exposed than anyone else». Various authors, *Perché Lassù* (Mondadori, 2021), chap. 2.

²³⁶ Various authors, *Perché Lassù*.

²³⁷ [and their frequent egomania,]

²³⁸ Eliade, *Il sacro e il profano*, p. 130.

²³⁹ Though «Greenwich Village [was] alive with communal apartments, recreational drugs, and gurus preaching to packed houses of students and spiritual seekers». Issitt, *Hippies*, p. 9.

²⁴⁰ Haight-Ashbury was the district of San Francisco where the hippie developed.

²⁴¹ Issitt, *Hippies*, p. 7.

²⁴² Koestler, *The Ghost in the Machine*.

two natures of the holon: that of individual, wishing to express itself, and the collectivist feeling of being “part of something greater”, wishing to dissolve itself in the fusional unity.

Gatherings, descent and “pop-ization” With the gathering of momentum the number and the size of hippies gathering and parties grew, as well as their political and mediatic relevance. The first event that brought definitively the hippie movement to worldwide renown was the “Human Be-In”²⁴³, held in San Francisco’s Golden Gate Park the 14th of January 1967. The event attracted 20 000 hippies *circa* from all over the USA²⁴⁴ and saw the presence of countercultural icons such as Timothy Leary, Ram Dass²⁴⁵, Allen Ginsberg²⁴⁶ and Alan Watts²⁴⁷. After that, the 1967 Monterey International Pop Festival, «the first of the big outdoor music concerts»¹¹⁷ that will pave the way to the famous “Woodstock” Music and Art Fair and the equally famous “Summer of Love”, whose 100 000 people event earned the title of “hippie kingdom” for San Francisco²⁴⁸. With increased publicity came increased popularity and hostility from non-hippies, police and government, which brought increasing difficulties for the hippies in finding a house or a job, while the hippie movement, like the Beat generation, was starting to “pop-izing”:

*San Francisco and parts of Monterey had become caricatures of hippie culture. In Haight-Ashbury, a tour company offered bus tours of the hippie hangouts and hundreds of new stores opened to sell ‘hippie’ clothing, music, and other paraphernalia. In October of 1967, dismayed by the commercialization of their culture, the Diggers held a ‘Death of the Hippie March,’ coinciding with Ron Thelin’s decision to close his Psychedelic Shop, one of the first hippie businesses on Haight Street [...] By early 1968, the Diggers disbanded and many of the hippie luminaries fled the neighborhood, moving to other parts of San Francisco or to other cities*²⁴⁹.

Furthermore, the high numbers of people coming to Haight Ashbury brought many security problems (violence, drug abuse, rapes), so that the original hippie groups like the Diggers had to establish a Council for the Summer of Love to cope with the issue. According to the “original” hippies, their movement ended just two years after their first debut in the world.

²⁴³ The [Wolfgang’s Documentary and Interviews’s 30 mins documentary](#) of the 1967 Human Be-In shows, beyond all the words, what it meant to be hippie.

Human Be-In - Full Program - 1/14/1967 - Polo Fields, Golden Gate Park (Official), dir. by Wolfgang’s Documentaries & Interviews, 2014 <<https://www.youtube.com/watch?v=HTGyFgyB5Q8>> [accessed 14 January 2025].

²⁴⁴ Issitt, *Hippies*, p. 9.

²⁴⁵ Richard Alpert, a Stanford researcher who collaborated with Timothy Leary’s Harvard research on psychedelics, travelled to India to become disciple of a Hindu guru who gave him the name “Ram Dass”.

²⁴⁶ The beat author of Howl presented earlier

²⁴⁷ ‘San Francisco’s “Human Be-In” Launches the Summer of Love | January 14, 1967’, *HISTORY* <<https://www.history.com/this-day-in-history/the-human-be-in-san-francisco-1967-summer-of-love>> [accessed 14 January 2025].

²⁴⁸ Issitt, *Hippies*, p. 10.

²⁴⁹ Issitt, *Hippies*, p. 10, 11.

This did not mean, however, that the hippie momentum ended: in the East Coast particularly, Jerry Rubin's "yippies" organized events (usually with political connotations) that hosted from fifty to thirty thousand gatherers, the most relevant one the "Youth Festival" of 1968 at the Democratic Convention, which resulted in conflict with the police and in the arrest and trial of Rubin and others, which first showed the direct conflict between hippies and the state¹²².

The legendary Woodstock Music and Art Fair of 1969 could be seen as the last major moment of hippie culture, where the Altamont Free Concert its final blow, especially because of the violent incident with the motorcycle club members "Hell's Angels", who were hired as security, which brought to the death of a man²⁵⁰.

From the 70s on, the "original" "hippie moment" ended, though it not "died". It continued to live in its "pop-ized" version²⁵¹ and started intermingling with the mainstream, with unexpected results that we see until today²⁵². The ideal of "organic communitarianism" as an holonic balance between individual, to which the community had to be tailored, and society, of which the individual was responsible as contributing part, got cut in half in the societal part, given the failure of communes²⁵³, leaving the individual as the end of the holonic chain: everything had to be tailored to himself while he did not have to tailor on anything else. The only individual hippie teachings passed through the 70s filter, or were re-read in an individual manner: «[i]deas that the hippies brought to popular attention, like Yoga and Eastern philosophy, became trends in the 1970s, along with a wave of other obsessions like Silva Mind Control, health food, and jogging»²⁵⁴, «[t]he peace sign, once a serious symbol of political rebellion, became a popular decorative pattern. Yoga and meditation, once seen as earnest attempts to achieve new levels of spiritual consciousness, became fitness fads, and Buddhism, once a potent rejection of Judeo-Christian dominance in America, became a vehicle for self-help literature»²⁵⁵. Journalists like Tom Wolfe²⁵⁶ and researchers like Christopher Lasch²⁵⁷ have denounced and analyzed the rising individualism and narcissism of the 70s onward, whose relationship with the hippies and organicism would be worth analyzing in future researchers.

²⁵⁰ Issitt, *Hippies*, p. 12.

²⁵¹ «The peace sign, once a serious symbol of political rebellion (consider the Vietnam War), became a popular decorative pattern». Issitt, *Hippies*, p. 14.

²⁵² An example is the term "vibe", now established term of the Internet jargon, present also in the "good vibes only" Internet meme culture (an example of which is [this](#)^(a)), which was actually born from the 60s hippies' belief in the existence and the possibility to detect positive or negative energies (in all likelihood what laymen might call "hunch" or intuition) linked to a person, place or thing.^(b)

^(a) '26 Wholesome Memes Filled With Good Vibes', *Know Your Meme*, 2024

<<https://trending.knowyourmeme.com/editorials/collections/26-wholesome-memes-filled-with-good-vibes>> [accessed 14 January 2025].

^(b) Issitt, *Hippies*, p. 13.

²⁵³ The most important countercultural commune, Drop City, failed in the mid 70s. Curl, *Memories of Drop City*.

²⁵⁴ Issitt, *Hippies*, p. 13.

²⁵⁵ Issitt, *Hippies*, p. 14.

²⁵⁶ Tom Wolfe, 'The "Me" Decade and the Third Great Awakening', *New York Magazine*, 2023

<<https://nymag.com/article/tom-wolfe-me-decade-third-great-awakening.html>> [accessed 14 January 2025].

²⁵⁷ Christopher Lasch, *The Culture of Narcissism: American Life in an Age of Diminishing Expectations* (Norton & Company, 1991).

The Whole Earth Chronolog This is the context where the young Stewart Brand, the founder of the Whole Earth Catalog and «the man that invented the Silicon Valley before everyone else»²⁵⁸ lived and extracted his influences, though it could not be defined as a hippie or a beat. He would certainly fall in the generalist, “pop” notion of “genius”: scatter-brained, eccentric, curious, distinctly intelligent, difficult to frame. Stewart Brand grew in an upper middle-class family: «Brand grew up [...] in a midwestern city that defined the America of the 1950s. [His mother,] Julia was president of the Junior League and the family belonged to both the Rockford Country Club and the University Club. He was educated mostly in private schools; his parents had attended two of the finest colleges in the nation; and his extended family was populated by department store owners, bankers and timber magnates»²⁵⁹. His mother was an avid reader and «would make sure that they had all the books imaginable to pursue [...] [the] subject that interested them»¹³³: Brand developed in the same way, so that «much of his outlook on the world has come from reading»¹³³. He developed a deep love for the natural world, and took the commitment to protect the nation's forests, land, air and water by adhering to the “Outdoor Life” magazine pledge. After the schools, he decided to frequent Stanford. Looking outside the train to get there, he was fascinated by the natural landscapes, such as the forests and mountains of the Sierra Nevada. He decided to go to Stanford²⁶⁰, where he «didn’t quite fit in. He was too earnest and a little too talkative»²⁶¹, forging his own path between biology, Western civilization, French and English, writing²⁶², religion, military history, in opposition to the 50s conformism and in line with his fast-changing interests. As he himself will understand more clearly later on, his choices were driven by «a serendipitous approach to life led without a grand plan, keeping an open mind, and doing whatever seems most promising at the moment», the type of life that he exemplified with the motto “Stay hungry, stay foolish” that he put at the end of his Whole Earth Epilog. At Stanford, before becoming the university that led to the creation of the Silicon Valley, before Steve Jobs and Steve Wozniak sold them at Berkely, Brand was tinkering with transistors and “blue boxes”²⁶³. «[H]e attended a lecture by Aldous Huxley, the author of *Brave New World*, who argued that in the future, *biology would become the world’s dominant science*. Inspired, Brand decided that the path was inescapable. Huxley was also the author of *The Doors of Perception*, which recounted his experiences with psychedelics (in his case, mescaline) as tools to unlock an otherwise barricaded path to spiritual ascendance»¹³⁵. Brand started having contact with the new ideals that would soon diffuse in the following years: the application of biology to non-biological subject and spiritual experimentation through LSD.

Brand’s “personal” fear of authoritarianism Like many other in that period, he was frightened by the Communist menace, by the fear that the USA might «become a distant but

²⁵⁸ Andrea Daniele Signorelli, ‘Chi è Stewart Brand, l’uomo che ha immaginato la Silicon Valley prima di tutti’, *Wired Italia*, 2022 <<https://www.wired.it/article/steward-brand-ritratto-silicon-valley/>> [accessed 14 January 2025].

²⁵⁹ Markoff, *Whole Earth*. Chap. 1, par. 3.

²⁶⁰ Which at the time was not yet the internationally renowned institution that is today.

²⁶¹ Markoff, *Whole Earth*, chap. 2.

²⁶² He thought of becoming a journalist at the time.

²⁶³ An outlaw electronic device that let the user make free phone calls from a pay phone.

very important industrially province of the Union of Soviet Socialist Republics»²⁶⁴, that he «would necessarily become small, a gear with its place on a certain axle of the Communist machine. Perhaps only a tooth on the gear». «If it came to war, he would fight, he decided, but not for the president or even for democracy but *rather for his “individualism and personal liberty. If I must be a fool, I want the freedom to be foolish in my own way—not somebody else’s. I will fight to avoid becoming a number—to others and myself”*»²⁶⁵. His deepest fear was not annihilation, or the end of his country, but rather the end of his personal freedom, of his individuality and the constraint of living in a mechanistic system. His fear of the Communists was concretized in the 50s bureaucracy, that he started to know, and despise, in his army experience: «I learned that bureaucracy is terrified of the truth, any truth, and I learned to use it as a weapon»; «I learned of the rage and shame that despotism brings, and I learned the joy of resistance»²⁶⁶.

Californian experiences Through his religion lessons²⁶⁷ he connected with the Beats Generation, attended seminars on mysticism, got interested in Eastern spirituality and participated as subject in a research group to study the relationship between creativity and LSD. After graduation, he tried to work as journalist, published research in biology and ecology, prepared research on personality on the Beat Generation, underwent military training, took photography, design, medieval art, poetry classes at San Francisco State College and Art Institute while exploring northern California. He sensed that «something was afoot»²⁶⁸ there, at the beginning of the 60s. «The spectrum extended from the spiritual, mystical, and chemical [...] paths to mind expansion, to the pragmatic access-to-tools philosophy that Brand pioneered in the Whole Earth Catalog and that would be best expressed by Steve Jobs in the 1980s when he described the personal computer as a “bicycle for the mind”». He thus immersed himself in the already depicted spiral of movements, trends and people that characterize early 60s California²⁶⁹, from psychedelic spirituality to human potential movement. He sought to make converge, or at least dialogue all the inputs he received with his evolutionary biological view of human ecology. «[H]is philosophy was rooted in biology, principally evolution and ecology, and could best be described as “pragmatic”. [...] He had recently dived into Zen Buddhism, and he had been reading about its influence on art; [...] his increasing interest in Zen assumptions, approaches, and values

²⁶⁴ Markoff, *Whole Earth*, chap. 2, par. 2.

²⁶⁵ Emphasis added.

²⁶⁶ Markoff, *Whole Earth*, chap. 3, par. 9.

²⁶⁷ Professor Spiegelberg, having met guru of the calibre of Ramana Maharshi, was a bridge between Western and Eastern thought, like Alan Watts, with whom he helped establish the Academy of Asian Studies in San Francisco, to which the beats Gary Snyder (“the poet of deep ecology”) and Allen Ginsberg participated.

²⁶⁸ Markoff, *Whole Earth*, chap. 3, par. 7.

²⁶⁹ With almost all the figures that have been presented in the 60’s account, Brand has had at least one fleeting encounter. Like Leary and Ram Dass, who «had an equally dramatic personal impact on Stewart Brand»^(a), but also the Grateful Dead, the Merry Pranksters. He participated to and even organized some “Acid Test”, as well as the 1966 “Trips Festival”, a «supersize Acid Test»^(b) out of an idea of the Merry Pranksters. In this context he met people that would later be (important) part of the Whole Earth Catalog, like Lloyd Kahn, who, with Peter Calthorpe built geodesic domes in high school.

^(a) Markoff, *Whole Earth*, chap. 3, par. 9.

^(b) Markoff, *Whole Earth*, chap. 5, par. 4.

was one of the reasons he wanted to try psychedelics»²⁷⁰. While working as photographer, he had connections with IBM, explored American Indian culture by reading books and going to Indian reservations in the southwest to take photos and immerse himself in their culture and rituals, while having experiences with the countercultural groups Merry Pranksters, Loefflers, who introduced him, after marijuana, mescaline and LSD, to the world of peyote²⁷¹. His relationship with counterculture and psychedelics was not the usual “hippie” one; rather, he could not be defined as a hippie first because his experiences predated the “real” hippie moment by at least 2/3 years, secondly because, whenever the pressure on fully integrating in one group or modality of thinking or attitude arose, he would lose interest and flee away (it is the case of the Merry Pranksters).

But the most incisive influence of Stewart Brand was Buckminster Fuller. He «fell under his spell while attending a series of lectures he gave in San Jose in early 1966»²⁷². Fuller’s thinking will be presented later, but his ideas «pro-technology, with a deep faith that the coming of computerization and automation would result in an infinite abundance that would arrive shortly», his appearance as «iconoclastic inventor and futurist», his focus on *whole-systems* thinking fascinated young Brand so much that Fuller will almost always be at the first page of his *Whole Earth Catalog*, in the first section “Understanding *Whole Systems*”.

Whole Earth Prologue One (famous) afternoon of February 1966 Stewart Brand decided to «spend the afternoon tripping on LSD on his rooftop in North Beach». During his trip, he pondered on why he and every other American have not yet seen a picture of the *whole* Earth from space²⁷³. He decided to pursue an answer to that question after his trip, making pin-back buttons with “Why haven’t we seen a photograph of the whole Earth yet?” and sending it to senators, representative, NASA officials, UN officials, even URSS scientists and the Soviet Politburo and, obviously, Buckminster Fuller²⁷⁴ and Marshall McLuhan. The photograph of the whole Earth (whose, relative or not, importance will be deepened in the next chapter), that Brand managed to have in 1967, in Brand’s viewpoint, would (or should) have changed the way people saw themselves and their relationship with others, forcing them to think holistically and realizing in concrete all the holistic theory that have been just a fruit of imagination until that moment. “We are not on the Earth, we *are* the (*whole*) Earth”; “we do not need rockets or spaceships to venture the deep space, we *already are* on ‘Spaceship Earth’²⁷⁵, the ‘blue marble’ venturing the deep space”. But the photo of the whole Earth meant, at least for Brand, something else, too: as phenomenology teaches, it is (almost) impossible to see one’s eyes, for they are what “is seeing”; in order to do it some technology (a mirror, or the NASA geostationary satellite weather and communications satellite ATS-

²⁷⁰ Markoff, *Whole Earth*, chap. 3, par. 9.

²⁷¹ Leary’s “lifechanging” psychedelic.

²⁷² Markoff, *Whole Earth*, chap. 5, par. 8.

²⁷³ With “whole Earth”, Brand intended what in technical language is called a full-disk, “true color” photograph of the Earth. There already existed photographs of the Earth, but they were either black and white or not full-disks photos (or both).

²⁷⁴ Who, understanding too literally the wording, replied that it was impossible to have more than a half circa of the Earth at one time. Markoff, *Whole Earth*, chap. 5, par. 8.

²⁷⁵ *Operating Manual for Spaceship Earth*, not casually, is 1969 book by Buckminster Fuller, probably inspired by Barbara Ward’s *Spaceship Earth*. Richard Buckminster Fuller and Jaime Snyder, *Operating Manual for Spaceship Earth*, New ed (Müller, 2013). Barbara Ward, *Spaceship Earth* (Hamish Hamilton, 1966).

3²⁷⁶), some “power” is needed. To be able to see, “from outside”, a picture of the whole Earth, meant to be able to transcend the limitations of subjectivity, seeing itself as an object, *objectively*, and what is objective pertains to a domain that is “exotic” to the relative world: it meant to reach divinity, it means that we humans, «we are as gods», as the Whole Earth Catalog states in its “Purpose” section, on the first page of it.

In the meanwhile, although not remotely what it would have been like a few years from now, the Midpeninsula of San Francisco Bay Area started the first sparks of «the remarkable technology transformation that was just over the horizon»²⁷⁷. Brand made acquaintance with (sometimes countercultural) young researchers of the Stanford Artificial Intelligence Laboratory and Douglas Engelbart’s Augmentation Research Center at the Stanford Research Institute²⁷⁸, while the bulk of the countercultural and hippie movement was starting to head back to the land. He eventually participated in the Portola institute, an alternative education Menlo Park-based organization founded by Dick Raymond and Bob Albrecht²⁷⁹, that would become «Silicon Valley’s first “incubator”». Albrecht, «a refugee from the mainframe computing world», «had a clear vision of taking computers—at the time viewed by most people as cold, controlling machines—and liberating them so they could be used by anyone». When Brand invited the Pranksters to visit the Institute and Engelbart showed Ken Kesey how the computer let create, modify, share information and texts, Brand’s friend commented «[i]t’s the next thing after acid»: the computer would expand people’s minds as (if not more than) psychedelics. Of a similar idea was Engelbart who, together with Buckminster Fuller, will influence Brand’s conception of “tools”, as instruments through which the individual could emancipate herself by interacting with the environment. While Fuller’s concept of tools was “materialistic”, rooted in systems (rather than ecological) thinking and focused on practical tools, Engelbart influenced Brand in thinking that information itself was a tool. According to Engelbart «the power of computing would transform the world», that the computer «would become a universal intellectual tool», by wiring people in a community where they could share freely information.

After the death of his father in 1968, he decided that he wanted to help his friends struggling with communal, rural life by given them the tools, they usually lacked, to realize their romantic ideals. Their problem was not that they were not capable of addressing the challenges posed by a rural life, just that they did not have the *access to tools*, be they *practical tools and the knowledge to use them*. Recalling L.L.Bean catalog, in its style as well as utility, he decided to make a Catalog, the “Whole Earth” catalog, in honor to his 1966 campaign: not casually, the cover image of the Catalog will be the ATS-3 colored full-disk image of the Earth. The magazine would have listed many books and useful tools, but people needed to reach for them, too: for this reason, Brand set up the *Whole Earth Truck Store*,

²⁷⁶ The satellite that first took the photo Brand was looking for. ‘Our SpaceFlight Heritage: ATS-3 Relays First Color Images of Earth - SpaceFlight Insider’
<<https://web.archive.org/web/20201111234403/https://www.spaceflightinsider.com/space-flight-history/spaceflight-heritage-ats-3-relays-first-color-images-earth/>> [accessed 23 January 2025]. Irony intended.

²⁷⁷ Markoff, *Whole Earth*, chap. 6, par. 1.

²⁷⁸ Two “symmetric” research institutions (reflecting a cleavage that would characterize IT also in the following years): the first focused on develop an artificial intelligence, the second on augmenting the human one.

²⁷⁹ Two of the «best and the brightest [that] were leaving the establishment and striking out on their own» in the 60s. Markoff, *Whole Earth*, chap. 6, par. 1.

which will become the WEC headquarters.

The Catalog would have been the link between LSD and the computer, in sharing information, expanding consciousness, further personal growth and empower people.²⁸⁰

²⁸⁰ (Parts of) The rest of Brand's biography will be presented through the hermeneutic analysis of the Whole Earth Catalog in the second part of this work, when considered useful for the analysis. In that case Markoff's authorized biography, together with the WEC, Brand's works and online interviews will be considered as a (secondary) historic source.

Images

The 50s through advertisement²⁸¹



²⁸¹ 50s: *All-American Ads*, ed. by Jim Heimann (New York : Taschen, 2001).



This one was only a test (atomic detonation in Nevada).

Big reason for better roads

"It has been determined as a matter of Federal policy," reports the President's Advisory Committee on a National Highway Program, "that at least 70 million people would have to be evacuated from target areas in case of threatened or actual enemy attack. No urban area in the country today has highway facilities equal to this task."

But such highways are coming: the 41,000-mile National System of

Interstate and Defense Highways.

This tremendous network of no-stop freeways offers other vital defense benefits, too. Obviously, it will speed the movement of men and materiel. But more importantly, it will encourage the decentralization of our industries. Already more and more plants are following these fine new roads out of congested cities, out into the wide countryside just minutes away by swift, safe freeways.

WHAT EVERY CITIZEN SHOULD KNOW

Don't allow the Interstate-Defense Highway Program to bog down. Find out how it will serve you, how much it will actually cost, how long it will take to finish. Send today for a free copy of an informative booklet, "The Road Ahead." Write Dept. 12T, Caterpillar Tractor Co., Peoria, Illinois, U.S.A.

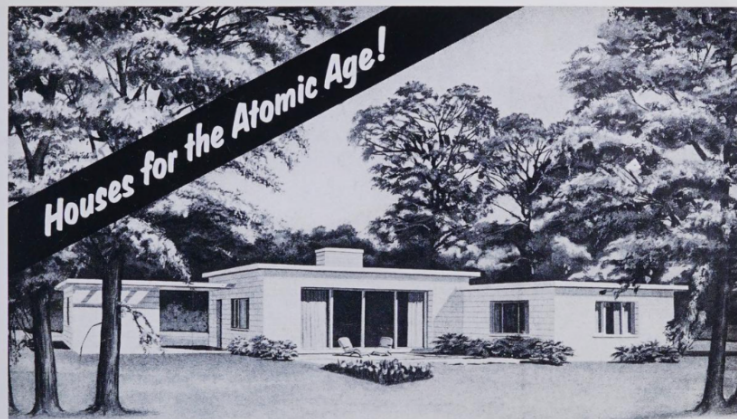
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Now you can protect precious lives with
An all-concrete blast-resistant house

Here's a house with all the advantages of any concrete house—PLUS protection from atomic blasts at minimum cost.

A firesafe, attractive, *low-annual-cost* house, it provides comfortable living—PLUS a refuge for your family in this atomic age.

The blast-resistant house design is based on principles learned at Hiroshima and Nagasaki and at Eniwetok and Yucca Flats. It has a reinforced concrete first floor and roof and reinforced concrete masonry walls. The walls, the floor and the roof are tied together securely with reinforcement to form a rigidly integrated house that the engineers calculate will resist blast pressures 40% closer to bursts than conventionally-built houses.

Anywhere in the concrete basement of the house would be much safer than above ground but a special shelter area has been provided in this basement to protect occupants from blast pressures expected at distances as close as 3,600 feet from ground zero of a bomb with an explosive force equivalent to 20,000 tons of TNT. This shelter

area affords protection from radiation, fire and flying debris as well. And the same shelter area also can serve as a refuge from the lesser violence of tornadoes, hurricanes and earthquakes.

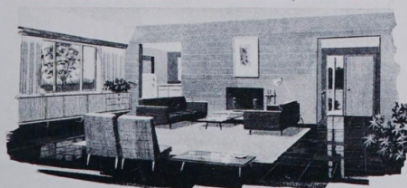
The safety features built into this blast-resistant house are estimated by the architect and engineer to raise the cost less than 10%.

Concrete always has been known for its remarkable strength and durability. That's why it can be used economically to build houses with a high degree of safety from atomic blasts.

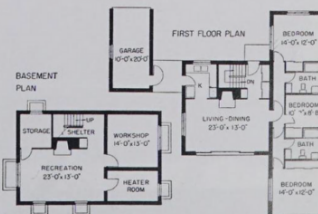
Like all concrete structures, blast-resistant concrete houses are moderate in first cost, require little maintenance and give long years of service. The result is *low-annual-cost* shelter. Write for folder.

PORTLAND CEMENT ASSOCIATION
 Dept. A6-9, 33 West Grand Avenue, Chicago 10, Illinois
 A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work.

Interiors of a blast-resistant house have all the charm and livability of conventional houses.



Portland Cement Association, 1955



The Whole Earth Catalog²⁸²



²⁸² Covers of the six issues, plus three pages of the '68 one, the covers of the first five issues plus three more pages of the '68 issue.

Hermeneutic Analysis of the Whole Earth Catalog

Now that the *context*, of which the *text* is a reflection and to which at the same time it is addressed²⁸³, has been presented, it is possible to proceed to analyze the Whole Earth Catalog itself. All WECs present an almost identical set of units, made of a black cover and back, an introductory page which states the «Function» and «Purpose» of the Catalog, a table of contents²⁸⁴, a page on the Catalog's "Procedure" at the start²⁸⁵ and advertisement pages, a page on the Portola Institute at the end of it. At the center, the content of the Catalog: a list of books and tools with its title or name, a review of it and sometimes, in the case of books, "relevant" excerpts of it, with a photograph of the item next to a ball of the dimension of a hand palm to give an idea of its size. The content is organized in seven sections: («Understanding») «Whole Systems», «Shelter and Land Use», «Industry and Craft», «Communications», «Community», «Nomadics», «Learning»²⁸⁶, not always in this order. The content of each issue is generally reproduced in the subsequent ones (with amendments, updates), making the WEC issues different temporal snapshots of *one unique Catalog*, constantly updated by the WEC staff and the readers, which could submit to the Catalog their own reviews or suggestions to review new items. This reflected Brand's idea of the Catalog «not as a stand-alone document but as *part of a dynamic system*, and throughout its existence he added regular supplements to offer a channel for feedback in what he believed would be a *self-sustaining organism*. Brand's insistence on this *feedback loop* added more currency and complexity to what thus became a sort of "living document"»²⁸⁷.

At first glance, flipping through it, the WEC appears as an abundant and diverse, chaotic though eye-appealing array of photographs (of books, people (clothed and nude), calculators and early computers, backpacks, vises, textiles, guitars, of cities or places of the world from above) textboxes, graphs, drawings, technical plates, architectural tables, cybernetic charts, sketches, handwritten notes, chemical structures, geographical and astronomical maps, geometric figures (including sacred ones), Eastern or ancient characters: it resembles the workbook of a polymath or the rambling of a madman.

The font of the Catalog is the "**Windsor**" type font. As already said, the font, as well as the catalog format and its "straightforwardness" are one of the things that Brand «stole» from the L.L.Bean Catalog. In his words²⁸⁸:

The Windsor typeface I used on the Whole Earth Catalog—that's become now the typeface of hippiedom, apparently, when I look at some of the nostalgia stuff. That was the L.L.Bean-type font that they used. I was building on my father's interest in mail-order catalogs, and L.L.Bean was one of the ones we really liked. There was a

²⁸³ Newman, *Media*.

²⁸⁴ From the Spring 1970 accompanied by a title index and, in *The Last Whole Earth Catalog*, subject index.

²⁸⁵ With information on Ordering from and subscribing to the WEC, reviewing, corresponding, Advertising, Selling, Donating, ethical standards, credits and technical considerations.

²⁸⁶ *The Last Whole Earth Catalog* is the only one which, differently from all the others, is made of 9 sections, result of the separation of «Shelter and Land Use» in «Shelter» and «Land use» and «Industry and Craft» in «Industry» and «Craft».

²⁸⁷ Markoff, *Whole Earth*, p. 169. Emphasis added. Note how the very structure of the Whole Earth Catalog is imbued with Fuller's and Wiener's thinking.

²⁸⁸ Answering the interviewer's question: «When you put out the *Whole Earth Catalog*, how much did you think about the font and style of the early editions?» (see note 289).

straightforward New England honesty about it that I really appreciated.

It would have a leather belt in there for \$2.25. The write-up on it—instead of “This will make you more of a man,” it just said, “This is a pretty good little leather belt for \$2.25.” That pragmatic clarity and succinctness, I took as a model of how to review things in the Whole Earth Catalog.²⁸⁹

Whole Earth Covers The covers and backs of all Catalogs figure an all-black background with a different picture of the earth (except for the Spring and Fall 1970 issues which show a photograph of the Andromeda galaxy and of the sky) for each issue on the center of it. The covers show the title of the catalog in regular or small caps and the regular italic subtitle «*access to tools*» on the top of the page. Bottom left, there is the number of the issue and its dollar price: the first, the Fall 1968 WEC costed \$5, the Spring and Fall 1969 \$4, the Spring and Fall 1970 \$3, while *The Last Whole Earth Catalog*²⁹⁰ \$5. That was in line with Brand’s philosophy of offering an ever-expanding magazine at an ever-decreasing price (the first WEC was 68 pages, the second and third around 130, the fourth and fifth around 150, the LWEC 450). The back cover of each WEC is usually a reproduction of the front one, with some differences, like added images or figures and quotes.

The first WEC front cover shows the already presented ATS-3 full-disk, true color “photograph of the whole Earth”.²⁹¹ The back cover featured the very same photo with written, instead of the title,

***We can’t put it together.
It is together.²⁹²***

The Spring 1969 WEC shows, in its front cover, the famous “Earthrise” photo, the first colored photograph of the Earth from space taken by a human (William Anders) on another astronomical object, the moon²⁹³. The photo «established our planetary facthood and beauty and rareness (dry moon, barren space) and began to bend human consciousness»²⁹⁴. On the back cover, the very same photo, with an open, “tending” hand²⁹⁵ that, “from above”, seems

²⁸⁹ Stewart Brand on *Starting Things and Staying Curious* | *Conversations with Tyler*, dir. by Mercatus Center, 2022

<https://www.youtube.com/watch?app=desktop&v=lBiEBTp8Rko&list=PLS8aEHTqDvpInY9ksIUOOK8Qj_B91o_W> [accessed 28 January 2025].

²⁹⁰ Henceforth “LWEC” only.

²⁹¹ The motifs and meanings behind this first photograph have been already treated in the **Whole Earth prologue** paragraph, in Brand’s biography.

²⁹² Stewart Brand, *The Whole Earth Catalog: Fall 1968* (Portola Institute, 1968), p. 68, <https://wholeearth.info>, <https://wholeearth.info/p/whole-earth-catalog-fall-1968>.

²⁹³ During NASA’s Apollo 8 mission, the first crewed spacecraft to leave Earth’s gravitational sphere of influence, reaching the Moon (without landing on it) and returning Earth unhurt. ‘Opinion | What Did Plato Think the Earth Looked Like? (Published 2018)’, 2018 <https://ghostarchive.org/archive/replay/w/id-eb862c729aa7/mp_/https://www.nytimes.com/2018/12/24/opinion/plato-earth-christmas-eve-apollo-8.html> [accessed 28 January 2025].

²⁹⁴ Stewart Brand, *The Last Whole Earth Catalog* (Portola Institute, 1971), p. 3, <https://wholeearth.info>, <https://wholeearth.info/p/the-last-whole-earth-catalog-january-1971>.

²⁹⁵ The hand was Steve Durkee’s, a collaborator of the WEC.

to collect and care for the little blue ball that is our home, while, next to it, the quote from Harold Morowitz's *Energy Flow in Biology* «The flow of energy through a system acts to organize that system»²⁹⁶. To put it simply, Morowitz's theory is based on the idea that energy is not just the “fuel” of life, i.e. the outsourced charger that powers metabolic reactions, but, given the “unnatural” stably low entropy of life forms²⁹⁷, contributes to the very structural organization of them, since a considerable, constant amount of energy is required to keep entropy in check. This means also that biological *systems*, from humans, to animals, plants and the environment, are all *interconnected* by an unending flow of energy that traverse all things. What Brand (probably) wanted to show with this photo was how the Earth was but a fragile whole, that just by accident is not the desolate land that is our satellite and that we (should) bear responsibility for it²⁹⁸.

In the meanwhile, the WEC started having the huge success that will characterize the *Last Whole Earth Catalog*: reviews and articles, like that of Philip Morrison on *Scientific American*, Nicholas von Hoffman's column on *Washington Post* and many other, like the answer «to get the *Whole Earth Catalog*» the “Uncle Ben Sez” advice column of the *Detroit Free Press* gave to someone who asked “how to go back to the land”, enhanced enormously its fame and portrayed it as “cool”²⁹⁹. In July of 1969 the Catalog made \$8,000 of profits and from the two thousand copies of the first WEC, the Fall 1970 WEC printed sixty thousand copies and had four thousand subscribers³⁰⁰.

But as the celebrity ad the success increased the pressure increased, too and, together with the philosophy of decreasing costs and increasing volume of content of each WEC and the tight rhythms that were needed to reach that goal³⁰¹), the exasperation of the use of nitrous oxide (a psychedelic he decided to switch to because of its convenient quick and brief effect, differently from LSD), and his failing marriage, Brand decided to soon stop with the WEC experience, fixing 1971 as the end date of the Catalog³⁰². In September 1969 he announced, «The CATALOG has but 20 months to live»³⁰³, adding that «[t]he function of the skyrocket is to get as high as possible before it blows»³⁰⁴.

The Fall 1969 WEC front and back cover feature a «paste-job, using color photographs of Earth and Moon from [“]recent[”] NASA Apollo missions. The view is approximately correct for a viewer co-planar with the Moon's orbit, 400,000 miles out from Earth. Due to perspective on the Moon's orbit, the Moon appears closer to the Earth than its actual distance of 30 Earth diameters. When you look through a filter dense enough to distinguish surface

²⁹⁶ Harold Joseph Morowitz, *Energy Flow in Biology: Biological Organization as a Problem in Thermal Physics*, Repr (Ox Bow Pr, 1979).

²⁹⁷ The second law of thermodynamics states that every system tends to state of maximum disorder, which means that the entropy (the measure of “disorderness”) of every system is always increasing. ‘Second Law of Thermodynamics | Britannica’, 2025 <<https://www.britannica.com/science/second-law-of-thermodynamics>> [accessed 18 February 2025].

²⁹⁸ It is easy to see from here the seeds of the ecological turn that Brand will have in the years to come.

²⁹⁹ Markoff, *Whole Earth*, p. 172.

³⁰⁰ Markoff, *Whole Earth*, p. 173.

³⁰¹ *Stewart Brand on Starting Things and Staying Curious | Conversations with Tyler*. Min. 25:40. «[A]s the workload of the Catalog relentlessly increased, Shugart noticed Brand's mood darkening». Markoff, *Whole Earth*, p. 174.

³⁰² Markoff, *Whole Earth*, p. 163.

³⁰³ Markoff, *Whole Earth*, p. 174.

³⁰⁴ It was in one of the meetings that Brand held after the decision to prepare for the “grand finale” of the 1971 issue that writer Gurney Norman proposed himself to include a novel in it, *Divine Right's Trip*.

feature on the planet, the stars are invisible»³⁰⁵. In the back cover version, the big, capital letter «FURTHER» on the top of the page is contrasted by the small, lowercase «closer» under the Earth. The idea here, probably, is to play again on the duality of Earth's astronomical photographs, though in this case, instead of playing on the mystical awe/individual responsibility, the focus here is on distance. The presence of the moon as a sort of yardstick underlines the relativity that underlies every judgment or qualification: we can feel other humans so far from us, though is nothing compared to the distance to the moon; and again we can feel so far from the moon, though it is nothing compared to empty vastness of space. If the first issue taught about our littleness though godlikeness through a photo of the Earth, the third issue's photo enhanced this vertigo showing the entire earth-moon system. But it is not just a matter of “zooming out”³⁰⁶: while the image of just the Earth still gave an idea of anthropocentrism and absoluteness, since the Earth is a “whole” (and nothing exists outside of it), the photo of the Earth *and* some other celestial body gives a different type of “vibe”³⁰⁷, that of scale and relativity, that some years later will be fully expressed with the 1990 Voyager 1's “Family Portrait” set of photographs of the Solar system and of six of its planets, Earth included, portrayed (at a distance of 40 AU) as a “Pale Blue Dot”, that will trigger astronomer Carl Sagan's reflection precisely on relativity and littleness («joy and suffering [...], every hero and coward, every creator and destroyer of civilization, [...] every saint and sinner [...] lived [...] on a mote of dust suspended in a sunbeam»).

The Spring 1970's front cover strikes with a Lick Observatory photo of the M-31 Andromeda galaxy³⁰⁸. Brand's imagination is faster than technological advancements³⁰⁹, as this cover cannot reflect the subjective-objective paradoxical play that characterized the other “photographs of ourselves”, as this is a picture of “something else”, though it shares the same intention of all the others. In fact, Andromeda galaxy is «considered similar to our own in structure and size», and has, on its WEC depiction, a comic “thought” balloon in the point that «approximates the position of Earth in this galaxy». Now the dialectic should be clear: with this further “zoom out”, Brand wanted to emphasize a feeling of smallness that does not lead to nihilism, but to a sense of responsibility for such a rich, rare and fragile system. But the “artefactuality” of this photograph gives also another hint on the point of view of the

³⁰⁵ Stewart Brand, *The Whole Earth Catalog: Fall 1969* (Portola Institute, 1969), p. 129, <https://wholeearth.info>, <https://wholeearth.info/p/whole-earth-catalog-fall-1969>.

³⁰⁶ Which, in any case, will not be the end of it.

³⁰⁷ May you want to justify breaking the formal and academic register to use a word dear to the hippie language of the time (see note 252).

³⁰⁸ *The Whole Earth Catalog: Spring 1970* (Portola Institute, 1970), p. 1, <https://wholeearth.info>, <https://wholeearth.info/p/whole-earth-catalog-spring-1970?format=grid&index=143>.

³⁰⁹ «Why haven't we seen a photograph of *our* whole galaxy yet?», Brand asked in «The Cover» section of the Spring 1970 WEC^(a). Unfortunately for him, still today there is no photo of the Milky Way yet, and won't be for a long, long time: according to known physics, even by travelling at light speed (and right now the fastest man made (space) object goes around 0,059% the speed of light^(b)), it would require (as bare, unacceptable^(c), minimum) more than 200 000 years to get a photo of the “whole Milky Way” (the diameter of which is approximately 100 000 lightyears^(d)). With actual technologies, it would take millions of years (taking the cited “record” velocity of 0,000589 *c*, something around 340 million years).

^(a) *The Whole Earth Catalog: Spring 1970*.

^(b) ‘Parker Space Probe: Fastest Man-Made Object Ever Breaks Speed Record’, *BBC Newsround*, 2023 <<https://www.bbc.com/newsround/67132240>> [accessed 18 February 2025].

^(c) Because for an imaginary satellite to get a photo of the whole Milky Way is not enough to just “exit” the Milky Way: it would need to back away from it “a little bit”.

^(d) ‘Imagine the Universe!’ <https://imagine.gsfc.nasa.gov/science/featured_science/milkyway/#> [accessed 18 February 2025]. 200 000 years because 100 000 years is the time taken by the satellite's trip and 100 000 years the time taken by the information to travel back Earth.

author, that will be even clearer analyzing the Fall 1970 issue: that Brand's *whole-istic* vision is as much made up of photos of the Earth from space at least as much as the photos are the material support for his self-conceived ideal. Reiterating that everyone is a product of the socio-historical context, "Brandism", still, was not a simple byproduct of the photo of the Earth but rather some of the ideas that started to be associated with those photos are a byproduct of his thinking(, too): as it will showed with *The Last Whole Earth Catalog*, the photos of the Earth became for Brand a language, a way to convey ideas or meanings, as the Earth was one of the "golf balls"³¹⁰ of the IBM "Selectric" composer through which he wrote the issues of the Catalog³¹¹; every phase, position, *rotation* of the Earth held a different meaning. If it is surely true that the photo of the Earth spoke through Brand, Brand, too, spoke through them.

If one could think the "galactic" photo to be the last of this series of "zooming out"³¹² (what else could he do, a photo of the Universe? That is really impossible, even for Brand), Brand managed to make an "even larger" photo through a loophole, thanks to a 180° fisheye lens. The front cover of the Fall 1970 Issue of the WEC features a photograph of the sky³¹³, «made one August afternoon [...]this[", 1970] summer a few miles east of Albuquerque with a 180° fisheye lens»³¹⁴, which, through the fisheye lens, appears to the human eye as a sphere, with the same "curving" that a real photographed sphere (like the Earth from space) would have. Under it, the small-typed caption:

«THE UNIVERSE
from planet Earth
on a sunny day»³¹⁵

This photograph is much more "artefactual" than that of the Spring 1970: yes, the sky in a certain sense is the Universe (though it is "as Universe as" planet Earth), especially in the sense of *space*, though it is imprecise to call it «THE UNIVERSE» first because Summer 1970 "Albuquerque's sky" is not "all the sky" and secondly because in this photo the very Earth is absent³¹⁶. Brand probably acknowledged all these faults, though, as already anticipated, the value of the image should be found in its meaning. By shaping the entire

³¹⁰ The IBM selectric composer was a 1961 electronic typewriter that «Instead of the "basket" of individual typebars that swung up to strike the ribbon and page in a typical typewriter of the period, the Selectric had a chrome-plated plastic "element" (frequently called a "typeball", or less formally, a "golf ball") that *rotated and pivoted* to the correct position before striking the paper». 'IBM Selectric', *Wikipedia*, 2024 <https://it.wikipedia.org/w/index.php?title=IBM_Selectric&oldid=139136408> [accessed 29 January 2025].

³¹¹ *Stewart Brand on Starting Things and Staying Curious | Conversations with Tyler*.

³¹² Recall that with the first issue Brand started with a photo of the Earth just outside its atmosphere, then, with the second, a photo of the Earth from the Moon, then, with the third, a photo of the Earth/Moon system from outside, and then, with the fourth one, a photograph of the Earth "in the whole Milky Way from outer space".

³¹³ A «snapshot of the universe», according to Brand and his WEC staff. Stewart Brand, *The Whole Earth Catalog: Fall 1970* (Portola Institute, 1970), p. 3, <https://wholeearth.info>, <https://wholeearth.info/p/whole-earth-catalog-fall-1970?format=grid&index=143>.

³¹⁴ Brand, *The Whole Earth Catalog: Fall 1970*, p. 3.

³¹⁵ Brand, *The Whole Earth Catalog: Fall 1970*, p. 1.

³¹⁶ This reflects the phenomenology paradox of subjectivity-objectivity already introduced in the Whole Earth Prologue, showing that in reality the astronomical photos of the Earth are not at all an overcoming of the phenomenological limit of the partiality of the point of view, and it is really impossible to look at one's own eyes.

Universe (through the image of the sky) as a sphere he wanted to convey the original, ultimate meaning of the whole, as something that has nothing outside of it: if one, like on the Earth, would have traversed it completely, she would finish at the start line, rather than outside of it. If the Earth, which still was in itself a whole, but needed *outsourced* energy in order to function, if the Solar system was a *holon* made of holons that constituted a bigger holon, the Universe would have been the infinite circle made of finite straight lines, the ultimate, “closed” cybernetic system that *contained and was everything*.

The back cover of this WEC features a «composite photo [of the Milky Way] [...] done by Prof. Bart Bok of Steward Observatory at Tucson, [...] sent to us by Carl Sagan in response to our plaint for a photo of the whole galaxy last spring»³¹⁷. To the upper-left of the galaxy there is the caption, similar to the front cover one, «HOME GALAXY / from the home planet / on a number of starry nights»³¹⁸, on the lower-right of it a quote from the introduction of Carl Sagan’s 1970 *Planetary Exploration*:

*There is a place with four suns in the sky— red, white, blue, and yellow; two of them are so close together that they touch, and star-stuff flows between them. I know of a world with a million moons. I know of a sun the size of the Eart— and made of diamond. There are atomic nuclei a few miles across which rotate thirty times a second. There are tiny grains between the stars, with the size and atomic composition of bacteria. There are stars leaving the Milky Way, and immense gas clouds falling into it. There are turbulent plasmas writhing with X- and gamma-rays and mighty stellar explosions. There are, perhaps, places which are outside our universe. The Universe is vast and awesome, and for the first time we are becoming a part of it.*³¹⁹

Finally, on the bottom-right there are two magnified sunflower seeds, that in respect to the “photo” of the Milky Way next to it seems capable to contain or extend for thousands of systems clusters. It is written that they are «sunflower seeds from page 4»: the reference is not to an image, but to an excerpt of 1970 Richard Grossinger’s *Solar Journal: Oecological Sections*³²⁰:

*Beware of whole systemitis.
its the loneliness awareness.
imagine you are a near sighted, bucktoothed, kid, doing sunflower
seeds,
and somebody comes along and puts eyeglasses on you,
holds up a mirror,*

³¹⁷ Brand, *The Whole Earth Catalog: Fall 1970*, p. 3.

³¹⁸ Brand, *The Whole Earth Catalog: Fall 1970*, p. 148.

³¹⁹ Carl Sagan, *Planetary Exploration (Condon Lectures)* (Oregon State System of Higher Education, 1970). Emphasis added.

³²⁰ Richard Grossinger, *Solar Journal: Oecological Sections* (Black Sparrow Press, 1970).

*the takes you out on a hilltop at night,
points up at the little winks out there,
and tells you the aren't really little winks at all,
but great big flashes,
a long way away,
then asks you if you want some more sunflower seeds.*

*you want to throw away the eyeglasses, but it is too late,
you are stuck,
you have seen it,
you are little,
alone,
puny,
except.....
except for a few soft flannel thoughts,
and a belief that there are others like you,
brothers like you,
and that a sunflower seed
is'a whole system too.³²¹*

The poem describes, in a nutshell, the “awakening” to the feelings the Whole Earth Catalog is flagship of: the realization of the vastness of the Universe, the *absence of an ontological or existential difference* between Earth, the Solar system, our galaxy and every other planet, system or galaxy (so that our planet could turn in any moment in every other desolated planet), the littleness and loneliness of earthlings, the sorrow acknowledgement that stars are not “beams” but «flashes», that many of these flashes that have come to us have already died much time ago; but also the hope that among all those planets there could be other “Earths”, many other lifeforms that we will never encounter, and that we should care more for the island we are standing on. But the main (anticipated) meaning why there are these two sunflowers next to the Milky Way is contained in the last two verses of the poem: the *fractal* coincidence between the micro and the macrocosm, the idea that “That which is below is like that which is above and that which is above is like that which is below”³²² that can be found in multiple esoteric, religious, philosophical traditions: Hermeticism, Taoism³²³,

³²¹ Brand, *The Whole Earth Catalog: Spring 1970*, p. 4. Emphasis added.

³²² this statement comes in fact from the legendary Emerald Tablet of Hermes Trismegistus. (See [here](https://sacred-texts.com/alc/emerald.htm)). ‘Emerald Tablet of Hermes’ <<https://sacred-texts.com/alc/emerald.htm>> [accessed 29 January 2025].

³²³ From the concept of *Taiji*^(a) to the various representations of the human body as external settings, like a “mountain ecosystem”, like in the *Neijing Tu*^(b).

^(a) *The Routledge Encyclopedia of Taoism*, ed. by Fabrizio Pregadio (Routledge, 2011), p. 1166.

^(b) Pregadio, *The Routledge Encyclopedia of Taoism*, p. 767.

Buddhism³²⁴, astrology³²⁵, alchemy, even in the medieval-Christian nun Hildegard of Bingen's *Liber divinorum Operum* the human «appears as a microcosm reflecting the laws of the entire cosmos in all his physical and spiritual circumstances»³²⁶. In a (just) slightly different manner, Swami Vivekananda spoke of the “seed” as the receptacle of all the possibilities of life of its future development³²⁷ and hence, a universe in power. This is, in the belief of the author, the meaning of the sunflower seed next to the Milky Way galaxy in the back cover of this issue of the WEC.

As already anticipated earlier in the text and in time by Brand, *The Last Whole Earth Catalog* (1971) was intended to be the last issue of the WEC. In the meantime, however, the WEC's and Brand's celebrity were peaking: the month after the publication of the LWECEC he got invited to the national television audience in the *Dick Cavett Show*³²⁸; the Catalog and the Truck Store became cash machines, the profits up to April 1971 were of \$276,000, the deal with Random House publishing company for the LWECEC publishing (instead of continuing with self-publishing) which sold more than one million copies³²⁹. In April 1972, the LWECEC won the National Book Award in the Contemporary Affairs category, without being it even nominated³³⁰. Pressure to continue it was such³³¹ that, in 1974, he would restart publishing the WEC with the *Whole Earth Epilog*³³² and *The (updated) Last Whole Earth Catalog* an year later, continuing throughout the rest of the century with more or less sporadic

³²⁴ The mandala is «a diagram of the universe»^(a), a «round symbol of a universe, used to represent a deeper meaning»^(b)

^(a) ‘Mandalas: Mapping the Buddhist Art of Tibet - The Metropolitan Museum of Art’ <<https://www.metmuseum.org/exhibitions/mandalas-mapping-the-buddhist-art-of-tibet>> [accessed 18 February 2025].

^(b) ‘What Is a Mandala?’ <<https://studybuddhism.com/en/tibetan-buddhism/tantra/buddhist-tantra/what-is-a-mandala>> [accessed 18 February 2025].

³²⁵ Astrology historically has always used the correspondence between celestial and human events to interpret events on the earth, on the belief that celestial arrangement could somewhat influence non-causally the human one. ‘Astrology - Hellenistic, 3rd Century BC-AD | Britannica’, 2025 <<https://www.britannica.com/topic/astrology>> [accessed 18 February 2025].

³²⁶ ‘Santa Hildegarda Di Bingen — S Hildegarda → Le Sue Opere’ <<https://www.santa-ildegarda-di-bingen.it/it/s-ildegarda/article-le-sue-opere/>> [accessed 29 January 2025].

³²⁷ «The whole great banana tree, covering several acres of land, is enclosed in power in its tiny seed, where the whole mass of its energy is gathered, latent. Similarly, we can imagine a gigantic human intellect already present in the protoplasm of a cell». Swami Vivekananda and Swami Nityabodhananda, *I libri sullo yoga. I, Jnana-yoga. lo yoga della conoscenza* (Ubalini, 1963), chap. Vedantismo pratico (III).

³²⁸ Markoff, *Whole Earth*, p. 192.

³²⁹ Markoff, *Whole Earth*, p. 193.

³³⁰ Markoff, *Whole Earth*, p. 200.

³³¹ In the “History” section of the 1974 *Whole Earth Epilog* the WEC staff wrote: «Some explanation is owed. In May 1971 we ceased making **Whole Earth Catalogs** forever sincerely enough on the expectation that someone would quickly come along and fill the niche better than we did. Well,

1) They didn't;

2) **The Last Whole Earth Catalog** continued to sell 5,000 copies a week with increasingly outdated information;

3) The North American economy began to lose its mind, putting more people in need of tools for independence and the economy as a whole in need of greater local resilience; and

4) After burning our bridges we reported before the Throne to announce, “We’re here for our next terrific idea.” The Throne said, “That Was It.”». Stewart Brand, *Whole Earth Epilog*, 1974, p. 753, <https://wholeearth.info>, <https://wholeearth.info/p/whole-earth-epilog-october-1974>.

³³² The one that got in its back cover the photographs of the dawn from inside and “outside” (same discourse of note 333) the Earth and the phrase «**Stay Hungry. Stay foolish.**». Brand, *Whole Earth Epilog*, p. 770.

publications until 1994 *The Millennium Whole Earth Catalog* and the (really) last 1998 30th anniversary celebration *Whole Earth Catalog*.

The LWEC featured “four covers”, in the sense that the internal page of the cover of the issue features the captioned photograph on the black background that are usually on the front and back covers, too. On the front cover there is the classic title, though bigger in font and not anymore in small caps, the classic subtitle and the central photo of the Earth “at evening”³³³, which, on the one hand recalls “urobologically” the first 1968 issue, on the other gives the clear meaning that this issue marks the dusk of the magazine, as underlined by the classic small caption under the Earth: «Evening. / Thanks again»³³⁴.

The “inside front cover” of the LWEC shows the same front cover of the Spring 1969 WEC, the Earth seen from the Moon, while its “inside back cover” shows the back cover of the Spring 1970 WEC, the Andromeda/Milky Way with the position of the Earth signed by the exclamation mark comic ballon.

The (outside) back cover of the LWEC instead re-proposes the back cover of the first 1968 WEC, the ATS-3 full disk colored Earth photograph with written on top of it «We can’t put it together. / It is together»³³⁵, again reinforcing the link with the first Whole Earth Catalog.

Function and Purpose – The Human centrality One of the most famous pages of the Whole Earth Catalog are that of the function and purpose of the WEC. It is the first page of each WEC, excluding the cover(s), and, differently from the all the other pages chaotically full of textboxes, images, graphs... it is an almost blank page with just these two very brief paragraphs titled «**FUNCTION**»³³⁶ and «**PURPOSE**»³³⁷: this emphasize the importance that Brand wanted to give to this part of the Catalog and, above all, given the nature of the content of the paragraphs, the importance that Brand gave to the ideational part of the magazine, giving proof on how the WEC was not just a back-to-the-land version of consumerist discourse or “just a normal advertising magazine”, but a catalog that held in itself a specific, pre-determined anthropological model. The function paragraph states:

The WHOLE EARTH CATALOG functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.

An item is listed in the CATALOG if it is deemed:

- 1) Useful as a tool,*
- 2) Relevant to independent education,*
- 3) High quality or low cost,*
- 4) Not already common knowledge*

³³³ Obviously, the idea of an Earth “at evening” is incorrect: it means that the earth appears “waning” from the point of view of the satellite that shot it, that for the people on the terrestrial rim between light and shadow in the photo it is sunset.

³³⁴ Brand, *The Last Whole Earth Catalog*, p. 1.

³³⁵ Brand, *The Whole Earth Catalog: Fall 1968*, p. 68.

³³⁶ Brand, *The Whole Earth Catalog: Fall 1968*, p. 2.

³³⁷ Sometimes, especially in later issues, the page is used to list subscribers, supporters or for the explanations of the covers.

5) Easily available by mail.

This information is continually revised according to the experience and suggestions of CATALOG users and staff.

As already anticipated³³⁸, this is *in nuce* the entire philosophy of the Whole Earth Catalog, a philosophy of function and a functionalist philosophy: a functionalist philosophy as borrowed from Buckminster Fuller (on which there will be a deepening when dealing with the content of the WEC), a philosophy of function because Brand's vision of tools, more than a re-edition of Fuller thought, is a reflection of his own life and the deep belief of "Chomskian" resemblance of a "distance" between the "pristine", natural human and the tools, cognitive or material, that as such are used to reach a human-determined result. This idea is further exposed in the purpose section:

We are as gods and might as well get good at it. So far, remotely done power and glory—as via government, big business, formal education, church—has succeeded to the point where gross defects obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing—power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested. Tools that aid this process are sought and promoted by the WHOLE EARTH CATALOG.

For Brand "power and glory", *which acts via government, big business, formal education, church* «had gone about as far as possible»³³⁹ to the point of making more damages than gain. From this assumption it is clear that (1) the "traditional system" has failed in providing an adequate life system for the people and (2) (government), big business, church and the very education system are all different forms or expressions of a single source, which Brand calls «power and glory». But why a magazine that lists mainly books should criticize the education system? Here lies a fundamental nuance that is very similar to the one Zandbergen notes on the countercultural relationship with technology³⁴⁰: Brand's critics is not (obviously) on education itself, but on *a way* of "doing education", that is more about shaping the individual than giving him the tools to be a free, full-fledged human being. Here is clear the "Chomskyan" resemblance: Noam Chomsky's vision of education is strongly critic of traditional education systems, seen by him as instruments of *indoctrination* that, rather than leverage the *natural* human abilities of critical thinking, intellectual curiosity and autonomy, focuses on passively cluttering individuals with predefined sets of information that inhibit their ability of critical thinking and facilitates integration and conformation into predefined

³³⁸ Hence the philosophy of usefulness and tool-ization and Shannon's theory of information influence will be omitted (also because it will be treated when speaking of the content of the WEC later in the chapter).

³³⁹ Markoff, *Whole Earth*, p. 166.

³⁴⁰ Zandbergen, 'Acceleration and Gnostic Timelessness in Silicon Valley: How Gnostic Spirituality Has Come to Matter in the "Information Age"', p. 35.

ideologies or social norms³⁴¹. Has already seen, the countercultural dialectic is founded on the idea that society (or a more abstract notion of it³⁴²) has somewhat enslaved, limited the capacity of expression of the human which, by nature, is much more imaginative, creative, freer than how it is under traditional societies, hence a work of *emancipation* is needed: the WEC is the instrument that serves the *purpose* of constructing the «realm of intimate, personal power [that] is developing—power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested». There is sufficient margin to believe this “realm of personal power” to be different from Lasch’s narcissism of the 70s USA, though obvious interesting connections could be made between the two cases: apart from the rhetoric of the individual emancipation, the delegitimization of societal and traditional values and the very critics to materialism that led to neospiritualist positions on human empowerment³⁴³ or the remarking on “learning to trust oneself, one’s feeling”, seems the perfect soil for narcissistic proliferation, though not (necessarily) immediately narcissistic in themselves³⁴⁴. Counterculture and Brand’s statements could not be seen as a proto-form of narcissism, in the point of view of the author, because (1) it is rather a form of *negative* emancipation, rather than a *positive* ego hypertrophy and (2) the countercultural discourse is centered on a (non-specified) “humanity” or individuality rather than ego-centeredness of people, which is instead (even unnecessarily) demonized by the especially spiritualist branch of the hippies³⁴⁵. In countercultural discourse, the individual who is *naturally* perfect is subjugated by “Moloch”, and only through emancipation from it the individual can *regain* assets that *have always been* hers: it is different from the stark hedonism and mania of realization, the conflicting crowd of “Mes” that tries to define itself by stepping over all the others³⁴⁶.

Function and Purpose – “We are as gods”³⁴⁷ Of the “Purpose” paragraph every sentence has been analyzed except for the very first, which happened to become one of the most famous quotes of the WEC (after probably «Stay hungry, stay foolish»), so that the 2021 documentary film on Brand’s life directed by Alvarado and Sussberg was titled on the first part of it: «We are as gods and might as well get good at it». The philosophy behind it has already been presented: «the photographs of earth from space had that god-like perspective» and, if it was really true, we had a very big responsibility in preserving our little h(e)aven, hence, as Brand will correct later, «have to get good at it»³⁴⁸. Though, the idea of the godlikeness of humans came from Edmund Leach, a British social anthropologist interested on human-environment relationship and interconnectedness, as he later

³⁴¹ Noam Chomsky, *Capire il potere* (Il saggiatore, 2017), chap. 7, «La funzione della scuola». and Noam Chomsky and Donaldo Macedo, *Chomsky on Mis-Education*, Critical Perspective Series (Rowman & Littlefield Publishers, 2004).

³⁴² See **Literature review – Whole Systems** – Zandbergen’s article’s review.

³⁴³ Remember “I am the eyes of the world”, “the Self-Atman coincides with Ultimate Reality”.

³⁴⁴ Despite other (different) faults already presented. In any case, the impact the counterculture has had on the rising narcissism in the 70s American society is an interesting possible line of research that should be deepened.

³⁴⁵ Recall, for example, «Moloch whose name is the Mind». Ginsberg, ‘Howl’.

³⁴⁶ The difference, however, is very blurred, take the case of the hippie’s «belief that reliable information could be gained by attending to one’s innate feelings about the world»: how much is this “reappropriating one’s life” and how is it pure egotism? Issitt, *Hippies*, p. 13.

³⁴⁷ References of the WEC elements will be that of the LWEW for tidier referencing, as any element of the other issues of the WEC is also on the LWEW as well as many dedicated sections appear only in the LWEW.

³⁴⁸ ‘WE ARE AS GODS AND HAVE TO GET GOOD AT IT | Edge.Org’

<https://www.edge.org/conversation/stewart_brand-we-are-as-gods-and-have-to-get-good-at-it> [accessed 31 January 2025].

acknowledged. «A *Runaway World?*, a book based on his lectures, begins: “men have become like gods. Isn’t it about time that we understood our divinity?”»³⁴⁹.

Understanding Whole Systems – Brand’s “wholism” Of all sections of the Whole Earth Catalog, the *Whole Systems* one is the most “authorial” and inspired section³⁵⁰, the fullest and most complete exposition of “Brandism”. It is the first section of the WEC (not coincidentally) and the one that, more than anyone else, seemed more of an ideological manifesto than a section of a Catalog which listed useful and pragmatic tools. The first page in every issue of the WEC (except for the Fall 1970 one) is dedicated to Buckminster Fuller and his works, highlighting Brand’s devotion for its revolutionary and tool-centered approach: the concept of grating “access to tools” for self-sufficiency and individual empowerment was Fuller’s, as well it was Fuller’s too the already cited idea of humans’ responsibility in the use of natural resource and in the maintenance of the «Spaceship Earth»³⁵¹.

Richard Buckminster Fuller (Milton, Massachusetts 1895 – *Los Angeles, California* 1983) was an American engineer, architect, inventor and futurist to whom is owed, among others, the hippie-famous geodesic dome (the structure of the houses of the famous Drop City commune)³⁵², substantiation of his vectorial system of geometry that he called “Energetic-Synergetic geometry”, based on the assumption «that there is in nature a vectorial, or directionally oriented, system of forces that provides maximum strength with minimum structures, as is the case in the nested tetrahedron lattices of organic compounds and of metals»³⁵³. The first 1968 issue’s page on Fuller starts by stating «The insights of Buckminster Fuller are what initiated this catalog»³⁵⁴ continuing with a very interesting statement that describes one core feature of organicist philosophy: «People who beef about Fuller mainly complain about his repetition — the same ideas again and again, it’s embarrassing.. It is embarrassing, also illuminating, because the same notions take on different uses when re-approached from different angles or with different contexts, Fuller’s lectures have a raga quality of rich nonlinear endless improvisation full of convergent surprises». The idea is that, according to Brand, there are common underlining principles common to different *systems, whether mechanical, biological, ecological or social*. This conception of systems comes from another “Brandian” point of reference listed in this section: Ludwig von Bertalanffy’s General Systems theory:

By definition General Systems is a mixed bag. Kinds of systems covered in the Yearbook include Biological, Social Psychological, Games, Linguistic, Political, Cybernetic and Meteorological. Throughout is the search for common dynamics that transcend them

³⁴⁹ Markoff, *Whole Earth*, p. 165.

³⁵⁰ The first pages of the *Whole Systems* section will become WEC’s trademark, a symbol everywhere recognized of the “funky”, futurist, homespun yet somewhat aesthetically pleasing style, taken several times in the “far” future (together with the whole Earth picture) to present it or make it unmistakable. This is the case, for example, of the 2021 documentary film on Stewart Brand *We Are As Gods*, whose Press Kit is “made of” the first pages of the *Whole Systems* section of the first WEC. Press kit can be found [here](#) or from the [film’s site](#). *We Are As Gods*, dir. by David Alvarado and Jason Sussberg (Stripe Press, 2021).

³⁵¹ Fuller and Snyder, *Operating Manual for Spaceship Earth*.

³⁵² But also the structure of the USA pavilion for Expo 67 in Montreal. ‘R. Buckminster Fuller | Engineer, Architect, Futurist | Britannica’, 2025 <<https://www.britannica.com/biography/R-Buckminster-Fuller>> [accessed 13 February 2025].

³⁵³ ‘R. Buckminster Fuller | Engineer, Architect, Futurist | Britannica’.

³⁵⁴ Brand, *The Whole Earth Catalog: Fall 1968*, p. 3.

*all. It's technical, mathematical business, heavy reading, and maybe trivial, maybe wishful; but every here and there is a gleam of something that might be a window into broad mindscapes.*³⁵⁵

The Fall 1968 issue then follows on the same design idea behind the WEC covers: that images could lead to a consciousness change. Photographs, drawings, maps, graphs would have been the implicit way to peek into those «broad mindscapes», symmetrically to explicit system theories. The next two pages are hence dedicated to photographs and drawings of space, Earth, human body, cities from different points of view, like from above³⁵⁶ or from outer space.

Books on images are then followed by equally appealing (and weird) pages with drawings of fishes, bones and other biological elements, together with their geometric rationalization: the idea is the same of Fuller's and Bertalanffy's, though applied in the case of forms, geometry and design, the last of which will be one of the staples of Brand's approach that will be later analyzed. After a black page entirely devoted to a book on *yantras*³⁵⁷, the last two pages of the WEC first issue's *Whole Systems* section are dedicated to Jung's *Psychological Reflections* («Jung in capsules [...] In a world increasingly subjective, everybody is psychologists to one another. *Here is one master book of tools*»³⁵⁸), Wiener's «sequel to cybernetics» («one of the founders of an n-dimensional inhabited world whose nature we've yet to learn»), Arthur Koestler's *The Ghost in the Machine*, which gave title to this work (though Brand seemed not yet interested in holons), and lastly two books of *future studies*.

With the subsequent issues Brand's systemic vision gets “blunter” and more ecological, in the twofold sense of more biological and less on a middle-way “linear interdependence” while more on a cyclical, fully cybernetic ecological vision, which will be fully completed with Batesonian thinking, which he will delve in after the “end” of the WEC experience. As Brand will later explain in an interview:

«When I came across Gregory Bateson, he was sort of the corrective for Buckminster Fuller for me, because Fuller was so totally an engineer, what Bateson would call the input-output approach to understanding and solving everything. Whereas Bateson was much more. He was aware that every system is basically self-referential to some degree—that's the thing Fuller would never take on—and hierarchically organized at a very deep conceptual level, that we are

³⁵⁵ Brand, *The Whole Earth Catalog: Fall 1968*, p. 8.

³⁵⁶ *The Whole Earth Catalog: Fall 1968*, p. 6.

³⁵⁷ «yantra, in Tantric Hinduism and Vajrayana, or Tantric Buddhism, a linear diagram used as a support for ritual. In its more elaborate and pictorial form it is called a mandala. Yantras range from those traced on the ground or on paper and disposed of after the rite, to those etched in stone and metal, such as are found in temples». ‘Yantra | Hinduism, Rituals, Symbols | Britannica’, 2025 <<https://www.britannica.com/topic/yantra>> [accessed 13 February 2025].

³⁵⁸ Brand, *The Whole Earth Catalog: Fall 1968*, p. 11. Emphasis added.

always immersed in the system that we think we were isolating something from»³⁵⁹

Nonetheless, for the whole duration of the WEC (and his life) Brand will remain firm in the “Fullerian” pragmatism and tool-oriented approach: this have to kept in mind, especially later, when dealing with the *Communications* and *Learning* sections of the WEC³⁶⁰.

Land, Shelter, Industry – Countercultural craft and design These sections of the WEC, usually organized in the two sections *Shelter and Land Use* and *Industry and Craft*³⁶¹, consist of the most “practical” part of the WEC, in the twofold sense that (1) they completely consist of “tools” not only in a “Brandian” but also common sense, “input” know-how tools (like a book on «man-water relationship»³⁶² on «ancient techniques, theory, flow in pipes and channels») and practical tools (like hand pumps, pitcher pumps and hydraulic turbines³⁶³)³⁶⁴ and (2) there is not much “Brandism” as compared to the previous (and others, too) section, which will give them less importance for our analysis. Apparently, Brand neither gave so much space to this content, which should allegedly be the most important part of a magazine whose main ideal is to help counterculturals in carrying on (from a practical point of view) their countercultural way of life: the average space these two/four sections occupy in the WEC goes from 28% to 31%, with the only exception of Fall 1969’s 37%³⁶⁵. These sections contain information on (1) plants and agriculture: how to recognize them (books on edible vegetables, trees, herbs, weeds, flowers, wild plants and flowers, psychedelics or marijuana), retrieve the seeds, keep them (greenhouses, gardens), water them (hydraulics, hydroponic systems), keep them away from parasites and “bad” insects (especially through cheap, eco-friendly ways, e.g. through antagonist species like the ladybug for aphids), fertilize the soil (again through natural means, like worm farming), trash them (composting systems), whether you live in the countryside, suburbs, full city or if you decide to “go back-to-land”; (2) farming and animals, be they domestic ones, livestock or wild animals: how to construct and maintain a farm where to keep goats, pigs, chickens, cows, horses, rabbits, how to cure them and dispose of their meat and furs or excrements, giving pro and cons on raising that or that other animal farm³⁶⁶, how to have a lively beehive out of the bee nest that is always on your

³⁵⁹ Stewart Brand on *Starting Things and Staying Curious* | *Conversations with Tyler*. Min. 12:38

³⁶⁰ No more is said about this paramount section because, as Brad recognized regarding Fuller’s works, it would have been a repetition of the same concepts again and again: whole-ism and tool-ization.

³⁶¹ Though in the last WEC, probably for the high number of elements, the two sections were split in four different sections: *Land Use*, *Shelter*, *Industry*, *Craft*.

³⁶² Brand, *The Last Whole Earth Catalog*, p. 72.

³⁶³ *The Last Whole Earth Catalog*, p. 71,72.

³⁶⁴ As it will be shown (and it has already been shown) there are different degrees upon which some knowledge is viewed as tool, from *Industry and Craft* practical knowledge on how to build a geodesic dome to *Whole Systems* quasi-ideological manifesto to its various declination in the *Learning* section.

³⁶⁵ Precise space occupied by the total of the two of four sections together in the WEC is:

- Fall 1968: 19/68
- Spring 1969: 41/130
- Fall 1969: 49/130
- Spring 1970 43/150
- Fall 1970 42/150
- LWEC: 130/450

³⁶⁶ «if you raise rabbits you can eat them and tan the hides for clothes to keep you warm», or «I would like to spread the word about the joys of raising sheep. They require almost no work and very little money to care for. In return you get enough wool for yourself, your friends, as well as some extra to sell; excellent manure for your garden (second only to chicken manure in nitrogen content), and, if you're into it, a cheap source of mutton or

attic³⁶⁷; (3) land and building: how to find and buy land, how to modify it through terraforming, like explosives, chainsaws, bulldozers, how to build on it a geodesic dome³⁶⁸ (the symbol of countercultural housing), but also a Japanese house, a pole house³⁶⁹ or an entire owner-built home³⁷⁰, how to build a log house or set inflatables (those of circuses and fairs), how to do carpentry, electric wiring, heating, illumination, how to use plastics for building; (4) engineering: how pieces of technology work, how to replicate, invent, experiment with mechanisms, how to do knots, how to do blacksmithing, how to use working tools, knowing chemistry, physics, materials science, where to get gears, mechanical instruments, lab equipment and supplies, punch presses, ceiling fans, calipers and any other work hardware; (5) artistic occupation: how to do weaving, macramé, printmaking, tea, jewelry, metalworking, glass blowing, plastics, sculpting, candlemaking, bonsai, pottery, knitting and where to get related necessary tools³⁷¹.

Although these sections do not make bold ideological statements, as already said and now showed, there still is some relevance in the type of products listed and how they are listed and presented: many voices, in fact, reflect the *design* behind the whole Catalog. First of all, one can immediately see the tension between pragmatic “tool-ization” and hippie fascination for the ancient and the exotic in opposition to modern, western destructive technology. This is clear in the *Land Use* section funded on the opposition against corporate-led, chemicals-based agriculture and the distribution of more “eco-friendly” homemade solutions, like spraying water and garlic on plantations to keep cutworms and aphids away³⁷², rather than using pesticides, or organic gardening (which has in the LWECA a dedicated space with a dedicated introduction). It is the case of the kerosene lamp, presented in the Catalog as a better alternative to the classic “Coleman lamps”, which are presented as «terrible—they hiss and clank and blind you, just like civilization»³⁷³. These instances show an interesting character of counterculture: how the hippie “back-to-land” movement is not just a “spatial” ideology (that of fleeing cities, going to the countryside nearer Nature), but also of “*returning* to the land”, going *back* to the original, pre-industrial times when (all) people did agricultural work. Ancient methods based on intuitive, implicit knowledge were for them the best one for humans and the whole environment³⁷⁴; here the figure of the aboriginal is paramount, as repository and teacher of a knowledge “lost much time ago”. The aboriginal’s relationship with Earth, soil and environment is a holistic one, based on gaining but also giving and the consciousness of multiple, equivalent interests rather than just one’s own and it is contrasted to that of the colonizer, whose only egoistical interest is that of spoiling the environment of what she needs³⁷⁵. At the same time, every tool or form of knowledge, be it aboriginal or technoscientific, has to be sifted through observation and not mere faith or romanticism: the approach is pragmatic, scientific, interested in the effectivity of the tool regardless of its

lamb which, like all home grown foods, is far superior to anything in the store». *The Last Whole Earth Catalog*, p. 66.

³⁶⁷ Brand, *The Last Whole Earth Catalog*, p. 63.

³⁶⁸ *The Last Whole Earth Catalog*, p. 86.

³⁶⁹ *The Last Whole Earth Catalog*, p. 95.

³⁷⁰ Brand, *The Last Whole Earth Catalog*, p. 94.

³⁷¹ This listing is tiring and chaotic, but has been written in this way purposely to convey the abundance and chaos of the WEC’s rendering.

³⁷² Brand, *The Last Whole Earth Catalog*, p. 54.

³⁷³ Brand, *The Last Whole Earth Catalog*, p. 99.

³⁷⁴ Brand actually never bought the hippie romanticism and will soon completely abandon it. Markoff, *Whole Earth*, pp. 139, 297.

³⁷⁵ *The Last Whole Earth Catalog*, p. 46.

origin³⁷⁶; demonstration is Rudolf Steiner's book on biodynamic agriculture, which is still listed though presented with caution, for its dubious effectivity. The East is obviously the other fundamental repository of knowledge that is found throughout the whole WEC: ancient Chinese technologies can be a source of information «on Taoism and how its influence helped the Chinese discover and utilize some technology long before the West»³⁷⁷ and «taking some of the mechanical inventions of old China [...] and apply them to the hand technology of intentional communities», Buddhism can be an inspiration for a new consciousness shift in economics, from focus on goods and profits to focus on the humans' working experience that produce the good, the humans that consume it and the environment that encloses them³⁷⁸. It is sometimes relevant the very language used to express statement, like in the case of a book on extreme weather events or natural disasters, which are referred to as «larger than normal pieces of cosmic energy»³⁷⁹ that «lean on human affairs».

But there is one very clear element that emerges in these sections and that is very relevant for Brand: design and architecture. For Brand, design and architecture are two faces of the same coin: that of reflecting about the consequences a developed tool might have in a holistic manner, i.e. for the users of the tool, for the environment, for the brief and long term. Good design, for the WEC is design that is in accordance with human and nature, which could pose itself as an artificial, though well-designed *organ* for a greater organism inside a greater organism: good design makes organs, not tools. Lewis Mumford's introduction of 1969 Ian McHarg's *Design with Nature*³⁸⁰, one of the landscape and housing design books on the *Land Use* section of the WEC³⁸¹, states: «there is still only a small shelf of books that deals with man's relation to his environment *as a whole*»³⁸². McHarg's book focuses in fact on the need to account for the interconnected complexity of the environment as we ourselves, as parts of it, depend on it; as the WEC quotes: «George Wald once wrote facetiously that “it would be a poor thing to be an atom in a Universe without physicists. And physicists are made of atoms. A physicist is the atom's way of knowing about atoms”. Who knows what atoms yearn to be, but we are their progeny. It would be just as sad to be an organism in a universe without ecologists, who are themselves organisms»³⁸³, which means that, regardless of the religious and philosophical consequences of this (the neospiritualist idea of “being the eyes of the World”, “the conscious part of the world”, “God that hides and tries to know itself”), we should never forget the “meta-knowledge”³⁸⁴ that we are organisms inside organisms and should consider ecology (the wider metaknowledge) in human (the particular) design of architecture³⁸⁵. Of the same tenor is Paolo Soleri's “arcology”, fusion of architecture and ecology: «[...] Soleri sees the next step in evolution as man's job. He sees that step manifested in an organism and that organism is the city»³⁸⁶. The posture does not change when passing from landscape design and architecture to engineering design: design is/should

³⁷⁶ *The Last Whole Earth Catalog*, p. 46.

³⁷⁷ Brand, *The Last Whole Earth Catalog*, p. 120.

³⁷⁸ *The Last Whole Earth Catalog*, p. 153.

³⁷⁹ *The Last Whole Earth Catalog*, p. 87.

³⁸⁰ Ian L. McHarg, *Design with Nature* (Natural History Press, 1969).

³⁸¹ *The Last Whole Earth Catalog*, p. 82.

³⁸² Lewis Mumford, ‘Introduction’, in *Design with Nature* (Doubleday & Company, Inc., 1971), p. vi. Emphasis added.

³⁸³ *The Last Whole Earth Catalog*, p. 82.

³⁸⁴ See **The Batesonian Turn and the completion of Brand's organicism: from “tool-ization” to “tool-ism”**

³⁸⁵ Again, the clear reference is to the holon-istic view that is at the base of the organicism that is argument of this thesis.

³⁸⁶ Ron Williams, *The Last Whole Earth Catalog*, p. 83.

be an interdisciplinary enterprise (especially for what concern its relationship with biology) modeled on the basis of nature's laws of proportion, harmony, efficiency, flexibility, (ecological) adaptation to context, fluidity, and impermanence of the universe itself, to which everything from the shell to the flower to the planetary system to design itself is (or should be) subject³⁸⁷. «The usual procedure is that R&D comes up with a new process, it's implemented for several years, and then some biologist says Hey did you know porpoises do that? [...] And everybody says My, my, ain't Nature smart. Herr Hertel and colleagues are trying to reverse the order, learn from nature first, save time and stay humble»³⁸⁸.

Community and Nomadics – The countercultural heart of the WEC The *Community* and *Nomadics* sections of the WEC are two different sections of the Catalog, which are nonetheless bound together in this discussion for their structural similarity (they both start on giving information *about* the topic (meta-level³⁸⁹) and then start to suggest tools that could be useful for them³⁹⁰) and because they both reflect two different but fundamental element of the counterculture: the hippie (but also Beat) “on the road” nomadism (as it will be shown, *Divine Right's Trip*, the novel that was published inside the last WEC, will be about the protagonist journey across the US) and communitarianism, pursued through the construction of what Brand calls “intentional communities” or simply communes, like Drop City. For what concerns the *Community* section, it first starts on tools and knowledge *on* (non-square) traditional or primitive communities, theory of communities and so-called “intentional communities”, hippie communes, like the famous Drop City, made of Fuller's geodesic domes built from scrap materials. The idea, already discussed in the historical section, was that it was necessary to (re)build new, more authentic forms of communities which could then bring truer human relationship and the realization of the hippie utopia. In doing this, *context* is at least as important as the subject that lives in it³⁹¹. In Brand's words: «“Don't try to reform man”, says Fuller, “reform the environment”»³⁹².

It then gradually shifts from the meta-level to giving tools useful for keeping a community: first its leaders, how to be a good, not-hated leader (and why they usually are), then accounting, money earning, saving, spending³⁹³; food and nutrition (how to buy it, where to find it, what is its nutritional value, how to cook it), like a Zen baking manual³⁹⁴, recipes on eating insects³⁹⁵, macrobiotic cooking³⁹⁶, wok cooking³⁹⁷, kitchen tending, butchering,

³⁸⁷ This is the position of Paul Jacques Grillo, author of 1960 *What is design?*, first book listed in the *Industry* section of the LWEC. Paul J. Grillo, *What Is Design?* (Chicago P. Theobald, 1960).

³⁸⁸ Brand, *The Last Whole Earth Catalog*, p. 119.

³⁸⁹ In the case of the *Nomadics* section, the three books *The Way of the White Cloud* by Lama Anagarika Govinda, *Troutfishing in America* by Richard Brautigan and obviously Nikos Kazantzakis' *The Odyssey: A Modern Sequel*, «imminently suitable to the Whole Earth philosophy»^(a) on which Brand will later state (in an interview): «Kazantzakis had this sort of “Commit everything to your theory of the world, even if it's wrong.” I got over that also, because that way lies madness and also great destruction, but it was fun to go down that road with him. He's a beautiful writer and thinker.»^(b).

^(a) Thomas Edwards, *The Last Whole Earth Catalog*, p. 254.

^(b) Stewart Brand on *Starting Things and Staying Curious* | *Conversations with Tyler*. Min 6:20

³⁹⁰ In the case of the *Nomadics* section information on vehicles, hitchhiking, mountaineering, horsemanship, camping, and practical tools.

³⁹¹ Again, the hint here is at Batesonian thinking, which will be the missing link that would have closed the circle, unifying cybernetic theory and practice.

³⁹² Brand, *The Last Whole Earth Catalog*, p. 182.

³⁹³ *The Last Whole Earth Catalog*, pp. 184–87.

³⁹⁴ *The Last Whole Earth Catalog*, p. 191.

³⁹⁵ *The Last Whole Earth Catalog*, p. 188.

³⁹⁶ *The Last Whole Earth Catalog*, p. 193.

³⁹⁷ *The Last Whole Earth Catalog*, p. 196.

storing; washing clothes, wine and beer making, sauna building, massages, Go³⁹⁸, dog training, hawking, mental health, fitness emergency, medicine (traditional and folk medicine included), childbirth, breastfeeding, and obviously dope, sex and death. Regarding the second, the focus is on women emancipation, from the sexual³⁹⁹ («Masturbation is not something to do just when you don't have a man. It's different from, not inferior to, sex for two. It's also the first easiest, and most convenient way to experiment with your body. [...] You also don't have to worry about someone else's needs or opinions of you»⁴⁰⁰) to the more absolute gender balance:

*To any men who happen to read this: this pamphlet was not written for you. Please do not use it as a marriage manual; please do not “try out” the “techniques” you think have been suggested here; please do not suggest to your girl that she read it. If you do want to change your behaviour and you are living together, you might start doing half the housework. If you insist on being preoccupied with her as a sex object and want to know specifically what you can do in bed, you might try to become more open to her wants and needs. Listen to what she says, and if you can, do what she asks. In the long run you should try to change your own life, and the society, so that you can be pleased with and proud of yourself without having to exploit her. For either of the sexes to be free, both you and she must be leading worthwhile lives.*⁴⁰¹

To the pressing issue of gender equality and women strive for equal treatment is dedicated an entire page, written by Diana Shugart and Kit Leder⁴⁰².

Even death is declined in a countercultural fashion: opposing to statal and corporations' injustices that want to dispose and profit even from dead people, opposing social norms which mundanize and render grotesque and meaningless such profound event like death, or a society which stigmatizes death to the point that «pathological secrecy has surrounded the event of dying»⁴⁰³. Instead the countercultural death is based on the acceptance of it, rather than its avoidance or suppression, as a natural and necessary fact of life itself («death is recognized for what it is: the end of life on earth, and no attempt is made to hide this»⁴⁰⁴) as well as the body of the deceased person «returned to the mother which bore him and who will keep him in her depths until the last day», in the belief that «human bodies are an organic part of The WHOLE EARTH and at death must return to nourish the ongoing stream of life»⁴⁰⁵.

Communication & Learning – Two faces of the same approach Even more than the duplet of *Community* and *Nomadics*, the sections of *Communication* and *Learning* are quite distinct one with the other. The *Communication* section, as the name suggests, is about everything that concerns communication, in its widest sense: it is astounding, by retracing the

³⁹⁸ The Chinese version of chess.

³⁹⁹ In line with hippie sexual openness.

⁴⁰⁰ Diana Shugart, *The Last Whole Earth Catalog*, p. 221.

⁴⁰¹ Shugart, *The Last Whole Earth Catalog*, p. 221.

⁴⁰² *The Last Whole Earth Catalog*, p. 222.

⁴⁰³ Brand, *The Last Whole Earth Catalog*, p. 225.

⁴⁰⁴ Matthew Kelty, *The Last Whole Earth Catalog*, p. 224.

⁴⁰⁵ Anton Nelson, *The Last Whole Earth Catalog*, p. 225.

rationale behind the presence of certain elements (as usual, mainly books) in this section, the number of different interpretations of “communication” Brand and the WEC staff came up with. First, as the array of books on diagrams, maps and graphs show, “communication” as *techniques of expression* in conveying explicit information beyond the linguistic one, in the belief that some of them are more apt in delivering meaning than others in given contexts. Secondly, “communication” as the good old linguistic communication, which remains the most effective technique of expression in most settings; books on language, rhetoric and style are presented.

Thirdly, communication in the sense of media, here intended as *media outlet*, what we usually and generally intend in the concept *media studies*; in fact, we immediately find McLuhan’s books, 1964 *Understanding Media*⁴⁰⁶ and 1970 *Culture is Our Business*. Fourthly, strictly linked to the previous, “communication” as media as the set of “*mediums*” that can be used, from radio to television.

Fifth, “communication” as technique of individual expression, in conveying implicit, emotional, symbolic “information”; it is the “media” in the senso of mean (*medium*) of expression, like music, theater, cinema, photography, calligraphy and art in general. Along the artistical track, but in rather standalone position (at the starting page of the book), probably for its relevance not just for art but for “meaning” in general («how to enjoy mushrooms, zen, famous people, and space-time crosswords puzzles»⁴⁰⁷), a book on non-communication: John Cage⁴⁰⁸’s peculiar 1961 *Silence*⁴⁰⁹.

Lastly, the “weird(-est)” branch of communication⁴¹⁰, as a way to cross-cultural, cross-racial, cross-planetary way of connecting: mathematics.

The second section is devoted to «one of the central themes in Brand’s life»⁴¹¹: *Learning*. As in the *Community* section, this was intended in manifold ways: “learning” in the sense of *making (one) learn*, i.e. “how to teach”, especially children, parent to son as well as broader schooling (which, as now should have become pretty clear, was viewed in a countercultural lens, that is with doubt, mistrust or a stern look); “learning” in the sense of *satisfying one’s intellectual curiosity*, something similar to what today would have been called “LLL”, “Lifelong Learning”⁴¹² and, lastly of *learning how to learn*. These two views reflected two main tenets of Brand’s philosophy (in general and relating to learning): first, that « [Brand Speaking:] “I’m not really actually here [at Stanford] to learn French, or whatever, I’m learning how to be able to learn anything, and then I can go forth and have a life... I don’t need the class.” Learning was an end unto itself»⁴¹³; second, that learning was an «essential

⁴⁰⁶ *Understanding Media: The Extensions of Man*, 2nd printing (The MIT press, 1995).

⁴⁰⁷ Brand, *The Last Whole Earth Catalog*, p. 309.

⁴⁰⁸ The revolutionary composer of the famous 4’33”, the composition in three movements for any instrument or ensemble where *no note is played*, the only sound is silence and the accidental sounds that emerge during the execution. The [interpretation of the Berliner Philharmoniker conducted by Kirill Petrenko](https://www.youtube.com/watch?v=AWVUp12XPpU) is one [of the best] examples. *John Cage: 4’33’’ / Petrenko · Berliner Philharmoniker*, dir. by Berliner Philharmoniker, 2020 <<https://www.youtube.com/watch?v=AWVUp12XPpU>> [accessed 13 February 2025].

⁴⁰⁹ John Cage, *Silenzio*, trans. by Giancarlo Carlotti (Il Saggiatore S.r.l., 2019).

⁴¹⁰ In that it (probably) consists of a language, in a Galilean-like “language the book of Nature is written of”?

⁴¹¹ Markoff, *Whole Earth*, p. 137.

⁴¹² And, since effective and appropriate given the nature of the WEC, [as well as the fact that this is a Luiss Master’s Thesis ((now old) inside joke)^(a)], Lifelarge Learning, too.

^(a) Lo Storto Giovanni, ‘La sfida del “lifelarge” learning’, *Giovanni Lo Storto*, 2015

<<https://www.giovanilostorto.it/2015/12/15/la-sfida-del-lifelarge-learning/>> [accessed 13 February 2025].

⁴¹³ Markoff, *Whole Earth*, p. 137.

element in keeping both individuals and organizations vibrant. You needed to learn skills and acquire tools. [...] human progress was dependent on technological advances»⁴¹⁴.

But this is not the end of it, for the most important *information* for this analysis, has yet to come. Why these two sections, if so different, have been put together? To understand this, we should pose another question about the great amount of books catalogued in both the two sections which have been ignored so far and which escape the previously made categorization: how is it that both the communication and learning sections are full of books on cybernetics, the brain, “the mind of the dolphin”, programming and self-programming the brain, psychedelics, epistemological theories, mystical practices? These books deserve a listing⁴¹⁵:

Communications:

- Kenneth E. Boulding’s 1956 *The Image*
- Norbert Wiener’s 1948 *Cybernetics – or Control and Communication in the Animal and the Machine*
- Alfred Korzybski’s 1933 *Science & Sanity*
- John C. Lilly’s 1967 *Programming and Metaprogramming in the Human Biocomputer – Theory and Experiments*
- John C. Lilly’s 1967 *The Mind of the Dolphins*
- Richard L. Gregory’s 1966 *Eye and Brain* and 1970 *The Intelligent Eye*
- Wayne Barker’s 1968 *Brain Storms – A Study of Human Spontaneity*
- Josa M. R. Delgado’s 1969 *Physical Control of the Mind*
- Dean E. Wooldridge’s 1963 *The Machinery of the Brain*
- J. Z. Young’s 1964 *A Model of the Brain*
- W. Ross Ashby’s 1952 *Design for a Brain*
- Michael A. Arbib’s 1964 *Brains, Machines and Mathematics*
- W. Ross Ashby’s 1958 *An Introduction to Cybernetics*
- September 1966 issue of *Scientific American Information*
- F. E. Emery’s 1969 *Systems Thinking*
- A. T. Armstrong-Wright’s 1969 *Critical Path Method*

Learning:

- Jacob Needleman’s 1970 *The New Religions*
- Steve Gaskin’s 1970 *Monday Night Class*
- James Fadiman’s 1971 *The Proper Study of Man*
- Gerald Heard’s 1963 *The Five Ages of Man*
- Robert E. Brown’s 1968 *Psychedelic Guide to the Preparation of the Eucharist*

⁴¹⁴ Markoff, *Whole Earth*, pp. 137, 138. Here appears even more clear why the subtitle *Access to tools* and the emancipatory role of cognitive and material tools.

⁴¹⁵ The choice of making a list certainly is not among the most fortunate: it surely could me more appropriate, (like it has been done in the rest of the thesis) to make a synthesis, giving an analytical description and just present here and there a few books or quotations. Here, however, the author has decided otherwise, in the belief that (1) only through a most-direct confrontation with the WEC sources it could be possible to understand and verify the theory behind this work (otherwise the sensation of being it all an hallucination of the author would have been too strong) and (2) realize the sheer amount of resources that in four years Brand and the WEC staff managed to amass, but especially the sheer quantity of books and reviews on the topic produced in that historical moment (hence the dates), and, even more particularly, their quirkiness: many of the books in this list will never be reprinted and fall into oblivion.

- *The Psychedelic Review*
- *Marijuana Review*
- STASH, Students Association for the Study of Hallucinogens
- A. Offer & H. Osmond's 1967 *The Hallucinogens*
- Bernard Aaronson, Humphrey Osmond (eds.)'s 1970 *Psychedelics*
- Charles Tart (ed.)'s 1969 *Altered States of Consciousness*
- R. Monroe's 1971 *Journeys Out of the Body*
- Sheila Ostrander & Lyn Schroeder's 1970 *Psychic Discoveries Behind the Iron Curtain*
- *Journal of Transpersonal Psychology*
- A. R. Orage's 1930 *Psychological Exercises*
- Lawrence LeShan's 1969 *Toward a General Theory of the Paranormal*
- M. C. Richards's 1962 *Centering*
- Bernard Gunther's 1968 *Sense Relaxation – Below Your Mind*
- Laurance Sparks' 1962 *Self-Hypnosis*
- Leslie M. LeCron's 1964 *Self Hypnotism*
- Maxwell Maltz's 1960 *Psycho-Cybernetics – A New Technique for Using Your Subconscious Power*
- Chogyam Trungpa's 1969 *Meditation in Action*
- Thomas Merton, John Howard Griffin's 1970 *A Hidden Wholeness*
- Claudio Narajo, Robert Ornstein and Smough's 1971 *On the Psychology of Meditation*
- B. K. S. Iyengar's 1965 *Light on Yoga*
- Yogi Vithaldas' 1957 *The Yoga System of Health and Relief from Tension*
- Gopi Krishna's 1970 *Kundalini: The Evolutionary Energy in Man*
- Cheng and Smith's 1967 *T'ai-Chi*
- Baba Ram Dass' 1971 *Be Here Now*
- Burton Watson's 1964 translation of *Chuang Tzu*
- Richard Wilhelm's 1962 translation of *The Secret of the Golden Flower*
- W. Y. Evans-Wetz (ed.)'s 1969 *The Tibetan Book of the Great Liberation*
- Suzuki Roshi's 1970 *Zen Mind, Beginner's Mind*
- Carlos Castaneda's 1968 *The Teachings of Don Juan: A Yaqui Way of Knowledge*
- Carlos Castaneda's 1971 *A Separate Reality – Further Conversations with Don Juan*
- Ajit Mookerjee's 1971 *Tantra Asana*
- Evelyn Underhill's 1911 *Mysticism*
- George A. Miller, Eugene Galanter, Karl H. Pribram's 1960 *Plans and the Structure of Behavior*
- Arthur Koestler's 1964 *The Act of Creation*
- *The I Ching*

What we can conclude by looking at these different books is (1) that the *Communications* section's set of books is founded on a cybernetic vision of the brain and mind as the control of the "human cybernetic system", potentially manipulable, *like any other technological system*, (by the control itself) in a sort of circular feedback loop, to shape the entire cybernetic psycho-physical system, determining some predetermined goals; (2) that, in line with the already mentioned Kesey's preconceived comment "computers is the next thing after acid"⁴¹⁶, which Brand will later acknowledge («Ready or not, computers are coming to the

⁴¹⁶ See **Whole Earth Prologue**.

people. That's good news, maybe the best since psychedelics»⁴¹⁷), the *Learning* section is founded on the continuity between psychedelics, religious, spiritual, contemplative, mystic practices, and computer (and computer science)⁴¹⁸. This last concept is quite peculiar (which brings us to the answer of the very first question of this part): why would such different things like hallucinogenic mushrooms, Yoga and the SPACEWAR videogame be connected one with the other? The only thing these three different planes is information or, more specifically, the capability of these planes to act as information sources. The way acids were used by the hippies, apart from escaping reality, was to “experiment” *true* reality and *know* themselves: psychedelics were *tools* for personal transformation and consciousness expansion, which means that through them they could access *meaning*, that is information, that was precluded to them; in that is no different from the computer, which could let the user *access* information that was otherwise precluded to them, because too costly or too far (or both): that is why it is the next thing after acids, and «[h]alf or more of computer science is heads»⁴¹⁹. Now it appears clear the connection with the *Communications* section: the information that has been discussed is the cybernetic information, the Shannonian “change”, that is necessary for the control to work. Here it is further clear the need of learning: in cybernetic systems, information is what drives a system's behavior, enabling regulation and adaptation to external conditions; *Learning* is the way we call this “updating” process, *Communications* the mean through which communication can reach from the periphery the cybernetic control.

Backing up a little to the “informative equivalence” between psychedelics, neospiritualist practices and computers, one more consideration must be made: Brand's approach to psychedelics and neospiritualist practices is not religious, eschatological, nor “transcendent”⁴²⁰, even when it seems like so, in a symmetrically different way (for instance) from already presented Timothy Leary's neospiritualism⁴²¹. If originally religious (transcendent) practices are framed as “information providers”, however different or liberating could be, remain enclosed in the cybernetic frame as forms of widening of the cybernetic system or of the knowledge or awareness of the higher order cybernetic systems the human one was inscribed in. After all, cybernetics is based on an informational-epistemic equivalence and an ontological one, it cannot accept a distinction such as that between the sacred and the profane: if there is a form of the sacred in the cybernetic mindset, it can only be in the totality of all (immanent) things that exist (the highest order cybernetic system). It is not a simple speculation of the author since Brand himself, when interviewed on Bateson (which again did not yet know deeply at the time, but was characterized by strong mystic drifts, as it will later be clear), stated:

Gregory was wonderfully dubious about engineering solutions, about naive intention, and went a little farther in the mystical direction for me, so there were later cracks for that for me. Besides, I'd gone a mystical route back when I studied comparative religion at Stanford, and that turned out to be eventually nonproductive and, I think,

⁴¹⁷ Brand, *II Cybernetic Frontiers*, p. 39.

⁴¹⁸ The latter will be clearer in the years following, from *II Cybernetics Frontiers*, but already present, *in nuce*, at the time of the WEC.

⁴¹⁹ Brand, *II Cybernetic Frontiers*, p. 49.

⁴²⁰ Even the immanentized versions of it (like the neospiritualist ones)

⁴²¹ This explains Brand's odd conviction that the Catalog had «no politics, no religion, no art», although it seemed to everyone «the Catalog was full of all three». Markoff, *Whole Earth*, p. 184.

counterproductive. Often people go down a mystical or romantic route.⁴²²

Furthermore, this shows how organicism is in an ambiguous state of “superposition”, ready to decay into the fully immanentized cybernetic version or into that of the immanent neospiritualism à la Leary or the esoteric cosmic sectarianism of Oriental or anthroposophical matrix that will be maximally expressed in the New Age ten years or so later. To summarize, what Brand does is a sort of “immanentization” of religious practices, which are pulled towards the immanent through the lens of cybernetic “tool-ization” (which, as now should be clear, is the same of saying “informatization”)⁴²³.

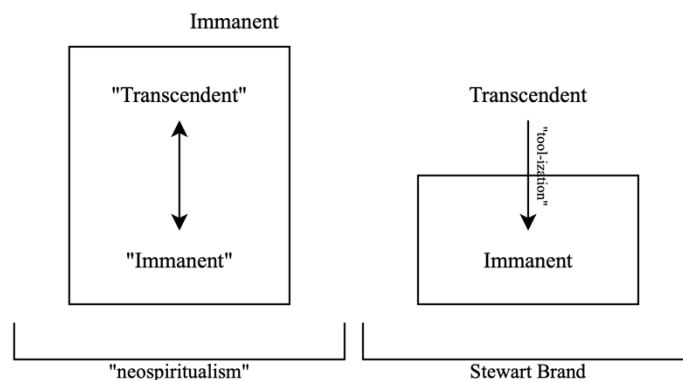


Table 2: Brand's relationship with the transcendent in the WEC vs. the neospiritualist one

Divine Right's Trip Gurney Norman's *Divine Right's Trip*, as already anticipated, was a novel included in 1971 The Last Whole Earth Catalog, after Norman's proposal of making the entire LWEC a novel in one of Brand's meetings to decide the fate of the last issue, which then got downsized in *adding* a novel to the LWEC. The original idea was to write a novel where the protagonist used the Whole Earth Catalog and the products there cataloged, though Norman, refusing such constraints, ended writing a real, elaborated novel where the WEC made a modest cameo (as the magazine the protagonist had in his van) and got mentioned just in two occasions in the entire novel⁴²⁴. The novel's many, short chapters are disseminated through the LWEC⁴²⁵ from page 9 to the very third-last page of the LWEC, where, before the final cover(s), an entire black background page (with a drawing of two dragons mutually eating each other's tails in a kind of Ouroboros) is devoted to the epilogue, the meaning of whose choice is probably that of resembling a (spiritual) seeking⁴²⁶ or, more probably, the

⁴²² Stewart Brand on *Starting Things and Staying Curious* | *Conversations with Tyler*. Min. 14:45.

⁴²³ Though this becomes really too speculative, it is possible for this vision to be suggested by Zen Buddhism itself (in which Brand has always had interest^(a)), which predicates (or seem to predicate) a full coincidence between *Nirvana* (transcendent liberation) and *Samsara* (immanent suffering), between *prajna* (enlightenment) and *avidya* (ignorance) which seems pertaining to the relative world or even unreal inventions of the mind that dissolve in non-dual unity^(b).

^(a) Markoff, *Whole Earth*.

^(b) Suzuki, *Essays in Zen Buddhism*.

⁴²⁴ Though in a relevant way, especially in the second case, when the protagonist decides to carry with him the copy of the WEC when ending his Van trip in case it could be useful in his autonomous, rooted living in Kentucky's countryside.

⁴²⁵ The novel will be later compiled in one standalone book that contained the whole organic novel in one place. For simplicity, this version will be used for citing passages of the novel.

⁴²⁶ Having the reader to look for every chapter of the novel

protagonist's spiritual seeking and trip, made, as it will be later described, of stages whose temporal relation is often not clear, like the waking up and falling asleep again of a sick person, or of a «stoner»⁴²⁷.

The novel is about David Ray Davenport, a hippie native of Kentucky, who decides to go on a trip to “seek truth” and, presumably, escape from home. He buys an old used 1963 Volkswagen minibus (the classic “hippie van”) and starts his journey *in search of truth wandering aimlessly* through America, taking on the name “Divine Right” (in place of birth name David Ray) Davenport «after that incredible stoned-out afternoon when the words Divine Right formed in the clouds above the meadow where he was lying in the grass looking up and breathing deeply in awe of how really simple everything is when you come right down to it»⁴²⁸. After coupling with the girlfriend he will later marry, Estelle (which, differently from Divine Right (D.R.), is a stable and balanced girl⁴²⁹), the narration of their trip begins, between long and tiring journeys, compulsive drug use, heavy arguments (mainly caused by him), trips gone wrong and peculiar characters encountered through the journey, like a «Lone Outdoorsman» who lived permanently in a camping site and a loudmouthed, self-absorbed guru that tried to reach Nirvana trying to forget his name and previous deeds and to contrast «mucus-loving servitude» driven by society through eating nuts only, like, allegedly, Sumerians did (living hundreds of years more than the average person). The complex register given by the slang and juvenile language, sudden and unannounced passage of monologues, dialogues, streams of consciousness (interior and otherwise), first and third person use, breaks in the fourth wall and interventions of the author himself, in a ‘jazz bebop’ prose somewhat reminiscent of Jack Kerouac's ‘spontaneous prose’, is diegetic with respect to a journey that is as much an external travel as (psychedelic) trip as interior journey. D.R., especially from the start to the middle of the novel, is portrayed as the unbearably stereotypical hippie «full of shit»: hangs on the lips of any self-proclaimed weird guru, philosophizes about anything, searching for its hidden meaning⁴³⁰, accepts and follows blindly even the wackiest idea, like deciding to punch himself on the other leg too, after doing it on the first out of frustration, to restore the “balance”, concept he learned about on a radio broadcast while driving. During the first half of the novel, he is depicted as inept, incapable of doing the right thing, to recognize it and to correct himself, trapped in a negative feedback loop: D.R., rather than being the protagonist of his trip, is rather subjected to it, subjugated by a trip he decided, needed, to make but that in the end “happened” to him. Though, this behavior is Divine Right's, not David Ray's; it is a mask he needs to wear in his flight from home, as well as a need to recover the internal balance he lost. In reality, as it will be shown from the second half of the book on, he will be a dedicated, hard-working and

⁴²⁷ Someone who uses «dope», or psychedelics. Slang expressions like this come from the novel, so they will be in “quote's quotation marks” («»).

⁴²⁸ Gurney Norman, *Divine Right's Trip: A Folk Tale* (Pan Books, 1973), p. 5.

⁴²⁹ «That was the thing about Estelle. She understood cruising, she understood roads, and traffic, she knew how to flow with things in motion». Norman, *Divine Right's Trip*, p. 2.

⁴³⁰ «As D.R. came out of the men's room he was flashing on the word terminal. T-E-R-M-I-N-A-L. I am in a terminal. The end of a line. Three vowels, an e, an i and an a. And three syllables, three very neat and pungent syllables each with a vowel nestled in its middle like a jewel. How balanced. How very balanced is the word terminal, in content as well as form. At a terminal people arrive and depart, they begin new journeys even as they are ending old ones. Both things happen at a terminal; it goes both ways. It's like calling graduation commencement. Commencing as you end. Indeed, because you end. Like living because you die. That's a very religious idea. Bus terminals are very religious places. Look at this room. A waiting room. People gathering in off the streets to wait together for the next thing in their lives. A place to come and wait. Waiting as a form of worship, sitting in these pews. Estelle is there in a pew. She could very well be praying. Praying and waiting, waiting and praying, how balanced, how even». Norman, *Divine Right's Trip*, p. 105.

loving individual when he will return to Kentucky and start to re-root himself in his native home and in reality. The recovering of this internal balance is the theme of this work.

On how this return to balance happens, the work's plot and structure consists of a cybernetic version of Hegelian "thesis-antithesis-synthesis" feedback loop: after going out of his home (anti-thesis), D.R. needs to fight the dragon, archetypical symbol of the obstacle to realization (as well as orientalism and of psychedelic trips) that appears everywhere throughout the novel⁴³¹, that is his own internal struggles, especially his "hippie" or juvenile refusal of traditional values and his existential bewilderment that results in his being «double-minded». The quote comes from the Bible's James 1:8 «A double-minded man is unstable in all ways», which appears in the novel many times, and describes perfectly D.R.'s state of being (1) half-way between the worldly/intellectual, "scopic"⁴³² strive for acquisition, obtaining, realizing and transcendent/existential «acceptance of life whole, as it is»⁴³³, (2) assaulted by doubt and still incapable to fully abandon himself to life (believing that there should be something he would have had to do, some truth he would have had to uncover, some philosophy that would have liberated him), (3) divided between two identities: that of the hippie whose «Divine Right is the name and weirdness his game»⁴³⁴ and that of the Kentuckian David Ray. After splitting with Estelle, showing D.R. real consequences of his mental struggles, he realizes what his priorities are and bring himself to the apex of his internal struggle, culminating with the psychological clash between Divine Right and David Ray and him and the dragon, which results in the resolution of his recondite fears, conflicts and faults, his return to the house where D.R. was born and all his family lived and died, the synthetic reunification of his two souls and the restoration of his internal equilibrium, exemplified by D.R. and Estelle's "synthetic" wedding in the epilogue, where hippie friends of Divine Right and David Ray's parents and neighbors participate together at the event, the (traditional) Reverend reads passages from Swami High-Time's Book of Tao and the (hippie) Swami reads passages from Reverend's Bible, closing the uroboric cycle of eternal return represented graphically by the two dragons eating each other's tail.

The Batesonian Turn and the completion of Brand's organicism: from "tool-ization" to "tool-ism"

The two "cybernetic frontiers" After closing the WEC project, Brand fell in a «downward spiral»⁴³⁵ that would start to end only in the subsequent year, thanks to two different stimulus: Gregory Bateson and the computer hacking culture. In the summer of 1972, during a trip to Cape Breton Island with his wife Jennings (who would soon abandon)

⁴³¹ The symbol and signpost of the chapters throughout the LWEC and the compiled version is a dragon, the first person he encounters does not utter a word except suggesting him to read about the story of St. George and the Dragon, the mural of a dragon Eddie painted on his bedroom's wall, when he «freaks out», during its quasi-schizophrenic attack he fights a dragon, the epilogue page on the LWEC depicts two dragons.

⁴³² In the sense of oriented toward a goal.

⁴³³ Original citation is «The surest test if a man be sane is if he accepts life whole, as it is», from Swami High Time's "Book of Tao" (Lao Tzu's Dao De Jing).

⁴³⁴ Correct quotation is «Divine Right is my name and weirdness is my game», which is a form of salute D.R. uses. Norman, *Divine Right's Trip*, p. 6.

⁴³⁵ Markoff, *Whole Earth*, p. 207.

Brand discovered Gregory Bateson('s thought)⁴³⁶: «[h]e had with him a copy of Bateson's *Steps to an Ecology of Mind*»⁴³⁷, «who would supplant Buckminster Fuller as his intellectual guiding star». Bateson offered to him «a mystical and biological foundation for a cybernetic theory that placed the individual in a much broader context that stretched from the social to the cultural an ecological dimensions of the world» that would base the view behind his future next project, the 1974 *CoEvolution Quarterly* and his future environmental involvement. A theory of "organic" cybernetics that he tried to fuse with the "machine cybernetics of the emerging computing universe"⁴³⁸, which, he thought, had in its turn many connections with the '60s counterculture he helped to create. The idea Kesey lightly expressed that the computer was «the next thing after LSD» started to make sense to Brand as computing technology started to diffuse among individuals and first videogaming experiences, which him perceived as forms of out-of-body experiences, were diffusing⁴³⁹. He would have deepened these two "cybernetic frontiers"⁴⁴⁰ in two articles, 1972 *SPACEWAR: Fanatic Life and Symbolic Death Among the Computer Bums* for Rolling Stones, about computer hackers and videogames⁴⁴¹, and 1973 *Both Sides of the Necessary Paradox (Conversations with Gregory Bateson)* which appeared in *Harper's Magazine*, where Brand delved more in the world of cybernetics by attending Bateson's courses at the University of California and spending time with him personally, while he was trying to build a home in Big Sur, but also through conversations with other figures of cybernetics as well counterculture like Lilly, Ram Dass, Kurt von Meier, Alan Watts, John Brockman⁴⁴².

Gregory Bateson's view, as investigated by Brand and exposed in his lectures ad his *Steps to an Ecology of Mind*⁴⁴³, revolves around the notions of "idea" and "meta-idea", information, ecology and paradoxes. According to Bateson, the vices of our Western culture are rooted in the impossibility to recognize the difference between certain ideas and the ideas about them, their context, the meta-ideas. To understand this concept, Bateson presents the case of the "double bind", a form of (negative) paradox that is proposed to be the reason behind certain schizophrenic patients: "Tell me you love me", one asks to her partner, obtaining the obvious response "I love you". But then the answer is followed by the piqued response of the first, "Why do you only say that when I ask you?"⁴⁴⁴. Apart from the conclusions Bateson makes on schizophrenia, it is possible to recognize how the last third protest is of a different kind

⁴³⁶ Though Brand already heard him speak at the LSD research center and even interview him at Stanford

⁴³⁷ Markoff, *Whole Earth*, p. 208.

⁴³⁸ Markoff, *Whole Earth*, p. 213.

⁴³⁹ It is needed to recall that, despite Brand's life is relevant for the relationship between cyberculture and counterculture (as Turner demonstrates^(a)), for understanding the birth of the computing culture or the birth of the modern ecological movement, post-WEC developments are here interesting only for they further show Brand's way of thinking or evolutions of his thinking, demonstrating (or not) the thesis presented in the Introduction chapter of this thesis.

^(a) Turner, *From Counterculture to Cyberculture*.

⁴⁴⁰ *II Cybernetic Frontiers* (1974) will be the first book by Brand where he will collect the two articles *Both Sides of the Necessary Paradox* and *Fanatic Life and Symbolic Death Among the Computer Bums*.

⁴⁴¹ That of games will be one of the main, lifelong interests of Brand, for their interactive value and variety and for its relationship with cooperation, competition, violence and the sublimation of it through games.

⁴⁴² Markoff, *Whole Earth*, p. 216.

⁴⁴³ Gregory Bateson, *Steps to an Ecology of Mind* (Univ. of Chicago Press, 2008).

⁴⁴⁴ Brand, *II Cybernetic Frontiers*, p. 14.

than the other two, it pertains to a “different level”, one could say, because it is *about the very question made in the first instance*, so that there is a statement (the question-and-answer) and a meta-statement (the protest). This set of (not necessarily explicit⁴⁴⁵) meta-information is usually dismissed or confused with the lower cybernetic level of information, generating malicious *halting* paradoxes like that of “This sentence is true”, which incorrectly merges statement (like “John ate carbonara yesterday”) and meta-statement (“the statement ‘John ate carbonara yesterday’ is not true”). Confusing these two levels brings to a flattening of one onto the other which could bring to the dangerous application of tools that belong to the lower level onto the higher one, like the will to exert control or rationality to reality. In Bateson’s words «I had a schizophrenic patient who said, ‘If it’s not the way I want it, I’ll prove it!’ That’s the back Double Bind, He’s fighting a battle, and *he’s fighting with this same tool*. He can’t let go of the tool»⁴⁴⁶. The result of this confusion, the schizophrenic application of just one tool to everything leads to the rupture of ecological stability, which pertains to a higher level than the human, it is a meta-level. Ecological stability is a cybernetic dynamic equilibrium maintained by constant adjustment and the rupture of it consists of «a breach of [the] Tao[(-)ism[()]]»⁴⁴⁷: how to return into it? «One of them is to sit in the lotus position for several hours a day»⁴⁴⁸, but to ask for «a cure for a breach of Taoism»⁴⁴⁹ is to ask for «another breach of Taoism». Note how this discourse is incredibly similar to the same discourses Alan Watts made in the same historical period: «How can we bring ourselves into accord with this Tao? A sage has said that if we *try* to accord with it, we shall get away from it»⁴⁵⁰. The link between hierarchical level and meta-level and oriental spirituality is showed also at the end of Brand’s article, where Bateson takes up the case of colonial administration: in one form of it, natives have to be like colonialist, hence native culture is destroyed as natives are indoctrinated in the colonists’ one; in the second form, natives are “conserved” in reserves, where they could statically remain how they have been when they meet the colonists, still killing the liveliness and authenticity of their culture. How to choose? «The truth which is important is not a truth of preference, it’s a truth of complexity... of a total eco-interactive on-going web... in which we dance, which is the dance of Shiva. You know, the whole of good and evil gets wrapped up in the dance of Shiva. And in ancient Hebrew good-and-evil is a single word meaning ‘everything’». The problem resembles zen *koan* number 5 of XIII century Wumen Huikai’s *Mumonkan*, which in turn resembles the cybernetic halting problem of the double bind:

香巖和尚云、如人上樹、口啣樹枝、手不攀枝、腳不踏樹。

⁴⁴⁵ Bateson underlines that there is a stark difference between a random act of loving and the request of that very same act of love, underlining that “the fact that one asked for it” (implicit meta-statement) frames the situation in a *context* where the requested act loses all meaning.

⁴⁴⁶ Bateson, *Steps to an Ecology of Mind*, p. 16.

⁴⁴⁷ Brand, *II Cybernetic Frontiers*, p. 17.

⁴⁴⁸ Brand, *II Cybernetic Frontiers*, p. 16.

⁴⁴⁹ Brand, *II Cybernetic Frontiers*, p. 17.

⁴⁵⁰ Watts, *Become What You Are*, chap. 2.

Kyōgen Oshō said, "It is like a man up in a tree hanging from a branch with his mouth; his hands grasp no bough, his feet rest on no limb.

樹下有人問西來意、不對即違他所問、若對又喪身失命。

Someone appears under the tree and asks him, 'What is the meaning of Bodhidharma's coming from the West?' If he does not answer, he fails to respond to the question. If he does answer, he will lose his life.

正恁麼時、作麼生對。

What would you do in such a situation?"⁴⁵¹

As with the colonialist problem, the solution does not lie in the problem in itself, but *outside of it*, on a *higher, meta-level*, that is the “greater dance of Shiva” that transcends and contains all the oppositions (something that Alan Watts, too, cites in the same fashion⁴⁵²). That is because Bateson, like Brand, was very interested in Zen teachings⁴⁵³, and applied to oriental teachings the cybernetic hierarchy he developed. Tao(-ism) is for Bateson the circular, non-linear whole that comprehended everything lower to it. «[T]he hierarchical relation of part to whole, trees to forest, steps up the meta-ladder of increasing abstraction and wider relevance, where at each level are fewer understandings and grander. At the top, sings atheist Bateson, “One is One and all alone and ever more shall be so”»⁴⁵⁴. Here one can immediately recognize Brand’s “wholism”’s return, the idea that the top of the “meta-ladder”, the ultimate holon is that whole that contains everything, «all alone» because nothing can exist outside of it. To explain this idea of Tao, Bateson presents William Blake’s engraving of Job affrighted with visions, where God is strongly resemblant to the human Job and with legs that become hooves. For Bateson, the One-Whole-Tao-God-Dance-of-Shiva is made of both good and evil: «[t]hey’re so intimately joined that you will never disentangle them»⁴⁵⁵. What is really diabolic is to distinguish⁴⁵⁶ between them, i.e. to posit “the good as good” and “the bad as bad”: «[t]he first evil evidently was the separation of good and evil».

Conclusions

The aim of this thesis was to demonstrate what has been defined as “organicism” could be considered the *Zeitgeist* of post-war Californian hippie, ecologist and cyber movements, by taking the historical case of what could be considered one, if not the root of all these different

⁴⁵¹ ‘The Gateless Gate 無門關’ <<https://sacred-texts.com/bud/zen/mumonkan.htm>> [accessed 3 February 2025].

To simplify, consider not responding as dying or as equally serious as dying.

⁴⁵² Watts, *Become What You Are*.

⁴⁵³ Markoff, *Whole Earth*, p. 225.

⁴⁵⁴ Brand, *II Cybernetic Frontiers*, p. 30.

⁴⁵⁵ Brand, *II Cybernetic Frontiers*, p. 22.

⁴⁵⁶ Galimberti notes the etymological connection between the original meaning of the etymological Greek component of the word “diabolic” and the idea of “to separate”. Umberto Galimberti, *Il Corpo*, Saggi universale economica Feltrinelli, 993, 14a ed. dopo la 11a ed. aggiornata ottobre 2002 (Feltrinelli, 2005).

movements: Stewart Brand, his *Whole Earth Catalog* and some near developments of his thought. Widespread research on the subject points out that the WEC, which is in fact a “mere” catalog (“Postalmarket-like”) of *tools* (mainly books) useful to the hippie and countercultural movement (from back-to-landers to exponents of “psychedelic spirituality”), contains and intends to disseminate a cultural, anthropological, political model, result of a synthesis (“tool-ism”) that Brand operates with the interdisciplinary and open philosophy of the military-industrial-academic complex that came into being during the war, cybernetics and more generally all fields of study that merge biology and mechanics, the countercultural experience of the 1950s (Beat Generation) and 1960s, and classical American pragmatism (“tool-ization”).

“Organicism” is based on a nonlinear, circular form of thinking (such as cybernetic feedback loops) and presents itself as a form of overcoming the long-standing debate between vitalism and mechanism on the basis of an ontological equivalence between the biological and the mechanical (on which Cybernetics, too, is based). For organicistic thinking, there is no longer distinction between “the biological” and “the mechanical”, because, on the one hand, the biological is deprived of the *elan vital* that makes it “special” with respect to the inanimate (*contra* vitalism), and on the other hand, the mechanical is elevated from a pure instrument to an *organ*, a (pre-trans-human) integration of the human that circularly influences its action and psycho-physical constitution. The concept is best explained with the concepts of an author Stewart Brand knew well, Arthur Koestler, author of *The Ghost in the Machine*⁴⁵⁷ (hence the title), who speaks of “holons”, entities that are both organs and organisms, “stand-alone” systems (in the sense that, taken individually, they appear as whole in themselves), that, however, (1) are made up of other sub-systems and (2) are in turn constituents of other macro-systems: the tool → organ, from being a means to an end, becomes *part of the end*, element of the teleological system. This “holistic” organicist view returns the organic and the “non-instrumental” to a renewed dimension of *non-instrumental* (“wholism”) *use* (“tool-ization”) consecrates the “tool-ism” that underlies the apparently paradoxical philosophy of the Whole Earth Catalog.

Rather than being a fixed ideology, organicism could be seen as its substratum or point of departure: it can take a more pragmatic form (Brandism and future hi-tech culture), harnessing the power of organicism’s return of the organic/teleological to the dimension of use and manipulability, or a more spiritual and mystic form (Batesonian Brahmanism and future New Age), harnessing organicism’s holonic “immanent transcendence”, main tenet of all those “holistic” disciplines.

⁴⁵⁷ Koestler, *The Ghost in the Machine*.

EXTRA: The Industrial Origins of Organicism

There is one last source that deserved to be mentioned in this work, although outside of the temporal focus of this thesis, for its uncanny similarity to the themes treated in this work and for its potential to be an interesting link or starting point for future research⁴⁵⁸. The work in question is Dolf Sternberger's *Panorama of the XIX century*, a 1938 historical work where the author, one of the most important post-war German political scientists, by adopting a research registry that is common to Walter Benjamin and even, *mutatis mutandis*, to J.J. Bachofen's approach in *An Essay on Mortuary Symbolism*⁴⁵⁹, «ventures into the “field of work of an avant-garde” that rejects the disciplinary partitions of academic science and uses the cross-cutting strategy of the essay to explore different spaces and rediscover in the eccentric variety of phenomena the internal analogies of forces, the interactions of images and meanings, as they appear in the sudden light of a fragment or in the perspective play of an angle when the gaze, mobile and curious, does not tire of questioning *even the most everyday object*»⁴⁶⁰. What is relevant for this “Extra” is the first chapter of the *Panorama*, *Natural/Artificial*, where he analyses some sources of the time that can give some hint on the topic, coming to the conclusion that the way freshly industrialized XIX century society saw and interacted with the machine was not of the cold, reductionist, mechanistic world usually described by the critics of “the age of technique” of a nature completely surrendered to the state of *Bestand* against a human technology that is not just “technology”, a *Gestell* governed by the *Denken als Rechnen*, but was rather founded on an interwoven interaction of natural and artificial, of organic and technological that suggested their *perfect substitutability* between one and the other.

The semi-organic allegory of the machine. Sternberger starts by commenting many sources of the time which portray the machine in semi-natural/semi-organic or semi-human terms: an entertaining and ironic toast speech of the director of the Prussian statistical office and the industrial academy in Berlin Ernst Engel in which he depicted the steam engine as the quiet and mild “mechanical” bride of an impetuous, “natural” groom (steam) in «one of the happiest marriages on earth», which that year (1875) celebrated their anniversary⁴⁶¹; Max Maria von Weber, who «played an important role in the field of railway communications from 1850 to 1881» being director of mechanical engineering in Saxony and of local railways, official of the Ministry of Finance⁴⁶², who «discovered the poetry of the railways»⁴⁶³ and «felt the need to present them [the steam engine and the railroad] in

⁴⁵⁸ Here the reason behind the label “Extra” for this chapter. This book alone cannot account as a correct description of the XIX century *Weltanschauung* (if any larger set of sources could): a wider set of secondary sources and, especially, primary sources are needed. Nonetheless, in any case, this book still presents itself as a primary source, in that, even if the historical account is imprecise or completely made up, it shows how, even before the war, some people were already clearly seeing organicism and even projecting it or “rediscovering its roots” in previous historical periods.

⁴⁵⁹ Johann Jakob Bachofen, ‘From An Essay on Mortuary Symbolism’, in *Myth, Religion, and Mother Right; Selected Writings of J.J. Bachofen* (Princeton University Press, 1967), pp. 21–68.

⁴⁶⁰ Ezio Raimondi, ‘The Past That Is within Us (Introduction to the Italian Edition)’, in *Panorama Del XIX Secolo* (Il Mulino, 1985), p. 8. Emphasis added.

⁴⁶¹ Sternberger and Heppe, *Panorama del XIX secolo*, p. 45,46.

⁴⁶² Sternberger and Heppe, *Panorama del XIX secolo*, p. 48.

⁴⁶³ Sternberger and Heppe, *Panorama del XIX secolo*, p. 49.

allegorical guise, to endow them with apparent life, a double life»⁴⁶⁴, e.g. defining the railway as a «pet of iron»⁴⁶⁵; the ubiquitous juxtaposition of the eagle to the train, finding its fusion in the symbol of the winged wheel.

Sternberger immediately emphasizes that «the form in which the machine is configured here does not simply derive from the joking analogy about steam engines or the relationship between technique and nature in general, nor is it the result of any imaginative or witty idea; on the contrary, it is precisely the actual technique and nature of the 19th century that have this appearance and these figures»⁴⁶⁶. What is Sternberger saying is that the sources analyzed in his work, rather than being simple standalone contingencies, are *signs* of a specific, underlining way of approaching Nature and Technology: Sternberger is substantially employing a circumstantial paradigm.

As already anticipated, according to Sternberger, the depicting of the machine in semi-human terms is not fashion but responds to a more profound question. Otherwise, Max Maria von Weber would not have employed it in a discourse on railway policy:

*The iron domestic animal must adapt its being to local and temporal circumstances, so that its structure may acclimatize in a manner analogous to that of the nature of the domestic animal; like the latter, from the function to which it is assigned, from the type of feeding, from the place and duration of its use, it will receive the features of a physiognomy that will characterize it as a variety of the same species. By placing these phenomena in the different branches of the railroad side by side, the geographical image will be derived, just as it happens in the organic world where similar effects and phenomena shape the geography of the plant and animal kingdoms.*⁴⁶⁷

Or, yet:

*Just as the muscle of the human body deprived of the nerve running through it would be a mass of inanimate flesh, the muscles fit for speed which the inventions of Watt and Stephenson endowed mankind with would have potentiality halved if they were not traversed by the conducting thought along the nerves of the telegraph wires.*⁴⁶⁸

The semi-mechanical allegory of the organic In a fashion that is more similar to us contemporaries, Sternberger shows how the opposite too happens, as the human starts to gradually start to be depicted in semi-mechanical terms. In a way that may appear charmingly contemporary and current, Sternberger notes how «when describing the nervous

⁴⁶⁴ Sternberger and Heppe, *Panorama del XIX secolo*, p. 48.

⁴⁶⁵ Sternberger and Heppe, *Panorama del XIX secolo*, p. 52.

⁴⁶⁶ Sternberger and Heppe, *Panorama del XIX secolo*, p. 48.

⁴⁶⁷ *Panorama del XIX secolo*, p. 52.

⁴⁶⁸ Sternberger and Heppe, *Panorama del XIX secolo*, p. 53.

system, in a more or less direct way, the language of telegraphy comes into play»⁴⁶⁹. He cites Eduard von Hartmann's *Philosophie des Unbewussten* (1869)⁴⁷⁰:

I want to lift my little finger and I lift it. Is it my will that lifts the finger? No, because if I cut the arm nerve, my will can no longer move the finger. We know that for every movement there is only one location and that is the central termination of the nerve fibers involved, which is able to receive the impulse of the will for this particular movement of this particular limb. If this point is injured, the will is powerless to act on the limb, just as it is when nerve communication between this center and the affected muscle is disrupted.

[A]nd so it is the stimulation of the center that produces the current.

*We can thus imagine the central endings of the motor nerve fibers almost as if it were a keyboard located in the brain; regardless of the intensity, the touch is always the same, the keys played change instead.*⁴⁷¹

Obviously, Hartmann underlines, it is “just” a comparison, in that there is no keyboard in the brain, but Sternberger believes that, although it is obviously a comparison in the sense exposed by Hartmann, it is much more than a simple comparison or way of saying:

*This simile is more than a simile or a mere façon de parler, as we see from its not being interchangeable and being scarcely variable and persistently recurring not merely in this author alone. Once muttered and applied, it cannot be excluded without crucially changing the character of this analysis of the body-soul connection, without radically modifying this theory and figure of humanity. Any attempt to exclude the “telegraph allegory” while retaining the thing itself makes obvious how fast it adheres and how indispensable it is to these observations. Were we to cut or remove all these words, the scattered, ubiquitously inserted and imprinted bits of technical language, then the subject of Hartmann's investigation, the human nervous system, would be totally obscure and unintelligible. In point of fact: metaphor, and this metaphor in particular, makes up the notion here rather than serving as its illustration.*⁴⁷²

⁴⁶⁹ *Panorama del XIX secolo*, p. 54.

⁴⁷⁰ Eduard von Hartmann, *Philosophie Des Unbewussten* (Carl Duncker's Verlag, 1876).

⁴⁷¹ Sternberger and Heppe, *Panorama del XIX secolo*, p. 54.

⁴⁷² *Panorama del XIX secolo*, p. 55. Translation comes from English version of the book, translated from German by Joachin Neugroschel. Dolf Sternberger, Joachim Neugroschel, and Dolf Sternberger, *Panorama of the Nineteenth Century*, Mole Editions (Urizen Books, 1977).

What Sternberger is emphasizing, apart from the seriousness of its analysis and the advancing of his thesis of interchangeability between organic and mechanical and vice versa, is the idea that, once the metaphor is set up, then there is no more epistemological disentanglement between the allegoric telegraph and the nervous system, in that the telegraph becomes the *figure* or *symbol* of the nervous system, so that there is no other way of thinking about it without implicit referring to the telegraphic allegory unless a new epistemological model is developed⁴⁷³.

Energy, perpetual motion and organicism Nevertheless, this discourse may still be not so convincing. After all (1), it could all be an invention of a very imaginative author, an excess of phantasmatic inventive and, even if that was not the case, and (2) is this really related to the organicism thesis proposed in this work?

Sternberger's analysis of Helmholtz first scientific (not philosophical or ideological) works of divulgation of the law of the conservation of the energy will give an answer.

What Helmholtz diffused through his lessons, giving mechanical examples like the working of a mallet, was (1) «the mutual equivalence relationship of the different known “natural energies” – of heat, magnetic, electrical, electromagnetic and mechanical energy»⁴⁷⁴ and (2) «the concept of “energy” that expresses it [the mutual equivalence] and unites all these “energies”», an entity that «later will be cultivated to the point of veneration, is recognizable and visible first and foremost in machines, although later it will also be discerned and studied in the processes of nature and even the universe». So, says Sternberger, more interested in confuting the reductionist view of technique than in the cybernetic approach that results from it, it is not completely true to state that modern techno-science rips the wholeness of nature in a series of separated, quantitative proxies, because it is this very same science that posits the existence of «a *general* labor force and its “forms”»⁴⁷⁵: «Speaking in mythological terms we will say that the spirit of labor power is capable of assuming in forms different guises; in the example just cited it appears in mechanical guises, but it could also appear in those of heat, magnetism, electricity». This general energy *it's not created by the human*, but only used or channeled in the “form” and context that is adapt. «Therefore, there is no work force that is not transformed natural energy»⁴⁷⁶. Then Helmholtz asks,

Having learned about the origin of work energy by observing the steam engine, we must ask: Is it any different with human beings? In point of fact, survival is tied to the continual intake of nourishment, combustible substances that, when totally digested, enter the blood, then undergo a slow burning in the lungs, and form well-nigh the same combinations with the oxygen in the air as would arise from burning a open fire. Since the amount of heat generated by the combustion is independent of the length of burning and its intermediary stages, we can calculate on the basis of the material consumed how much heat or

⁴⁷³ Please recall that this work was produced in 1938, half a century circa before American neuroscientists and IT guys or cyberneticians invaded each other's laboratory looking forward to understand more of the function of the brain (and vice versa), raising the epistemological problems that Sternberger is here underlining.

⁴⁷⁴ Sternberger and Heppel, *Panorama del XIX secolo*, p. 59.

⁴⁷⁵ *Panorama del XIX secolo*, p. 61.

⁴⁷⁶ *Panorama del XIX secolo*, p. 62.

*its equivalent in work can thereby be produced in the body of an animal. [...] research shows that heat generated in an animal body matches that supplied by chemical processes. The body of an animal thus does not differ from a steam engine in the fashion in which it gains heat and energy; it does differ, however, in the purpose and the manner for which and in which it then uses the energy gained.*⁴⁷⁷

Notes Sternberger how here the relevance is not to simply exalt the machine or give the general idea that the human, too is subjected to the laws of nature, but that «the character of the machine has shifted to the organism, in a much convincing and experimentally demonstrable way»⁴⁷⁸. More than that, the idea of one universal general energy crushed current physiological theories founded on the existence of an *elan vital* beyond the mere physical ones, proposing the perfect «commutability of nature and machine»⁴⁷⁹ and «the end of the peculiar position of it»⁴⁸⁰, involving «a return to the unique and universal nature»: it is surely true that this *science strips off nature of its romanticism, of its vitalism*, but *the result is not a mechanistic, reductionist worldview*, is something else, as the consequence of the return of the human to nature is part of a bigger shift in the way of seeing the universe itself.

In Helmholtz words, «in all series of natural processes there are no circular paths to acquire mechanical energy without a corresponding expenditure of energy. *Perpetuum mobile* is impossible». Perpetual motion was, according to Sternberger, one of the fixed points of XVIII baroque science: in their point of view everything they managed to unravel most of the secrets of the universe, which they thought mechanistically as being equal to a (human) machine; the only difference is in the lack of autonomous movement, which instead seems a characteristic of living (god-created) mechanisms, like humans⁴⁸¹.

With theories of transformation of energy, what could be a negative or neutral character of mechanisms becomes their strength, because not only the limited mechanism, but also the human, the sun, the stars in the sky and supermassive galaxies suffered of the same disease: they all needed energy to work. In Helmholtz words, «[t]he clock mechanism, therefore, produces no other work force than that transmitted to it, but returns it evenly over a longer period of time»⁴⁸², and Sternberger adds, «when you wind the clock it shows its umbilical cord, if I may be allowed the expression. The muscle power needed to recharge it is also a metabolic product of chemical combustions taking place in the body, and the foods ingested by the body are ultimately nothing more than sunlight synthesized and transformed into plants, and so on going backwards»⁴⁸³, «[b]y chasing energy backwards through all its transformations, the physicist reaches as far as the cosmic and cosmogonic spheres, and even the dimensions of the planetary system are revealed to be “imperfect” just as the clock was; in fact, most of the immense amount of heat developed by the cosmic nebulae at its emergence was “lost” in the form of radiation to allow the masses to merge»⁴⁸⁴.

But if there is no way of acquiring energy without a corresponding expenditure of energy, if

⁴⁷⁷ Hermann Helmholtz, *Populäre Wissenschaftliche Vorträge* (Druck und Verlag von Friedrich Vieweg und Sohn, 1871), chap. 2, Internet Archive, https://archive.org/details/bub_gb_IoJOlq9zk9kC/page/n1/mode/2up.

⁴⁷⁸ Sternberger and Heppe, *Panorama del XIX secolo*, p. 64.

⁴⁷⁹ *Panorama del XIX secolo*, p. 67.

⁴⁸⁰ *Panorama del XIX secolo*, p. 65.

⁴⁸¹ The difference is then solved with the escamotage of the Aristotelian *causa prima*: probably even God needed, from outside, to “charge” the Universe like a watch.

⁴⁸² Helmholtz, *Populäre Wissenschaftliche Vorträge*, chap. 3.

⁴⁸³ *Panorama del XIX secolo*, p. 67.

⁴⁸⁴ Sternberger and Heppe, *Panorama del XIX secolo*, p. 68.

it is impossible not to dissipate energy, is this energy “lost”? Obviously not, because of the law of the conservation of energy: «for Helmholtz, neither is this heat loss “contradictory to the principle of conservation of energy; it is certainly lost to our planetary system, but not to the universe”», which, hence, is the only real *perpetuum mobile*. «It is this “universe”, then, infinite in time and space [«however closed»], that is the only *perpetuum mobile*, but also the only place where natural energy or labor power is truly “conserved” without loss and where that “energy reserve” is found on which both living beings and machines feed themselves»⁴⁸⁵. «The moment the horizon of this “whole nature” is even slightly restricted, whether to the notion of our planetary system or even to the conditions on earth, then the otherwise “timeless” formula of the principle brings forth conceptions and strictly necessary reckonings of the *beginning and the end* of the world, a death by heat, *exhaustion of energy*, in short, calculations of natural history»⁴⁸⁶. This exposition shows how cybernetics’ commutability between organic and mechanic (based on the overcome of mechanicism and romantic vitalism), Brand’s “whole-ism”, Morowitz’s theory of energetic interconnectedness, and the passage from linear, “start-to-end” dialectics to the circular, non-linear and uroboric feedback loop which, however, does not exclude the first but integrates it in a quasi-holonic portion of it, in a physical form of *coincidentia oppositorum*. As Sternberger concludes:

*And thus, a hybrid of natural force and the conditions of its transformation, the engine has a double face, just like the cosmos, in whose unendingness alone perfect economy prevails and the search for lost work energy comes to a rest.*⁴⁸⁷

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⁴⁸⁵ Emphasis added.

⁴⁸⁶ Emphasis added.

⁴⁸⁷ *Panorama del XIX secolo*, p. 69. Translation from Sternberger, Neugroschel, and Sternberger, *Panorama of the Nineteenth Century*, p. 38.

I would like to thank Isabella Crovato, my grandmother, for suggesting and gifting me her copy of Dolf Sternberger's *Panorama of the XIX Century*, which in the meantime has become quite little-known and hard to find in non-German language.

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