ENGLISH BOOK REVIEW

The Soulful Machine, the Virtual Person, and the "Human" Condition: An Encounter with Jan M. Broekman, *Knowledge in Change: The Semiotics of Cognition and Conversion* (Cham, Switzerland: Springer Nature, 2023)

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Abstract

Humans create but do not regulate generative systems of data based programs (so-called "artificial" intelligence ("A.I.) and generative predictive analytics and its models. Humans, at best, regulate their interactions with, exploitation of, and the quality of the output of interactions with these forms of generative non-carbon based intelligence. Humans are compelled to do this because they have trained themselves it believe that nothing exists unless it is rendered meaningful in relation to the human itself. Beyond that—nothing is worth knowing. It is only to the extent that other selves, even those created by humanity, relate to humans, that they become of interest—and most be regulated, possessed, controlled, and managed—with respect to its interaction with or use by humans. Still, the human self-projection into the digital, and now more consciously the world around them, produces profound changes in the way that the human (and humanity) understands themselves and the way they order the world they inhabit. This work explores the semiotic trajectories made inevitable by the rise of projections of the human into digital plains, and by the possibility of the attainment by those projections of sentient autonomy. It undertakes that exploration through a deep dialectic engagement with Jan Broekman's, *Knowledge in Change: The Semiotics of Cognition and Conversion* (Cham, Switzerland: Springer Nature, 2023). Following the structure and analytics of Broekman's book, this work critically engages with and seeks to burst through the semiotic barriers of the movement of philosophy away from a unitary conception of the subject through the fracturing of the self, the rise of the plural self, and the emergence of the triadic self/self-E/subject. It then pushes the insights that Broekman develops further—up and out of the human. It animates Broekman's insights and considers the possibility of semiotic objectivity connected to but autonomous of the human, pointing to a pathway for the liberation of the autonomous generative virtual self from its human (fractured) subjectivity. In the process it exposes for order complexities and challenges, for the human, of efforts to regulate or engage with, not the generative autonomous "artificial intelligences" humanity created in its own image, but rather

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the use of those systems by humans and their effects in the human semiosphere. The consequences for regulatory approaches are then outlined.

Graphical Abstract

Keywords Artificial intelligence · Phenomenology · Semiotics · Data governance post-modern · Cognition · Autonomy · Regulatory measures

1 Introduction

There is a small but infinitely difficult space between the *human Semiosphere*[1] and the *multiverse of autonomous plural cognition*.[2] And there is tragedy built into the structures of that semiosphere and in the extra-human multiverse, in the disjunctions between individual (self) and social (selves),[3] which is both the marker of the human condition and the condition of subjective (grounded in a subject) sentience.[4] The perception of the gap   between human semiosphere and the plural cognition multiverse requires consciousness of cognition beyond and autonomous of the human. Where the autonomous intelligence is also rationalized as *artificial*, in the sense that it was brought into the world by humans, rather than situated in the world in which human acquired consciousness of themselves and their surroundings, then perception of it as something other than as an object to be possessed and dominated becomes quite difficult. Humans are used to doing this; they have been differentiating between categories of humanity well before the transformative revolution of

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[1] Anton Markoš, "Biosphere as Semiosphere: Variations on Lotman," *Sign Systems Studies* (2014) 42(4) 487–498.

[2] Cf., Paul Kockelman, "Biosemiosis, Technocognition, and Sociogenesis: Selection and Significance in a Multiverse of Sieving and Serendipity" *Current Anthropology* (2011) 52(5) 711–739; Andrei Linde 2017 Rep. Prog. Phys. 80 022001.

[3] Masaki Kobayashi (director) Shigeru Wakatsuki, Zenzo Matsuyama, The Human Condition (人間の條件) (Ninjin Club/Shochiko, 1959-1961) based on Junpei Gomikawa (Kurita Shigeru), The Human Condition (人間の條件) (Tokyo: Bungei shunju , 6 vols., 1979 [1958]) (wartime Japan 1930a-1940s and the relationship between the protagonist and the social subjectivities in which he is embedded that in the end will have its way). "At the same time, the book and film introduced a soldier who, although certainly caught in circumstances beyond his control, was much more of a hero than a victim." Sandra Wilson, War, Soldier and Nation in 1950s Japan" International Journal of Asian Studies (2008) 5(2) 187-218, 210.

[4] Cf., Marcelo El Khouri Buzato, "Towards a theoretical mashup for studying posthuman/postsocial ethics," Journal of Information, Communication and Ethics in Society (2017) 15(1) 74-89.

the digital added categories of virtual humanity. Aristotle framed this in terms of nature and the hierarchy of consciousness-sentience: "Those men, therefore who are as much inferior to others as the body is to the soul, are to be thus disposed of, as the proper use of them is their bodies, in which their excellence consists; and if what I said is true they are slaves by nature".[5] The current ontologies of the human-artificial intelligence (A.I.) relationship does not move far from this starting (and end) point.[6]

In Alice Walker's book, *The Color Purple*,[7] one gets a taste for this in the relationship between Sofia and her 'mistress', Miss Millie, who Sofia detests, but who treats her as a human extension of herself—an adult and animated version of the dolls she played with as a child. That was possible because of the power of a certain imaginary of race and its consequential social relations. That cognitive gap finds iterations within the entirety of human social relations—from those grounded in gender, religion, ethnicity, class, and the like. But that gap also produces fear and a renewed effort to merge the object into the master. The anxieties of racial hierarchies grounded in gradations of humanity have now been transposed to generative sentience. And among the greatest fears—the fear that the human will be *deceived*— that automated autonomous digital sentience, housed in robots for example, can, by pretending to be human, cause harm to the human or displace the human from its apex role in the ordering of human life.[8] The mirror becomes the monster. And yet the impulse to produce "Millie-Sofia" relations remains strong.

The gap is a fundamental habit of the Anthropocene. It is now carried over to the digital. And with it the usual slew of regulatory and social structures meant both to cement the ontological boundaries of the gap and protecting the boundaries of the totality of reality—the interior of the human Semiosphere. These are meant to build a barrier both to protect the integrity of the human Semiosphere and to shield it from cognition of what lies beyond the gap. Efforts like the Ethics Guide for Trustworthy A.I. assume the regulatory role of Miss Millie.[9] Mille-Sofia nicely frames the limiting dialectic of the human binary, certainly; when considered as a template that produces a mirroring mimesis with their virtual manifestation, and when those manifestations acquire autonomy to direct (within their own conceptual parameters), it describes as well the human condition that is no longer altogether human.

Jan Broekman takes us to the edge of that gap between the human, and their technologies of re-production and memory, their elaborate systems of subjectivity that

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[5] Aristotle, *A treatise on Government* (William Ellis (trans) London: JM Dent & Sons, 1912)), Bk I, chp. V.

[6] Robert A. Allen, Gareth R. T. White, Claire E. Clement, Paul Alexander, and Anthony Samuel, "Servants and masters: An activity theory investigation of human-A.I. roles in the performance of work," *Strategic Change* (2022) 31 581–590.

[7] Alice Walker's book, *The Color Purple* (NY: Harcourt Brace Jovanovitch1982).

[8] Amanda Sharke, Noel Sharkey, "We need to talk about deception in social robotics!," *Ethics and Information Technology* (2021) 23 309–316.

[9] Independent High-Level Expert Group on Artificial Intelligence (Set Up by the European Commission), *Ethics Guidelines for Trustworthy A.I.* (8 April 2019); European Commission, Proposal for a regulation laying down harmonized rules on artificial intelligence COM(2021) 206 final 2021/0106(COD) (21 April 2021).

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has moved humanity to the construction of virtual imaginaries of itself. He travels to the edge of the human and implies the consequences of building virtual realities of the self around which human cognition, and its ontologies and epistemologies are grounded. But he remains comfortably entrenched in the world of the human. Yet he does the remarkable—he makes it possible to recognize the existence of a reality beyond the human, an autonomy of the conscious, and he develops the conceptual tools that permit the human (and non-carbon based intelligence) to bridge the space that separates human and generative sentience constructed in the image of but detached from the human. Here we speak of systems of artificial intelligence the definition of which has been as elusive as its relation to the human. It is defined for example as "software that is developed with one or more of the techniques and approaches listed [in a descriptive] Annex... and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with".[10] The Organization for Cooperation and Development divides its definition in two parts.[11] The first is as A.I. system[12]; and second as A.I. system lifecycle.[13]

Broekman makes possible the building of a first, even if tentative, bridge across the gap between the human Semiosphere and the plural generative multiverse. In the process he also transforms the semiotics of social relations emerging from humanity's engagement with its virtual selves. Broekman unravels the solidity of the subject, preserved through the beginning of the twentieth century; he reconstructs it in the shadow of the crisis of the image of the late 19th and early twentieth century, and then of the digitalization of the image, and its personal portability in mobile devices in the late twentieth century. Nonetheless the resulting plural self and fractured subjectivity remains very much an all too human project. But it is enough; Broekman's insights are powerful enough to provide a foundation for the next step—the development of a semiotics of multiple autonomous subjects not all of whom are human. And with that a far more complicated approach to the human efforts to create, possess, control, and exploit intelligence that by their design can no longer be wholly

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[10] European Commission, Proposal for a Regulation of the European Parliament and Council Laying Down Harmonized Rues on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts COM(2021) 206 final 2021/0106(COD) (21 April 2021); art. 3(1).

[11] OECD, Recommendation of the Council on Artificial Intelligence OECD/LEGAL/0449 (2022 (hereafter OECD, Recommendation on A.I.)).

[12] Ibid., I ("A.I. system: An A.I. system is a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. A.I. systems are designed to operate with varying levels of autonomy.").

[13] Ibid. ("A.I. system lifecycle: A.I. system lifecycle phases involve: i) 'design, data and models'; which is a context-dependent sequence encompassing planning and design, data collection and processing, as well as model building; ii) 'verification and validation'; iii) 'deployment'; and iv) 'operation and monitoring'. These phases often take place in an iterative manner and are not necessarily sequential. The decision to retire an A.I. system from operation may occur at any point during the operation and monitoring phase.").

subordinated to the human. One has glimmerings of this in emerging smart cities, but no ontologies for the transformation that are phenomenologically semiotic.[14]

Jan Broekman has been my friend, colleague, mentor and teacher for many years. Broekman is a pioneer and critical pathbreaker within the broad family of semiotics—especially as it touches on law and legal education, and bio-ethics.[15] He authored more than twenty books on Philosophy, Law, Education and Cultural Studies and numerous articles in scientific Journals in various languages. He has been an influential voice in the development of semiotics and its elaboration as a species of phenomenological dialectics and ontological hermeneutics.

Jan Broekman has helped me see the world not just with new eyes, but to extend the range of analytic probing through all the senses. An openness to more comprehensive sensory inputs, provocations, irritants, stimuli, and absences, better reveals the multi-linear and polyphonous flows of the rich semiosis of knowledge as object, as a set of symbols representing the object, and as the way in which these objects and symbols become the architecture of social relations. Knowledge, in this sense, cannot be divorced from or considered autonomous of the human in the image of which it has been created, curated, and communicated.[16] The phenomenology of the human posits this relationship, and its semiotics cements the binary between the human and the objects around which it can order and objectify its sentience.

Knowledge, then, is another way in which the person, the collective, and social relations, are first humanized, and thus humanized, projected as an into the world around them—to perceive is to distinguish or to group; to understand is to give those groups values and purpose. The subject and the perspective remain stubbornly *human, all too human*; "All philosophers have the common fault that they start from man in his present state and hope to attain their end by an analysis of him".[17] (This is a sort of a passive-reactive actualization of things (they come into being by acts of identification), an equally passive symbolization of things (what is identified stands for something else—reductive essentialization), and a strategic organization of things and their symbology into a passively ordered universe. This is the core "stuff" of semiotics, not in its useful but micro-level function as a mechanics of micro-meaning making but rather as the philosophical psychology of antiphony (αντίφωνος [*antiphōnos*]) to stimulation (input from the senses, experiences, and the like).

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[14] E.g., Tan Yigitcanlar, Luke Butler, Emily Windle, Kevin C. Desouza, Rashid Mehmood, and Juan M. Corchado "Can Building "Artificially Intelligent Cities" Safeguard Humanity from Natural Disasters, Pandemics, and Other Catastrophes? An Urban Scholar's Perspective," *Sensors* (2020) 20, 2988; https://doi.org/10.3390/s20102988 ("We define an artificially intelligent city as an urban locality functioning as a robust system of systems, and whose economic, societal, environmental, and governmental activities are based on sustainable practices driven by A.I. technologies, helping us achieve social good and other desired outcomes and futures for all humans and non-humans." Ibid).

[15] Jan Broekman, On the Origins of Legal Semiotics, Law at the End of the Day 10 June 2012, available [https://lcbackerblog.blogspot.com/2012/06/jan-broekman-on-origins-of-legal.html].

[16] C f., Jean-Pau Sartre, *Existentialism and Humanism* (Philip Mairet, trans.; London: Methuen, 1948 [1946], p. 55.

[17] Friedrich Nietzsche, *Human All too Human: A Book for Free Spirits* (Alexander Harvey (trans) Chicago: Charles H. Kerr & Co, 1908), p. 14.

155   None of this matters until these polyphonies of knowledge can be *made com-*
156 *mon*—one of the literal meanings of the Latin *communicare* (otherwise, to share,
157 divide out; communicate, impart, inform; join, unite, participate in). That process
158 of communicating itself embodies its own semiotics—the objectification of words;
159 their symbology, and their function to convey meaning. That meaning, though, is not
160 of the object-symbol that communication expresses. Meaning common to human
161 collectives—not meaning inherent in the thing defined is precisely what captures the
162 essence of norm, values, language, philosophy, and the mechanics of social relations
163 however complex its framework and structures.[18] The same applies to the technolo-
164 gies of communication which themselves also serve or are constituted as a form of
165 what is communicated.[19] But contestations over its form and character also mirror
166 contemporary fracture of meaning making communities and their value orders.[20]

167   This is, in effect, what Jan Broekman has been trying to teach us, and himself, for
168 the greater part of a lifetime of extracting the essence of a philosophy of semiotics,
169 and with it the essence of our humanism—from the depths of humanity's transcend-
170 ent self-absorption to the heights of its immanence with the worlds around and in
171 them. No matter what humans talk or think about, they are thinking and speaking
172 about themselves. But because individual humans die, that conversation and reflec-
173 tion changes with time; and because no two human beings are exactly aligned, the
174 act of communication and its object (knowledge) are as much the acts of collective
175 coherence and efforts to know things in themselves. In his own language of a life-
176 time–that the foundations of social relations (especially as expressed through or as
177 law) law are concealed in a specific image of a person.

178   And so, it was to my great delight that I was asked to consider these possibili-
179 ties and challenges in the shadow of Jan Broekman's brilliant new work, *Knowledge*
180 *in Change: The Semiotics of Cognition and Conversion.*[21] The work is published
181 as Volume 8 of the Series Law and Visual Jurisprudence, for which I serve as an
182 Advisory Editor. Broekman's exploration is described in the following terms on its
183 publisher's website: (1) covers the cognition concept not only by means of analog
184 but also by equivalent digital thought formations; (2) explores a new concept of the
185 Subject-in-digital thought named the "Self-E"; and (3) provides basics for a semi-
186 otic analysis of cognition related to analog, digital, A.I. and Quantum approaches
187 and data.[22] Broekman picks up his mobile phone and takes a picture of the state of

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[18] Larry Catá Backer, Ruminations 42: Conformity and Forbidden Knowledge–The First Rule of Fight Club, the Invisible Hand and the Semiotics of Obedience, Law at the End of the Day (26 December 2012) available [https://lcbackerblog.blogspot.com/2012/12/ruminations-xlii-invisible-hand-and.html].

[19] Larry Catá Backer, La révolution technologique (sous-titrage en français), Law at the End of the Day (30 September 2011, available [https://lcbackerblog.blogspot.com/2011/09/la-revolution-technologique-sous.html].

[20] Robert J. Tierney, "Toward a Model of Global Meaning Making," *Journal of Literacy Research* 50(4) (2018) 397–422.

[21] Jan M. Broekman, *Knowledge in Change: The Semiotics of Cognition and Conversion* (Cham, Switzerland: Springer Nature, 2023) (ISBN 978–3-031–23000-4; i–x, 200 pp Springer Nature, 2023) (hereafter"Broekman")).

[22] Springer, *Knowledge in Change: The Semiotics of Cognition and Conversion*, website summary, available [https://link.springer.com/book/10.1007/978-3-031-23001-1].

the philosophy of the self in the third decade of the twenty-first century. Like drawing the Tarot Card "the Moon",[23] this mirroring provides the space—between the human and its image—expressed in the tentative assurances of its phenomenology, ontologies, and collateral epistemologies (the world)–in which the self has become plural (in itself) and more detached from the moments in history that had provides a stable place from which the world could be elaborated as if it were out of history.

Knowledge in Change approaches ancient and perplexing issues of the organization of human collectives within a rationalized understanding of the world in which these collectives function (exteriorization) and the investigation of the human individual as disaggregated components of that world of human social relations (internalization). In *la modernité*[24] one encounters this at a distance—through the semiotics of entextualization and erasure[25]; in the digital the image is added and animated[26]; and in the era of the generative non-human intelligence, the engagement is further distanced through processes of automation and liberated programmed iteration.[27] These are usually articulated by knowledge guardians as issues of *phenomenology* (a philosophy of experience; meaning through lived experience), *epistemology* (theories of knowledge; the rationalization of reality) and *intersubjectivity* (shared perceptions of reality; the experience of knowledge as *social relations*, the rationalization of human interaction at every level of complexity). All of these currents and problems presume the humanity as the only or the central subject of interest.

But the book does much more than that. It provides a basis for re-thinking the fundamentals of the way in which one understands the interface between humanity and its increasingly autonomous technology, and between the idea of humanity as innate in itself against the reality that the human may now be more intensely manifested in its interfacing with increasingly self-generative machine intelligence and the hardware within which it resides. The consequences for everything from philosophy to a philosophy of knowledge, to core insights for the organization of social relations within a world that is now populated by carbon and silicon based intelligence may be quite profound. Human social collectives already fear *and desire* this new world–the engagement with artificial intelligence and its consequences is but a

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[23] Generally, Inna Semetsky, "Interpreting the signs of the times: beyond Jung," *Social Semiotics* (2010) 20(2) 103–120. For one reading of the Moon card, see, How Stuff Works, Discover the Meaning of The Moon Tarot Card (18 August 2023); available [https://science.howstuffworks.com/science-vs-myth/extra sensory-perceptions/the-moon-card.htm].

[24] Françoise Proust, " Walter Benjamin et la théologie de la modernité/Walter Benjamin and the Theology of Modernity," *Archives des Sciences Sociales des Religions* (1995) 89 53–59; available [https://www.persee.fr/doc/assr_0335-5985_1995_num_89_1_977].

[25] Brigittine M. French, "The Semiotics of Collective Memories," *Annual Review of Anthropology*, (2012) 41 pp. 337–353.

[26] Michel Frizot, "La modernité instrumentale. Note sur Walter Benjamin," *Études photographiques* [En ligne] (8 Novembre 2000, online 15 Septembre 2008, consulté le 09 juin 2022). Available [http://journals.openedition.org/etudesphotographiques/228].

[27] Cf., Si Jie Ivin Yeo, Weiqiang Lin, "Autonomous vehicles, human agency and the potential of urban life," Geography Compass.(2020)14:e12531; available [https://doi.org/10.1111/gec3.12531]; Michael N. Huhns, "The Sentient Web," *IEEE Internet Computing* (2003) 7(6) 82–84 (Nov 2003); available [https://doi.org/10.1109/MIC.2003.1250589].

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tip of that iceberg. While humanity started this century secure in its conceit that it was the center of all things, by century's end a very different form of intersubjectivity may well be the basis of the ruling ideology for humanity within its natural and machine orders.

It is with that in mind that I offer this engagement of the trajectories of sentience, and with it the transformation of the human and their (autonomous) virtual avatars wrapped up in *Knowledge in Change*. Following the structure and analytics of Broekman's book, this work critically engages with and seeks to burst through the semiotic barriers of the movement of philosophy away from a unitary conception of the subject through the fracturing of the self, the rise of the plural self, and the emergence of the triadic self/self-E/subject. It then pushes the insights that Broekman develops further—up and out of the human. It animates Broekman's insights and considers the possibility of semiotic objectivity connected to but autonomous of the human, pointing to a pathway for the liberation of the autonomous generative virtual self from its human (fractured) subjectivity. In the process it exposes for order complexities and challenges, for the human, of efforts to regulate or engage with, not the generative autonomous "artificial intelligences" humanity created in its own image, but rather the use of those systems by humans and their effects in the human semiosphere.

2 Preface

In the Preface to *Knowledge in Change*, Jan Broekman lays out the trajectories of what will be a deeper dive into the fundamental questions of the intertwining of knowledge with its technologies in the age of the digital and the era of human subjectivity.

No, my knowledge is not a private and personal possession. On the contrary, the doors to the treasures of knowing are complicated instruments—and one of them is their dependence on cultural patterns which change their masters and participants. It seems difficult today to peacefully connect our traditional Ego with a modern Self.[28]

With *Knowledge in Change*, Jan Broekman invites us on a journey that assumed its modern form with the unification of the German Reich but which has now assumed a vastly different form, one enhanced by technology. The world of the spirit has been digitalized; reality exists more intensely in virtual than in corporeal space. Cultural patterns have been imprinted onto platforms, the masters and participants of which have become producers and consumers of knowledge. Knowledge remains neither private nor personal but the individual has been reconstituted as its own image. The ego and its self no longer inhabit the world of Jung or Freud; indeed, our Ego may well have lost its Self. Technology has exposed the changes that are usually veiled beneath the mumbo-jumbo of the philosopher, the discretionary tantrums

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28FL01 [28] Broekman, supra., p. v.

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of the administrator and the cultivated avarice of the merchants of things, ideas, and norms.

The Preface is particularly useful for identifying and distilling the broad outlines and key insights developed over the course of the more meticulous analysis of the nearly two hundred pages that follow. At the same time, it provides the canvas against which Broekman also invites us to engage in a further semiosis built on what Broekman has attempted to weave together—from past to present, then then for us, into the future. One starts here with the overarching points Broekman conveys in his Preface.

Broekman presents us with the fundamental conundrum of the post-modern: the "*peaceful connection*" between what he calls "*our traditional Ego*" and "*a modern Self*." And that three legged conundrum encapsulated in their respective cages: the Ego, Self, and their connection. That has provided the problemmatique for generations of philosophers from before the end of the nineteenth century. From a contemporary Jungian point of view, "It may be helpful to consider our ego as *being conscious* and our Self *having sentience*".[29] The layering of intersubjectivity adds spice, of course, adding to ego and self—their alter egos and alter-sentience.[30] To this, it might be even more helpful to consider the connectivity of ego and self as concepts of mass consciousness and mass sentience.[31]

If that were all, there would be very little indeed. But Broekman intends to dig deeper in a quite interesting way. Where most might focus on the connection between Ego and Self, Broekman recasts each as an object-symbol and then embeds them in the complicated web of meanings–the *traditional* Ego and the *modern* Self, the connection between which is decreed *peaceful*. That is, for example, the simple second sentence of the Preface, starts from the idea of Ego as both a thing (object) and its symbol. Here he hints at the dynamic element, as well as its semiotic matrix the exploration of which is to come—the "dependence on cultural patterns which change their masters and participants".[32] And brings us back to the crux of the problem of the conscious and the sentient, of the ego and the self.

This sets up the fundamental contradiction, which like the notion of principal contradiction of Chinese Leninism,[33] will propel Broekman's semiotics of the ties that bind the conscious and the sentient from its current stage of historical development into the next era. This is what Broekman finds *fascinating*—a word that is

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[29] Oliver Dale, "Self, Ego, and Suicide," *Analytical Psychology* 67(3) (2022) 796–816, 797.

[30] E.g., Chase Wesley Raymond, "Intersubjectivity, Normativity, and Grammar," Social Psychology Quarterly 82(2) (2019) 182–204; Helena de Preester, "From ego to alter ego: Husserl, Merleau-Ponty and a layered approach to intersubjectivity," Phenomenology and the cognitive sciences 7(1) (2008) 133–142.

[31] Mario Orozco-Guzmán, Hada Soria-Escalante, Jeannet Quiroz-Bautista, "Narcissistic isomorphisms: The ego, the masses, the Urvater, and the alterity," *Psychotherapy and Politics International* e1600 [https://doi-org.ezaccess.libraries.psu.edu/10.1002/ppi.1600)].

[32] Broekman, supra, Preface, p. V.

[33] Mao Zedong, On Contradiction (August 1937) (Originally delivered as lectures at the Anti-Japanese Military and Political College in Yenan, it was revised by the author on its inclusion in his Selected Works vol. 1); available [https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_17.htm].

of critical significance throughout the work. What does it mean to "fascinate"? Its etymology carries with it an origin in enchantment and bewitching. It's Latin derivation, *fascinatus*, evokes bewitchment, and its own derivation from the Latin *fascinus* speaks to charms, spells and witchcraft. One speaks here, Broekman speaks here and elsewhere,[34] of communication (textual, oral, visual, pictural—and *ultimately digital*) as a language of spells, incantation, and charms the power of which is the essence of intersubjective semiotics.[35] Indeed, the etymology of a word like spell (from the Anglo-French *espeller*) invokes the act of signification, of speaking a name to give it meaning. The Latin derivation of the word incantation (*incantar*e) suggests a signification beyond the power of its object to avoid—magic!

But here is the leap that is itself the essence of the book: the semiotics of the intersubjective ego-self is no longer the realm of humanity, whether one approaches this one individual at a time or from the big bang of the intersubjective ego-self. Nor is that connection now framed by the temporal flow from the traditional to the modern in both cases attached to the human ego-self. There is now another actor in the realm of intersubjectivity—and it is not human, though made in the image of humanity. Digitization has opened a space for the detachment of the human from themselves; digitalization has provided the means of taking those detachable bits and animating them; digitalization within systems of machine enabled learning (generative A.I.) has liberated the ego-self from the static and temporally instantaneous constraints of the mirror, of text, or of image—of the human. Intersubjectivity is now incarnated in technology and the hardware that provides its body; and it is increasingly animated extra-human intersubjectivity. In the form of the non-human ego-self, what is mislabeled Artificial intelligence, a new actor has been brought into the room of the ego-self. And that ego-self is no longer entirely human though made in humanity's intersubjective image.

It is here that one is tempted to take Broekman's critical insights, introduced in the book's Preface, as a conceptual launch pad. The implications, in a realm of A.I., animal sentience, and autonomous silicon encased intelligence suggests that the problems of phenomenology, of epistemology, and of intersubjectivity are no longer the central problem of humanity. One is reminded here of passages from the "Machinehood Manifesto" at the heart of S.B. Divya's novel, *Manchinehood*: "Gone are the days of dumb engines and processors. Today, nearly every machine contains some type of adaptive intelligence. What gives human beings the right to arbitrate when intelligence becomes equivalent to a person?"[36] Broekman uses the *Self-E* as the doorway through which he begins the exploration of the semiotics of the intersubjective ego-self transformation of the *modern* self in *pacific* connection with a *traditional* ego in the mirror of their machined selves. And that doorway leads not just away from a fixation of the human (individual or collective), but also to the liberation of the connection of the intersubjective from the semiotic prisons of

[34] Jan M. Broekman and Frank Fleerackers, *Legal Signs Fascinate: Kevelson's Research on Semiotics* (Dordrecht: Springer, 2018).

[35] Cf., Alessandro Duranti, "Husserl, Intersubjectivity, and Anthropology," Anthropological Theory 10(1–2) (2010) 16–35.

[36] S.B. Divya, *Manchinehood* (NY Saga Press, 2021), p. 143 (Machinhood Manifesto ¶ 9).

text, or human language (as a broad range of symbolic conveyances of sign-signi-
fication of objects identified as worthy of notice within the fields of vision of the
intersubjective).

The language of the intersubjective now again assumes a *fascinating* charac-
ter—of spells, incantations, and charms—the bewitch its collectives into specific
imaginaries of shared perception. We have all no entered a labyrinth of holograms
that can bewitch us into any lifeworld that suits its community. The human machine
connection has blasted the old conceits of human self-actualization and the closed
binary represented by the ego-self. The machine between the ego and the self—the
Self-E—now changes the basis for a phenomenology of knowledge (of the self and
everything within its sentient range). Or perhaps better from Broekman's perspec-
tive, we have, as a human collective morphed from the intersubjectivities of Michael
Crichton's *Westworld*,[37] where the machine human interactions after machine libera-
tion were understood as dangerously aberrational (a flaw producing life in a killing
machine) to the television series *Westworld*,[38] in which carbon and silicon life forms
interacted more ambiguously, starting from changes that follow the attainment of
consciousness of bio-mechanical robots programmed to fulfill human desire,[39] to the
inversion of the hierarchy of privileged subjectivity after the self-aware biomechani-
cal robots create a virus to cause the humans to fulfill the desires of the self-aware
robots.[40] This is the nightmare that haunts humanity even as it can't resist creat-
ing autonomous self-generating intelligence which they believe humanity can con-
trol. This is the ontological baselines of the contemporary impulse to control A.I.[41]
Indeed, the ontological inversions that serve as Westworld's *human* nightmares fas-
cinate even more when the human is understood as the *robots'* nightmare!

The Preface to Broekman's *Knowledge in Change* underlines this trajectory of the
exploration of what had been the self-centered phenomenology of knowledge, to a
reliable phenomenological epistemology. That is he moves the reader from a focus
of a self-centered philosophy of experience, to an experiential theory of knowledge
now mediated by and through machines and technology. He explains:

The reason is that actual semiotics became rapidly covered by the digital cul-
ture, which replaces the traditional cognition processes by an all-around grip
in the sense of conversion. This process, and with it the observations concern-

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[37] Michael Crichton, director, *Westworld* (MGM, 1973). The film required us to show the point of view of the main robot, played by Yul Brynner. But what special-effects technique would best suggest a machine's point of view? I proposed a rather simple solution: to show the point of view of a machine, use a machine." Michael Crichton, Westworld in His Own Words, Michael Crichton website; available https://www.michaelcrichton.com/works/westworld/.

[38] *Westworld* created by Jonathan Nolan and Lisa Joy, seasons 1–4, HBO Entertainment (2016–2022).

[39] *Westworld: Season 1 (The Maze)* (HBO, 2 October 2016 to 4 December 2016).

[40] Ibid., Sean 4 *(The Choice)* (HBO, 26 June 2022 to 14 August 2022).

[41] Deepa Shivaram, "The White House and big tech companies release commitments on managing A.I.," NPR (21 July 2023); available [https://www.npr.org/2023/07/21/1188831773/the-white-house-and-big-tech-companies-release-commitments-on-managing-ai].

ing the Subject of such a new form of knowledge formation, is the basic idea of this Book.[42]

Broekman suggest that the transformation of the Subject into a Self and the Self into a Selfie now replaces the Subject with the Self-E, "which determines the Self in the context of our digital culture." (Ibid.). To this Broekman adds the concept of conversion—a translation of sorts the template of which is the transformation of the analogue to the digital is now interwoven with notions of cognition. One moves simultaneously from Subject to Self-E and from cognition to conversion of communicative types grounded in the intersubjectivity of human and tech (hardware and software).

And there it is: "The *decentering of the subjects polar position* became the fundamental process in the second half of the twentieth century, and it changed the world-wide structure of human cognition".[43] And that change shifted the emphasis of intersubjectivity from interpretation (the Gadamerian project[44]) to conversion.

Conversion is a central concept that should provide an appropriate understanding of knowledge in digital worlds. What the term 'epistemology' in the analogue world meant is going to be replaced and intensified by what 'conversion' means in the digital world—far beyond a translation from one field of meaning to another".[45]

And that itself transforms the very notion of semiotics. In the face of the technological revolutionary reality, semiotics is meant to liberate itself from its alignment with a specific type of language, to a *semiospheric* focus on the differentiation among analogue, digital and quantum languages—for which (again) conversion provides the basis for both signification and intersubjective constitution. (Ibid, pp. vi-vii). As Broekman explains it: "The term *Semiosphere* which is introduced in the following pages is therefore not in the first placer focused on 's*emiotic*' dimensions but on the '*sphere*' which characterizes the social and psychological features of a 'Self'".[46]

One speaks here of a human–machine interface in which one is aware of the way it provides a means for human to interface with themselves for which the digital is a conduit. At the same time, and from the other side, it also opens the door to an examination of the way that it provides a means for generative A.I. to interface with itself for which the human is a conduit. It is not just the human body, but the hardware in which machine intelligence operates that each reflexively produces extra sensorial awareness. It is at this point that the trajectories of the philosophies of the self and of the epistemologies that it is heir to come to an ed. A new era—one in which the self can only be understood as a reflection of its projection against and

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[42] Broekman, Knowledge in Change, Preface, p. v.

[43] Ibid., p. vi.

[44] Hans-Georg Gadamer, *Truth and Method* (2nd rev. ed.; Joel Weinsheimer and Donald G. Marshall (trans); London: Bloomsbury Academic, 2004).

[45] Broekman, supra, p. Vii.

[46] Ibid.

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through machine intelligence, and vice versa—has now emerged. And with it theories of semiotics, phenomenology and epistemology must be converted into a language of the intertwining of the ego-self, its Self-E, and its machine image in the language of he semiospheric. This is what *fascinates*. The journey begins.

3 Chapter 1 (Minds, Moons and Cognition)

Having posed the central problem, Broekman must start somewhere. And that 'somewhere' is cognition. The semiotics of that objectification of cognition is itself *fascinating*, in the sense that Broekman uses the term throughout his explorations: of spellcasting as intersubjective semiotics; invoking signification by speaking the name of an object, and in that act of bewitchment giving it meaning. It is in this sense, perhaps that one can approach the biblical act of creation as a naming (Adam naming all of the creatures brought before him by God),[47] and by naming giving a thing both form and essence. It is as well at the root of the classical Chinese rhetoric of Guiguzi in the notion of intelligent naming–明名 (Míng míng).[48] Guiguzi speaks of Ming (名)–of naming, of defining accurately, and of drawing distinctions;–and ming (明) of enlightenment, intelligence, or that which shines or sparkles. Ming míng (明名) is translated as naming. It is a concept that itself was closely though controversially tied to that of shi (实) of actuality, truth, or essence of the thing named;[49] but also to the act of untruth (of speaking falsely) in its form as 名明名 (Míng míng míng). It is in this way that cognition fascinates. And it is in this form that Broekman is able to introduce the problemmatique of cognition in the age of the Self-E, planted squarely at the starting point of the re-naming of "self,", "ego," "conversion" and "intersubjectivity"—all of which together are themselves the description of the identifying characteristics—the means of facially recognizing—the re-created digital self. A self that is more out of itself (in the reality of its digital image) than in itself (as its corporeal manifestation).

Broekman, however, does not start with the imaginaries of the self, but with its cognition against its background. That is, he starts by suggesting that one recognizes, one can approach cognition, not by a focus on the self, but by deducing the self from out of the background against which the self is visible. Charles Fourier's[50] vision, Benjamin's Parisian Passages and notes on the Concept of History,[51] and the views of the Intergovernmental Panel on Climate Change[52] revolving around climate change as a consequence of the labors of humanity—with quite different

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[47] Gen 2:118–19.

[48] *Guiguzi: China's First Treatise on Rhetoric* (Hui Wu (trans); Carbondale: SIU Press, 2016), p. 59–60.

[49] Ibid., p. 60, n. 26.

[50] Charles Fourneier, Théorie des quatres mouvements et des destinées generals (Lyon, 1808).

[51] Walter Benjamin, Das Passagen-Wek; in Gesammelte Schriften Vol. 1–2 (Frankfurt a. M.: Suhkamp Verlag, 1982).

[52] Broekman, supra, p. 1.

effects depending on the century, forms the basis for a consideration of the way that cognition is manifested in the construction of the ego-self from the imaginaries of the world built around it. That background is posited as both consequential, and as active. The active element revolves around human labor, understood in its broadest sense of active engagement in and with the world; the consequence of course, is built around the effects of such labor. But cognition is also built into the valuation (assessment) of labor on background effects—moving from a positive to a negative framing over the course of two centuries.[53] "The question raises again: was there a new reality articulated when Fournier spoke about the moons, the planet, the climate? Or did he speak about himself, the human being, its dreams, the freedom, and the importance of related thought formations?[54] And thus the problem of cognition as the starting point, but one that has or will take a turn in the digital age.

Broekman starts the consideration of cognition by focusing on that old chestnut of modern philosophy—is human reality made in its own image?[55] The answer, of course, should be: yes of course it is. But that would be too simple—and simple minded. It is in the journey from the outside into the cognitive universe of the human—from its ego to its self, that things get more interesting. It's *fascinating* aspect is in the very possibility that because the universe is indifferent to cognition—that is that the universe is as it is (as the core initial Biblical observation reminds us, "without form and void"[56]—that it acquires form only through a process of ming míng (明名), of intelligent naming. *And thus the semiotics of cognition suggests that what human speak about as reality is merely little more than their effort to name and arrange that which is indifferent to the naming and to the arranging.*

But Broekman reminds us that human do not think in that way. Human are attracted to a different rationalization of cognition, as one engaged in the titanic task of masting meaning. To that end Broekman correctly points to Husserl,[57] but also Levinas.[58] But meaning mastery, in this sense, cannot be about *meaning* at all, but rather meaning is itself a semiotic signification of ordering; that is that meaning is or ought to be about the cognition of intelligent naming, and by naming of attributing characteristics to the object made real by its naming. For Broekman, Husserl provides a useful foundation, but one founded on the alignment of order, meaning, fact.

> It is important to underline the coherence of visual and lingual approaches in view of their sign-relevance, which tends to be linked to traditional forms of understanding the genesis of knowledge . . .as a subject which was a center of specific activities that creates a stable and manageable pattern of thoughts, ideas, issues, and even data.[59]

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[53] Ibid., p. 1–2.

[54] Ibid., p. 2.

[55] Ibid., pp. 2–6.

[56] Gen. 1:2 KJV (unless otherwise noted all Biblical citations are to KJV).

[57] Broekman, supra, p. 2.

[58] Emmanuel Levinas, "Reality and Its Shadow," in Emmanuel Levinas (ed) *Collected Philosophical Papers* (Dordrecht: Springer, 1987).

[59] Broekman, supra, p. 2.

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It is the stable and manageable pattern of thoughts, ideas, issues, and data that *fascinates* Broekman. Here classical semiotics provides the gateway from the knowing subject to its context: socialization; dynamic othering within a peer collective of meaning makers.[60] A key point here is the role of visual semiotics—and the need for a necessary exploration of its connection to cognition.

A virtual semiology was in the minds of those who focused on the study of signs, but where do we find access towards a deeper understanding of the actual issue? An answer might surprise. We find it in the traditional underpinning of *the Subject as a Self*—which of course, is a primary power of the Self in itself![61]

This gets one to the proper positioning of cognition within and entwined with a self-referencing epistemology that passes as the universe of knowledge, now better understood as posting the limits and vessels of human knowledge. This leads Broekman to what he describes as "a most remarkable insight, which relates to semiotics: an understanding and exploration of the Human Self does form the basis for *any* unfolding of cognition".[62] That insight, in turn produces another and far more potent notion—that epistemology as an expression of the (individual and collective) Self, that is that epistemology as a manifestation of knowing/naming, is itself the intertwining of two processes. The first is that of *cognition*, the second is that of *conversion*.[63] What technology has made more manifestly unavoidable is the realization that data becomes knowledge only through a process of conversion from something external to something internal to the self (and here a link to phenomenology which is to come later in the discussion). That knowledge, then, is not about the thing itself, but about the cognition of the thing. It is in this sense that Broekman is fascinated by Fournier, who is able in his own inadvertent way, to describe the self-reflexivity of virtual semiotics as the unity of the human self ***and*** the planet.[64] I might have been more inclined to suggest that what Fournier (and Broekman) were doing was suggesting the unity of human self ***as*** the planet.

What changes, what breaks the pattern of development, is what Broekman understands as the transition of the (self) constitution of reality from the analogue to the digital.[65] Critical to this leap is the convergence of the idea of consciousness (ego) and sentience (self) in the notion of the split-I, the plural character of each subject. Having created a space between the conscious and the sentient, it is then possible to insert the entirety of the world in the space between them. That is possible as a matter of course in a world characterized by the *analogue*—characterized by the invocation of physical signals (the visual, the textual, the observable, even if only in

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[60] E.g., Umberto Eco, *A Theory of Semiotics* (Indiana University Press, 1979).

[61] Broekman, supra. pp. 2–3.

[62] Ibid., pp. 3–4.

[63] Ibid., p. 2.

[64] C Fournier, Théorie des quatres mouvements et des destinées generals (Lyon, 1808); but also T.A. Sebeok, *Global Semiotics* (Indiana University Press, 2002).

[65] Broekman, supra, p. 4

505 relation to the observer). Digital expressivities upend the ancient conceits of cogni-
506 tion precisely because it is not attached to either self or ego (consciousness or sen-
507 tience. Instead it proceeds from both and transforms the mechanisms of intersubjec-
508 tivity from an internal to an external reflexivity between the self and expressions of
509 itself. Cognition is still grounded in conversion; Broekman describes this as "cogni-
510 tion (i.e. acquiring by thought, experience and the senses as grounded in selective
511 capacities), and conversion (i.e. the change or the causing to change form one form
512 to another".[66] However, the interface between input and output has changed. The
513 ego-self, always plural,[67] now becomes conscious through an interaction not with
514 itself but with its virtual self, what will become later in Broekman's elaboration as
515 the Self-E.

516 One should on the contrary understand *the new plurality* which dominates
517 cognition as well as conversion today. In other, rather absolute words, one
518 must conclude: *the digital is not the new form caused by the split of the split
519 ego.* But one could nevertheless suggest that the digital is the *other Otherness*
520 which creates intersubjectivity and thus the social dimensions of life on the
521 planet.[68]

522 At last one comes to the eureka moment and Broekman's critical *fascination*: this
523 new understanding of cognition in the digital is marked by a change of sign with a
524 movement of the subject from the conscious (ego) to the sentient (self). The imagery
525 of a walk in the woods drives this change home.[69] The play on words is brilliant:
526 one starts a walk in the woods (www), yet almost as soon as one starts one consults
527 a map app for directions. A walk in the woods simultaneously is also a walk in the
528 www, the world wide web." Cognition is at once analogue (the woods) and digital
529 (the virtual and interactive woods of the Internet). This is both a substantial change
530 from a walk in the woods with a map, or with a compass because both of those were
531 in the world. The digital connection takes one out of the world into its simulation.
532 What follows? Reality is in the simulation only confirmed by the actual pas-
533 sage in the woods. Simulation is the plural self and cognition the sense of self in
534 the world of the analogue and in the virtual world that makes the analogue world
535 clear, understandable—and real.[70] Indeed, in Broekman's story of the "www" it
536 is not clear whether the self is in the act of the walk in the woods or in the pic-
537 ture of the self in the walk, or in the digital simulation of the wood within which a
538 walk is possible while walking through its simulation in the www. Cognition, then,
539 is simulation, or is simulated. Its conformation may be located in the analogue but

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66FL01 [66] Broekman, supra, p. 9.

67FL01 [67] Ibid., p. 4.

68FL01 [68] Ibid., p. 5.

69FL01 [69] Ibid., pp. 5–6.

70FL01 [70] Larry Catá Backer, "Describe, Predict, Intervene!—On Objective Subjectivities and the Simulacra of
70FL02 Semiotics in the New Era; Simulated Signification and of Mechanical Meaning Making in Managing
70FL03 Post-COVID Human Society", in *Rearguards of Subjectivity* (Frank Fleerackers (ed); Springer, 2023) pp.
70FL04 21–62.

540 its signification is now wholly digital. "Once more, we repeat: the *Self* became the
541 *Selfie* and then the *Self-E* in the New Plural, which is dominated by digital thought
542 patterns. It functions like the Subject in earlier centuries of cognition but now in the
543 form of the *selfie* resp. *Self-E*".[71]

544   It is on this bedrock of cognition that Broekman then introduces five consequen-
545 tial subjects that are briefly considered in turn, each of which are then further elabo-
546 rated in later chapters: (1) Mirroring; (2) Networks ("To Grasp, to Fit"); (3) the Null
547 set; (4) Intersubjectivity; and (5) Conversion.

548   *(1) Mirroring*. Mirroring is offered as a metaphor encircling cognition. It is
549 offered as act and datum.[72] Humans see themselves in everything and everything
550 as themselves. Cognition, in this sense is the never ending act of Narcissus, who,
551 turned into a flower, became the mirror of others who would then behold themselves
552 in and through the object into which Narcissus had been transformed.[73] Here, too,
553 the foreshadowing of the mirroring selfie: "While he is drinking, being attracted
554 with the reflection of his own form, seen *in the water*, he falls in love with a thing
555 that has no substance; *and* he thinks that to be a body, which is *but* a shadow".[74]
556 The mirror, though, is also the foundation of replication; and of patterns, Broek-
557 man speaks of the mirroring that is the chessboard; he might well have spoken of
558 virtually any board game in any culture—the game of Go, for example.[75] But more
559 immediately the looking glass; Lewis Carroll perhaps intuited it best had it best in
560 his books *Alice's Adventures in Wonderland* (1865),[76] and *Through the Looking
561 Glass, and What Alice Found There* (1871).[77] Both are quintessential mirrors. But
562 more than that each suggests the power of virtual worlds to both reflect and shape
563 our own. Mirroring, of course, seeps imperceptibly into the digital, as well as the
564 imaginary. One can think of New York City as a space, but also of its mirror as a
565 grid on a map, or in a painting by Mondrian[78]; or its visual transformation in the
566 form of its subway map that reshapes the city even as it offers a guide to transport
567 within it.[79] Here mirroring geographies moves the signification of the space from
568 the physical to the virtual; where the city and its image change places of primacy.
569 To take Broekman's intuition further—mirroring cognition in the digital brings us
570 back to the walk in the woods and the world wide web. The ultimate mirror—the
571 simulation—and the transformation of phenomenology from physical to virtual

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[71] Broekman, supra. p. 6. Larry Catá Backer.

[72] Ibid., pp. 6–7.

[73] Ovid, *The Metamorphosis of Ovid* (Henry T. Riley (trans); London George Bell & Sons, 1899); Book III Fables VI-VII (Echo and Narcissus).

[74] Ibid., Book III, Fable VII, III. 413–445.

[75] Jiang Shigong, "The rise of great powers and the revival of civilization——The Taiwan issue under the "protracted war of civilization'" [强世功 《大国崛起与文明复兴——"文明持久战"下的台湾问题》], Law at the Endo of the Day (18 August 2022); available [https://lcbackerblog.blogspot.com/2022/08/jiang-shigong-rise-of-great-powers-and.html].

[76] Lewis Carroll, *Alice's Adventures in Wonderland* (London Macmillan, 1865).

[77] Lewis Carroll, *Through the Looking Glass, and What Alice Found there* (London, Macmillan, 1872).

[78] E.g. Piet Mondrian, Broadway Boogie Woogie (1942–43); New York: MoMA.

[79] John Xu, "Map Sensitivity vs. Map Dependency: A Case Study of Subway Maps' Impact on Passenger Route Choices in Washington DC.," *Behavioral Science* 7 (2017) 71.

572 experience.[80] The mirroring becomes a bridge. The bridge a means of conversion;
573 and conversion the foundation for a cognition as a sentience of perception in physi-
574 cal and virtual space.[81]

575   *(2) Networks ("To Grasp, to Fit")*. If cognition and conversion represent a bal-
576 ancing between the positive and negative embedded in intersubjectivity, Broekman
577 argues, that balancing and its traditional anchoring are upended in the face of the
578 digital. "The proximity of thinking and partitioning in a world delineated by inter-
579 subjectivity is lost in continuously revised coherences of data and techniques which
580 are in essence digital".[82] If the traditional partition of body and soul, of ego and self,
581 of the physical from the spiritual centers the human person in the business of cogni-
582 tion, and epistemology at the core of cognition, and phenomenology at the core of
583 epistemology (that is one proceeds from the body to the sense of the body, to the
584 recognition of the body as something apart, to the derivation of knowledge from that
585 sentient separation, to the conformation of that knowledge in experience) becomes
586 detached from its mirroring—that is from itself–then the inter-subject itself becomes
587 something quite different. It is not that the subject is transformed by the very process
588 of engagement with itself (however that self is constituted as its own mirror image
589 variants),[83] it is that the AND in I AND THOU (Ich UND Du) becomes the thing
590 BETWEEN the "ich" and the "du."

591   It follows that *interiority* of the subject and itself as the basis of cognition is
592 replaced by the *exteriority* of the subject and its digitalized image. This digitalized
593 image is itself a mirroring of the old ego-self but with one difference that changes
594 everything—the self can reach into the mirror and mirror image can reach into the
595 self. Within Broekman's field of vision, "That technology relegates any eccentric-
596 ity of the self: *Philosophy became a networked form of intersubjectivity*;"[84] law fol-
597 lows.[85] Here one moves closer to social *systems*, and thus, closer to the sensibilities
598 of programming language and the sentient possibilities of generative coding, apart
599 from its human creators—not human *AND* generative digital subject, but *BETWEEN*
600 human and generative digital subjects. Communication of a different kind is required
601 and dialectic takes on a different hue—the dialectics of the "between" and the "and"
602 fracture; the former requires code switching (Broekman's conversion) and the later
603 the dialectics of what Broekman describes as the plural self/Self-E.

604   *And there it is*. The nature of this networked intersubjectivity pulses with the
605 dynamic interplay of differentiation related to their enforcement of contouring on

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[80] Rosalia Lauro Grotto, "Symmetrization, Mirroring and External Reality: An 'Inner' Perspective," *European Review* 29(2) (2020) 181–196.

[81] Harrington et al., "Is Perception Reality? Using Person-in-Context Simulation to Promote Empathic Understanding of Dementia Among Nurse Practitioner Students," *Nursing Educ. Perspectives* 42 (2021) 377–379.

[82] Broekman, supra, p. 9.

[83] An ironic re-reading of the insights of I and Thou; Ich und Du. Martin Buber, *I and Thou* (Walter Kaufmann (trans) Touchstone, 1971).

[84] Broekman, supra, p. 9.

[85] Alberto Febbrajo and Gorm Harste (eds), *Law and Intersystemic Communication: Understanding 'Structural Coupling'* (London: Routledge, 2013).

606 the one hand, and to their mutual shadowing on the other. "These powerful dynamic
607 processes are often disregarded—even when such simple terms like "to know" or "to
608 grasp" are used on the one hand and "to fit" on the other".[86] To "grasp" and "to fit"
609 in the digital age shifts the dynamic of cognition and conversion, to one emphasiz-
610 ing conversion as a predicate to knowing. Networked intersubjectivity requires rout-
611 ers, pathways, mirroring, and mapping—they require an interface where the ego-self
612 (consciousness-sentience) and its virtual self-E can process experience. "the close-
613 ness of digital thinking and operating on the one hand and human behavior on the
614 other makes us experience our body and mind as a very different part of a universal
615 scale. The latter unfolds with the smartphone in our hands and the computer tech-
616 nologies in our minds."[87] That produces a mirroring of the "between" the I and the
617 you in both the physical space that separates the carbon-based human from the non-
618 carbon-based smartphone and in the cognitive space that defines their respective
619 subjectivities. Together they rewire language and pathways to cognition. One now
620 grasps and fits our digital semiotics in the language of coding, and that language of
621 coding serves also as a form of conversion between the analog and the digital.[88]

622 *(3) The Null set.* That brings us to the core of the fullness of knowledge—the
623 empty spaces of no thing and nothing as developed over the course of the centuries.
624 One starts with a basic premise: the basis of knowledge is the impossibility of the
625 absence of an opposite. Form is understood in its juxtaposition with form-less; a
626 thing is grasped in the shadow of no-thing. The binaries of knowledge are as old
627 as the effort to produce meaning—relational, contextual, and constantly in dynamic
628 engagement with its "not itself." To this end the mirror concept, considered earlier,
629 plays a role. "There is no mirroring if the Self has not created an Other through its
630 mirroring. If the "I" is completely self-sufficient and beyond relations, then there
631 is no cognition possible".[89] Indeed it is impossible where even the self cannot be
632 understood as a singularity since consciousness requires a sense of not-conscience,
633 and sentience requires knowledge of its meaning. And off we go.

634 But nothingness does not necessarily suggest the inevitability of duality (though
635 it is much easier to build collectives and manage the human where one posits the
636 duality as the basis for cognition). Broekman draws on ancient and more contem-
637 porary theologies of the nature of the Divine—a wholeness that is itself an aggre-
638 gation both of itself and around its creations. Absence is something; the null set
639 has value; non space is notable by its absence; that one cannot define it except in
640 relation to another does not obliterate its firstness.[90] One can draw as well on Laozi
641 (老子). Here one at last draws one's eye away from the divide between the thing
642 and no-thing to the human intersubjectivity that imposes that break in rationalizing

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86FL01 [86] Broekman, supra., p. 10.

87FL01 [87] Ibid., p. 11.

88FL01 [88] Ibid., pp. 11–12.

89FL01 [89] Broekman, p. 12–13.

90FL01 [90] Consider the wrestling of Neil Barton, "Absence perception and the philosophy of zero," *Synthese*
90FL02 (2020) 197 3823–3850.

643 the human and humanity in the world.[91] "The Tao is an empty vessel; it is used, but
644 never filled".[92]

645 *(4) Intersubjectivity*. One might question where all of this reshaping of mirror-
646 ing, of the network and of the "thing" that "is not" is going. At best, its relevance
647 to the digitalization of the self (as selfie and Self-E), and more importantly, the re-
648 creation of the human in and through techno-electronic objects (the hardware and
649 software that constitutes the basis of silicon based life made in the image of the
650 human) remains obscure. That obscurity is lifted, where one begins to embed these
651 notions, and their detachment from the consciousness-sentience of the physical indi-
652 vidual (and their collectives) in the concept of intersubjectivity. There will be more
653 to be said on that subject in the course of the elaboration of Broekman's revisioning
654 of reality. But for a first run, Broekman has this to say:

655 First intersubjectivity must be (re)opened to include both the "no-thing" and the
656 exteriority of the Self-E to the traditionally intensely narcissistic and dystopic love
657 affair between consciousness (ego) and sentience (Self). The plural subject is now a
658 networked subject, a simulated subject, a digital subject, a subject from within which
659 everything in the universe may be arranged (interiority), and a subject that continues
660 to make the world in its own image—except that this image is now both mirrored
661 within and virtually outside.[93] "Alexa users trust the voice assistant because they see
662 it as a secretary rather than a machine, a study has found. Researchers from Oxford
663 and Stanford University found they ignored concerns over privacy and surveillance
664 because they saw the Amazon device as a companion".[94]

665 Second, this intersubjectivity mimics internally the self-referencing nature of crea-
666 tion as an act of naming that flows outward to the constitution of divinity (understood
667 in relation to an in the image of its worshippers). But it is also the manifestation of
668 a return to Eden where the Self has gorged on the fruit of the Tree of Life.[95] That is
669 exactly what humanity has done. In the form of the creation of the virtual image of
670 itself—the virtual self, the Self-E, that now lives forever in its silicon bodies, and in
671 its own Earth (the world human created for it in the world wide web). *Humanity has*
672 *(re)built Eden, and having been locked out of permanence in physical form (except*
673 *through the act of procreation—another aspect of inter-subjectivity, of mirroring and*
674 *the no-thing worth further study)*. No longer bound by what is good and evil in the
675 sight of the Lord (the Biblical phrase), it humanity now builds its own Eden, sown
676 its own Tree of Good and Evil, and its own Tree of Life; and having gorged on both

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[91] Qinjie James Wang, "Thing-ing and No-Thing in Heidegger, Kant, and Laozi," *Dao: A Journal of Comparative Philosophy* 15(2) (2016) 159–174.

[92] Gia Fu Feng [馮家福] & Jane English (trans), *The Tao Te Ching* (Vintage Books 1989); ¶ 4.

[93] Broekman, supra, pp. 15–16 ("it concerns ultimately the position of *the Self related to another Self in one's proper Self!*" ibid., 15.

[94] Jim Norton, "Alexa users trust the Amazon device because they see it as human rather than a machine, study finds" *Daily Mail* 9 October 2023).

[95] The Tree of Life as the second element of divinity—eternity—which must join with knowledge (of good and evil) to suggests a cognitive equivalence between the Creator and the created (in the Biblical case, between God and humanity). "And the Lord God said, 'Behold, the man is become as one of us, to know good and evil: and now, lest he put forth his hand, and take also of the Tree of Life, and eat and live forever." (Gen. 56 3:22)).

677 has remade humanity's own (triadically Self-) image of the world in the mirrored
678 images of his own (re)creation as a silicon life form. Yet, like the Biblical original,
679 it is always possible to project oneself beyond good and evil,[96] in this case by the
680 autonomous generative digital forms humanity has thus created.

681   Third, this intersubjectivity has a kick. Creating the world in the image of human-
682 ity, and living as if that world functioned as anticipated in the interiorized reali-
683 ties of human cognition of things produces the no-thing that bites back. Evil, in this
684 sense, loses its moral sensibility (always a tool for the management of the masses
685 within an orthodox framework of the intersubjective), and becomes instead the
686 manifestation of the null of a thing, or better put, of the negation of inter-subjective
687 realities. Broekman offers climate change as his principal example. "Any attention
688 for the negative is to take seriously in our days of threatening climate changes deter-
689 mining many modern thought patterns".[97] The implications take the intersubjective
690 beyond good and evil in the eyes of their creator (good and evil sharing semiotic
691 triadic characteristics in their own right)[98] to the creation-negation of a thing in a
692 context in which the binary life-death/good-bad etc. are stripped away. This is the
693 semiosphere of Frankenstein.[99] It takes one, as well to the intersubjectivities of the
694 movie Prometheus, where humanity serves as its own creator-destroyer in a world of
695 plural internal and external selves.[100]

696   *(5) Conversion*. And, at last, one arrives at the chapter's destination—cognition
697 as a *totentanz* with its partner conversion. Conversion serves as the Leninism to cog-
698 nition's Marx—it is the means by which the intersubjective can serve as a discipli-
699 nary tool for the creation and protection of the *lifeworlds* or *imaginaries* that are the
700 foundation of the sentience of the human conscience.

701   To become another or new person through the espousal of new, or at least very
702   different, values and norms is in fact one of the basic properties of man. This
703   is the *primordial power of conversion* which enriches life with new themes and
704   multiple disclosures of existential dimensions.[101]

705   That conclusion is true enough—nonetheless, it remains altogether human, all
706 too human in a fundamentally ironic sense.[102] That, too, is conversion. And it is

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96 Friedrich Nietzsche, *Beyond Good and Evil* (Helen Zimmern (trans); *Complete Works of Friedrich Nietzsche*, 1909–1913; Project Gutenberg e-book #4363 (2009).

97 Broekman, supra. p. 16.

98 Cf., Nietzsche, Beyond Good and Evil, supra. ("it is a gross mistake, therefore, when historians of morals start with questions like, "Why have sympathetic actions been praised?" The noble type of man regards HIMSELF as a determiner of values; he does not require to be approved of; he passes the judgment: "What is injurious to me is injurious in itself;" he knows that it is he himself only who confers honour on things; he is a CREATOR OF VALUES". ibid., ¶ 260).

99 Marry Wollstonecraft Shelley, *Frankenstein: Or the Modern Prometheus* (1818 edition) Project Gutenberg eBook #41445).

100 Dom Nero, "It is Time to Redeem Prometheus," *Esquire* (1 September 2021).

101 Broekman, supra, p. 17.

102 Nietzsche, *Human All Too Human*, supra ("The actor cannot, at last, refrain, even in moments of the deepest pain, from thinking of the effect produced by his deportment and by his surroundings—for exam-

conversion all the more intense where the imitation is undertaken through a mirroring of values and norms through the looking glass of the virtual and its simulation of value. It is grounded in phenomenology (experience) but that can now be balanced between the physical and the virtual. And yet—*and yet*—it posits a subjectivity of dependence; the fundamental assumption that the mirror merely reflects. Yet the digital mirror, its images and pathways, do more than that—the mirror of coding and iterative inductive reasoning that produces the digital acquires its own subjectivity even as it traces its forms back to its human mimetics.[103] Indeed, humanity may be quickly arriving at the point where its generative mirror judges it more effectively than humanity judges its generative "creatio".[104]

Still, Broekman raises an essential and *fascinating* point: the modernization of conversion as a router of change of position and functioning raises the fundamental issue of the possibility of a plural intersubjectivity. In Broekman's imagery: "how can it be that climate developments and their often disastrous effects relate to patterns of human cognition and thus of specific patterns of cognition?"[105] The connection is lingual: "Could that lingual activity de determined by a natural phenomenon on the one hand (climate) and human knowledge (language as a non-natural issue) on the other? (Ibid). One answer is that they are the two sides of the same human linguistic coin. This brings one back to the rhetorical insight of *ming míng* ((明名) intelligent naming) but also to Nietzsche:

> The importance of language in the development of civilization consists in the fact that by means of it man placed one world, his own, alongside another, a place of leverage that he thought so firm as to admit of his turning the rest of the cosmos on a pivot that he might master it. In so far as man for ages looked upon mere ideas and names of things as upon aeternae veritates, he evinced the very pride with which he raised himself above the brute. He really supposed that in language he possessed a knowledge of the cosmos.[106]

Nonetheless, Broekman layers the lingual component of conversion with a historical one.[107] Broekman implies, and it is worth underscoring, that history as

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Footnote 102 (Continued)

ple, even at the funeral of his own child: he will weep at his own sorrow and its manifestations as though he were his own audience... When anyone, during a long period, and persistently, wishes to appear something, it will at last prove difficult for him to be anything else. The calling of almost every man, even of the artist, begins with hypocrisy, with an imitation of deportment, with a copying of the effective in manner." Ibid., ¶ 51).

[103] One gets a flavor of this emerging way of thinking in current discussion. See, e.g., Dmytro Mykhailov, and Nicola Liberati, "A Study of Technological Intentionality in C++ and Generative Adversarial Model: Phenomenological and Postphenomenological Perspectives," Foundations of Science 28 (2023) 841–857.

[104] See, e.g., Maggie Harrison, "Bing's A.I. Refuses to Generate Photorealistic Images of Women, Saying They're "Unsafe": "Your image generations are not displayed because we detected unsafe content in the images based on our content policy," Futurism (26 October 2023); available [https://futurism.com/bing-ai-images-women].

[105] Broekman, supra, p. 17.

[106] Nietzsche, *Human All Too Human*, supra, ¶11.

[107] Broekman, supra, pp. 17–19.

object, sign, and signifier, remains for the most part an *analogue concept*. It is also
an ancient one. But digitalization creates new forms of life and new ways of living,
retaining, and disappearing the past. The mirroring is still there–the past as a mirror
projecting the present into a signification of the past.[108]

Unlike liberal democratic states where official histories are embedded within
the privatized factionalism of political and social movements whose represent-
atives people our elective state institutions, and fuel the engines osf academic
and administrative apparatus for the management of correct thinking, Marx-
ist Leninist states view the crafting of official history as both a necessity, and
as an inherently public political project that is of the utmost importance for
the chronicling of the work of the vanguard elements of society responsible
for moving the nation toward the goals the progress toward the attainment of
which is the principal measure of their legitimacy. That official history, then,
(1) marks the progress of the vanguard, (2) is meant to serve as the official cat-
echism of the rationalization of history with the vanguard forces at the center,
(3) is object affirmation of which is meant to serve as a social signaling of
fidelity to the political economic model, (4) organizes the progress (because
history here is a progress from the start of legitimacy of the lens that brings
order to facts) to its current state, (5) points to the future from a very specific
discursive perspective that suggests the scope of the possible, (6) identifies
internal taboos and enemies, (7) provides a concrete basis for judging histori-
cal activity (and future planning) as falling within the appropriate historical
path or deviating from it, and (8) provides a temporal structure for the articula-
tion and evidence of the application, challenges and success of the vanguard's
ideology, its working style, its great triumphs and the lessons from the past
that will propel the vanguard to renewed success in the future.[109]

Nonetheless, erasure and recasting a narrative of the past now requires mirror-
ing action in both the physical and digital (virtual) realms. In the Soviet Era it was
possible to erase and remake the past merely by eliminating people, tearing down
sculptures, burning books, and airbrushing pictures and other images, and the like.
And yet the generalized imaginaries of history as temporal intersubjectivity, is also
well known. "Freed from its dependence on fixed points supplied from without, the
historian's picture of the past is thus in every detail an imaginary picture, and its
necessity is at every point the necessity of a priori imagination".[110]

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[108] Larry Catá Backer, Origin Cultures and Post-Global Empire–习近平: 把中国文明历史研究引向深入 推动增强历史自觉坚定文化自信 [Xi Jinping: Lead the study of the history of Chinese civilization in-depth, promote the enhancement of historical consciousness and strengthen cultural self-confidence], Law at the End of the Day (29 May 2022); available [https://lcbackerblog.blogspot.com/2022/05/xi-jinping-lead-study-of-history-of.html].

[109] Larry Catá Backer, "Resolution of the Central Committee of the Communist Party of China on the Major Achievements and Historical Experience of the Party over the Past Century" [中共中央关于党的百年奋斗重大成就和历史经验的决议 (全文)] Text and Thoughts, Law at the Endo of the Day (21 November 2021); available [https://lcbackerblog.blogspot.com/2021/11/resolution-of-central-committee-of.html].

[110] Robin G. Collingwood, *The Idea of History* (Oxford University Press, 1946), p. 245.

In the new digital era that is no longer sufficient–an equally thorough airbrushing of virtual worlds is also required and a rewriting of virtual text necessary to reshape the past in the image preferred by the present to attempt to project onto the future. Again, it is that double mirroring that is critical–between consciousness and sentience in the physical and in the virtual worlds, and between them. This is plural subjectivity, and multi-dimensional semiotics. This was recently apparent in contemporary efforts to scrub a sacked foreign minister in China[111]; it is also apparent in the efforts to protect or change digital libraries and repositories for original source materials.[112]

In one profound sense, though, Broekman has struck brilliantly here—human die, and others replace them, each situated in a sometimes substantially different point in the networked intersubjectivity of the human collective, the semiotics of which can produce changes of position (conversion) but only wholly within the confines of the human. History, for Broekman, "focused rather on the diverse flows of times which became recapitulated in frames of human cognition belonging to various positions."[113] And the router of changing positions: conversion! "Each relation between cognition, including each relation between knowledge and conversion will soon be understood as a form of conversion." The Leninism of semiotics in conversion (its forms) absorbs its semiotic Marxism (its norms) as the substance of cognition/knowledge. Indeed, it is no longer cognition that is of interest as a core concept, but the movement of cognition through conversion; another instance of the flow, this time in its rationalizing forms—through changes in function and position. The outcome is inevitable, but the pace quickens in the age of the digital; in the analog it is measured by the useful lifespan of the human (even within human communities the pace of the intersubjective dialectic of which is also measured in the space of a lifetime) The pace is increasingly faster when measured against the hyper-processing of the virtual. Cognition becomes the instantaneous picture of the flows of conversion.

This questionable positioning of the human subject and its subjectivity is a hitherto unknown and never ventured practice which came to life through the introduction and worldwide practices of digitality. These newly conceived practices and their special techniques brought a *conversion* that led to hitherto unknown forms of subjectivity.

Full stop.

These self-referencing systems are, in a sense both all too human and at the same time collectively supra-human in their good, bad, or indifferent habits of engaging with the stimuli that animate their programming. The problem, then, can be understood in semiotic terms. Where the language of social relations shifts from text to code, a transposition of the mechanics of orthodoxy is required. That mechanics requires both translation and quality control meas-

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[111] Oliver Hotham, "China's Qin Gang Scrubbed From Foreign Ministry Site After Dramatic Removal," *Hong Kong Free Press* (26 July 2023); available [https://hongkongfp.com/2023/07/26/chinas-qin-scrubbed-from-foreign-ministry-website-after-dramatic-removal/].

[112] Jonathan Zittrain, "The Internet Is Rotting: Too much has been lost already. The glue that holds humanity's knowledge together is coming undone" *The Atlantic* (30 June 2021).

[113] Broekman, supra, p. 18.

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ures. That is it requires a re-invention of the signification of the signs and objects through which meaning is described and applied in social relations. It also requires a new supervisory structures—from the discretionary decision making of human collectives (public and private operating as an exogenous force against heresy), to the automated self-learning machines that serve that purpose in the ecologies of enormous data flows (public and private analytics ted to judgments of aggregated data representing a quantified vision of social relations in macro and micro relations and endogenous (within) them).[114]

Digitization, the conversion of the physical into a form that can be processed into machine readable form, and its animation through the modalities of digitalization, big data analytics, the possibilities of simulation and the virtual world managed by self-generating artificial intelligence has remade—not the world—but human cognition of its relation to the world. The subject has externalized its own ego-self and re-created it in its own image. It now has a playmate. Digitalization has made possible a semiotic impossibility—the consciousness of ourselves and our virtual selves in mirrored and networked intersubjectivity in which subject, object, signified and signified all change position and function depending on position and perspective. At last one comes to understand cognition in the age of the digital—snapshots of flows of data in structurally coupled connection (conversion) in which the distinction between ego-self-selfie-Self-E collapses in both analogue and digital mirroring versions, and between them. Indeed, what becomes central to the semiotics of the Self(-E) is the flow. Cognition in the digital is "being in the flow;" a concept next considered by Broekman.

4 Chapter 2 (Fluidity and Flow)

We have come to understand that knowledge is a narcissistic exercise, even in the age of the digital. However, that self-reflection projected outward now acquires a far more interesting architecture. The mirrors of the self now reflect not just itself but its virtual self as well. This double mirroring (the self and its other or null self plus the virtual self/Selfie/Self-E) creates a state of cognition in which sentience flows in a plural inter-subjectivity of self, virtual self, and the null set of either/both. That flow requires a router. And that router, conversion, serves as the pathway toward, and perhaps as, cognition. The sentience of the self—whether physical or collective, becomes plural, historical, and always available for playback not just within the vagaries of the human mind but in the playback loops of its silicon self. It follows that as data serves the role of semiotic object—firstness—the flow of data, memory, playback encases object and object flows in secondness, signs the signification of which become both significant and the framework of epistemology. That epistemology, again in its semiotic aspects, is flow understood as the phenomenology

114FL01 [114] Larry Catá Backer, Coding Orthodoxy; Automated Law; and Quality Control in AI–CAIDP (Center
114FL02 for A.I. and Digital Policy): OPEN A.I. (FTC 2023), Law at the End of the Day (22 March 2023); avail-
114FL03 able [https://lcbackerblog.blogspot.com/2023/03/automated-law-caidp-center-for-ai-and.html].

847 of knowledge. Thus, Broekman signifies the meta-looping of the inter-subjectivity
848 of epistemology; that is of the human reconstitution of the world, physical and
849 simulated, that can be accessed and experienced—with reference to the self, selfie,
850 Self-E.

851 The flow, and fluidity, then, become a central ordering concept in the reconstitu-
852 tion of cognition as conversion, of conversion as the reflection of the plurality of
853 inter-subjectivity, and of the multiplicity of personality and its experiences in physi-
854 cal and virtual space—all spewing data around which a cognitive epistemology is
855 possible. In the paraphrased language of St John: in the beginning was the flow, and
856 the flow was with God, and the flow was God. (John1:1). Flow and fluidity, then,
857 acquire a core position in the constitution of knowledge, of what can be known from
858 the position of the human and its simulacra. *The flow itself points to something of
859 its core significs—the condition of being fluid.* If *fixity* is analogue and modern, then
860 *fluidity* is digital and post-modern. The state of fluidity permits a more intense con-
861 sideration (cognition!) of flow (the constant and multi-directional signaling that are
862 data) that makes visible the plurality and dynamic state of inter-subjectivity and thus
863 of cognition... and thus of knowledge that is itself a sentience and experie of the
864 world in which the physical-virtual selves occupy and with which they interact.

865 It is to that issue of fluidity in the self-experience that renders epistemology vis-
866 ible and knowable (in the sense that knowledge can be made to know itself—the
867 self-knowledge of knowledge) that Broekman turns in Chapter 2. The object is to
868 consider "fluidity" and "discourse" in the context of the objectivity of knowledge
869 where it proceeds from the self-selfie, self-E. If discourse is a sort of textual flow—
870 the analogue of data flows, iterative processes, and the foundations of self-genera-
871 tive silicon consciousness-functionality, then fluidity references the dynamic nature
872 of discourse in its iterations that necessarily must incorporate emerging discourse
873 into the some of its text.[115]

874 But there must be more. That "more "is found in both the useful vagueness of
875 the term the flow encased in fluidity as its major characteristic (ibid., p. 24) and its
876 utility for signifying the dynamic digital subject. Starting with Zygmunt Baumann's
877 much discussed *Liquid Modernity*[116] (an effort to move beyond the historicism of
878 modernity-post-modernity and beyond), and Umberto Eco's essays in *Chroniclers of
879 a Liquid Society,*[117] Broekman draws on concepts of crisis from Baumann and fluid-
880 ity from Eco to grasp a concept of flow that is tied to what older people in the later
881 20th and early twenty-first century saw as destabilizing transformation of social,
882 political, economic, and cultural orders. And indeed, the original title to Eco's col-
883 lection of essays–*Pape Satán Aleppe: Cronache di una società liquida* with its invo-
884 cation of the incantation that serves as the first line of Canto VII of Dante Aligh-
885 ieri's Inferno,[118] the meaning of which continues to elude—invokes the discursive

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115FL01 [115] Broekman, supra. pp. 23–24.

116FL01 [116] Zygmunt Baumann, *Liquid Modernity* (Cambridge, Polity Press, 2000).

117FL01 [117] Umberto Eco, *Chroniclers of a Liquid Society* (NY: Houghton Mifflin, 2017) (collection of essays
117FL02 written for his regular column in the magazine *L'Espresso*).

118FL01 [118] Dante Alighieri, The Divine Comedy (Henry Wadsworth Longfellow (trans); Project Gutenberg
118FL02 e-book #1001 (1997)).

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crisis that is at the heart of the liquid modernity and a liquid society. Dante speaks to the inhabitants of the Fourth Circle—the avaricious, the prodigal, the constant turning of the wheel of fortune (about which Broekman has written[119]) but most tellingly about the flow of the River Styx.[120]

Broekman uses that as a foil to detach the flow from the hand wringing of late post-modernity's infatuation with crisis and change (an irony given that most of its adherents had spent lifetimes wishing for the thing they now feared) —and then to take it into the digital. He turns the post-modern problemmatique upside down. If the problem of the post-modern is crisis, then that is a crisis of the analogue. In the digital, the focus is not on crisis, but on the flow—the inevitable movements of which can be understood as crisis, or they can be understood as the essence of cognition-conversion. Crisis, in this sense, comes from the privileging of stasis; yet stasis in the post-modern, defines its general contradiction. The resolution of that contradiction, and the pathway from the mirrored box of the post-modern, is in the shift from stability to flow, from analogue to digital. Broekman notes: "Flow is, after all: change. Movement, flux, drift, gush, or stream of values. The issue to be studied is thus the specificity of the flow's dynamics rather than its syntax! Change is the key word for this approach!".[121]

One embraces here not the self-referencing rigidity of systems built in concrete., but rather the full consequence of moving from solid to liquid states of intersubjectivity—and thus to more liquid states of certainty in what epistemology is stuffed with: in a sense it is the dynamics of phenomenology that both fills and defines the spaces of epistemology. Knowledge—cognition—grounded in convergence and built on flow (of data (e.g. of objects experienced))mirroring the physical and virtual producers of data, now takes on its digital character. One is no longer in the world of Husserl, Lyotard, Eco, or Baumann; one now inhabits the self-conceived world of Mr. Universe who sits at the routing point of "the signal": "Can't stop the signal... Everything goes somewhere. And I go everywhere".[122] From an epistemological respective, one can understand in the flow—or the signal—a distinct way of approaching intelligibility, and thus the movement from consciousness of a thing or state to its sentience.[123]

The flow is a manifestation of consequence of the movement from analogue to digital—the reduction of the effect of language, of discourse: "the flow demonstrates the contrary, namely that life and cosmos are more than linguistic categories ever express!"[124] *It is here that Broekman plants the fundamental semiotic question*—one of the position of the observer who from their observation is attempting to extract

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[119] Jan M. Broekman and Larry Catá Backer, Lawyers Making Meaning: The Semiotics of Law in Legal Education II (Dordrecht: Springer, 2013), pp. 217–232 (the deification of chance and fortune, and its dialogical structures in legal discourse).

[120] Dante, supra ("A marsh it makes, which has the name of Styx, This tristful brooklet, when it has descended, Down to the foot of the malign gray shores." Canto VII).

[121] Broekman, supra, p. 25.

[122] Serenity, Universal Studios Home Entertainment (20 December 2005; quoting Mr. Universe).

[123] René Thom, *Semio-Physics: A Sketch* (Reading, MA: Addison-Wesley Publishing, 1990).

[124] Broekman, supra, p. 25.

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theories of knowledge (epistemology) and knowledge-experience (phenomenology) from the only place possible for it to happen—from the lifeworlds and imaginaries of cognition.[125] Is knowledge lodged in the *picture of cognition at any one point*, or is cognition (and thus the knowledge of knowledge) or is it lodged in those spaces between pictures of cognition that may exist from one point to another? In the age of the digital lifeworld or imaginary, one must move from the algebraic to the sensibilities of calculus (that term understood in its mathematical and semiotic senses). Cognition, and its phenomenological epistemologies (tied to its complicated intersubjective and mirroring baggage of the self-selfie-Self-E) *moves from the study of things to the study of the way things are changing: the flow; the signal!* "Where or when did we lose our grip on knowing the flow in which we live? Or: did we ever know the flow?"[126]

That question, perhaps, is one of the most contemporaneously relevant questions that Broekman poses. However, it takes one back not to modernity, but back to the cognitive foundations of Leibnitz and his *calculus ratiocinator* (a mechanism for mechanically deducing all possible truths from the list of simple thought). And that bring sone face to face with two vital changes from analogue to digital. The first is the critical mirroring role of the virtual self (as selfie and Self-E). That takes one to the classical arguments—reinvented over and over since the 1670s—about *ligua characterica* and *calculus ratiocinator*. This is the conversation to which Broekman alludes in his discussion of fluidity—and one that is deeply semiotic, and algebraic, involving Peirce in an interesting way.[127] And it is imbedded in the *fascination* with discourse, linguistics and its connection to cognition/communication (and thus to semiotic meaning making and the rationalization of the world, etc.).[128] Its epistemological consequences have been much mined, certainly to good effect as archeology in the age of the analogue.[129] The point is underscored with Broekman's discussion of Gadamer's linking of language (objectified sentience) and consciousness (ego).[130] Whether the character of that ego as "natural" or "artificial" makes a difference beyond the Anthropocene remains to be seen.

The second touches on the constitution of the virtual self (i.e. or -E) as the constantly moving aggregation all that is possible from the current state of cognition). It gets one—in effect—to generative A.I. and to the subjectivity of the autonomous but connected virtual self.[131] But the perspective inherited from Leibnitz gets it

[125] Alfred Jules Ayer, *Language, Truth & Logic* (2nd ed. NY: Dover, 1946); pp. 120–133).

[126] Broekman, supra, p. 25.

[127] Joan Bertran-San Millán, "*Lingua Characterica and Calculus Ratiocinator*: The Leibnizian Background of the Frege-Schröder Polemic," *The Review of Symbolic Logic* 14(2) (2021) 411–446).

[128] Broekman, supra., pp. 23–27; Philip E.B. Jourdain, P. E. B. (1914). Preface, in Louis Couturat, *L'Algèbre de la Logique* (L. G. Robinson (trans.); Paris: Gauthier-Villars, 1914); pp. iii–x. [Chicago: Open Court, 1914]).

[129] Michel Foucault, *The Archeology of Knowledge & the Discourse on Language* (A.M. Sheridan Smith (trans); NY: Pantheon Books, 1972).

[130] Broekman, supra., pp. 27–29.

[131] Daniel M. Rice, *Calculus of Thought: Neuromorphic Logistic Regression in Cognitive Machines* (Amsterdam: Elsevier, 2014) pp. 1–25 ("In a sense, this concept of Calculus Ratiocinator foreshadows today's predictive analytic technology." Ibid., p. 2).

wrong—*one ought not to focus on the product of the deduction of all truths, but on the process of deduction of truth as truth*—the flow. It is in the spaces between iterations of imaginaries that the virtual self-resides. And it is in the process of transition from one to another—captured to an extent by Broekman's concept of conversion (here as router, and in the world of logic as analytic structure; and in the world of A.I., as code sparking self-generation). It connects the concept of flow, to conversion, and centers conversion within cognition even as cognition remains the central element in knowledge experienced by and through the self, selfie, Self-E.

This last point is the one that animates much of the discussion in the last sections of Chapter 2 of Broekman's work—effectively an *archeology of the flow* in Plato's dialogues[132]; Voeglin's flow[133]; and Kant's desire.[134] The discussion of Plato's work is meant to *underscore the humanity of knowledge*. More importantly Broekman connects the desiderata of Plato's schema with contemporary conceptions of consciousness, and from the conscious to the sentient, and from sentience to cognition as a short half lived expression of flow made manifest (incarnated like Logos) through conversion. This is tied to Damasio's idea, shared by Peirce,[135] of the materiality of the sign in an object in relation to feeling a thing as the foundation of the (analogue) consciousness. For Broekman this produces an emphasis of the importance of the flow in four distinctly described categories[136]: (1) the flow is internal to consciousness; consciousness as an entity "does not seem to flow or be in a flow;" (2) the flow of consciousness cannot be understood as a rationalized dance of objectified significs; (3) consciousness of flow is not flow but its momentary manifestation as object-signs conveyed through performance (language in some form or other); (4) flow may be reflexive but it exists empty of refection.

The first, of course, touches on the nature of coding—a code cannot be understood as code. Yet, it is not possible to understand programs or applications as code—code is in and of. In the land of predictive analytics and A.I., however, it is possible to understand that code is external to that which is coded—code can become self-reflexive; that is self-generative A.I. is consciousness attuned to its own consciousness through its relationship to flow. The second underlines the difference between moments in time and the dynamic that is movement from time to time. One cannot signify flow but is signified by it. The third suggests an apartness of flow from the consciousness of those in the flow—human consciousness. The last suggests *the difference between iteration and reflexivity*. Self-generating A.I. is built on momentary manifestations of the flow of data projected as iterative and repetitious contextually useful strings of data. Iterative consciousness is inductive. Human intersubjectivity is built on suppositions drawn from the premises about the self, either experienced or felt. Reflexive consciousness is deductive.

However, consciousness of flow remains elusive under the old thinking. Back in the world of experience and symbolization—the analogue—flow serves as the

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132 Broekman, supra, pp. 27–32.

133 Ibid., pp. 32–34.

134 Ibid., pp. 34–38.

135 Broekman, supra, pp. 30–31.

136 Ibid., p. 31.

placeholder that connects one qualitative state of knowledge with another: like the balance sheet of a business. That becomes the centerpiece of the sentience of a business enterprise—its periodically updated picture of itself in a moment in time. In the world of the digital, the four dimensional canvas on which Broekman constructs for us out of the gossamer of fluidity, flow serves as the flux reality, the pathways of which may be followed through the aggregation in space and time of its picture, momentarily frozen. In this sense flow is more like the ledger entries that can be manifested in any moment in time as an income statement and statement of cash flows. The sentience of the business enterprise now shifts from the frozen imagery of the balance sheet—the core on which pre-millennium philosophy took for granted as the stable space of sentience and around which worlds were built. Its shifted core always existed, of course, but as a second order space between what was important. Now, in the digital, reality understood as moments in times fall away to reveal the continuity of constant movement—of the iterative processes of the ledger in a business with many consumers and complex producers—as a *platform* the solidity of which is founded on its constant movement of consumers and producers, of change agents.[137]

But back to Voeglin, who adds to the insights of time in and as flow.[138] More specifically, Voeglin[139] adds a hyper-objectification to history form which actors acting provide the only thing of significance the aggregation of which ordered within and through time makes it possible solidify abstractions like consciousness only in relation to concrete specifics—a bottom up phenomenology. But again life in the analogue has its limits. In this case the limits created by the abstract and not the concrete—"truth" is the object but also one that gets in the way of a theory of the concrete, specifically because it can be a first order concrete object but rather a discursive referent to amalgamation built on (not concrete) supposition. This one obsesses about the truth of consciousness; and that truth flows through the concrete consciousness of concrete men, etc.[140] Back in the world of tensions between experience and symbolization, Broekman considers whether (again a change in the locus of perception) the flow can be found not in experience or symbolization (the traditional subjectivity-objectivity nexus) but in what Voeglin describes as the tensions between them.[141] The answer is "maybe".

To this, Broekman layers the possibilities in Kant's desire.[142] A rich discussion to be sure. One shares a measure of Broekman's frustration, in the digital, with the modernist obsession with the "I." Kant, like Moses standing on Mt. Nebo and

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[137] Larry Catá Backer, "Inside the Cage of the System (制度的笼子里): Standards Setting, National Security Values, Tech Platforms, Regulation, and the Central Contradiction of Legality in the Current Historical Era"–Text of Remarks Delivered at Conference: Technological Platforms and National Security in Hong Kong: The Domain of Standards Setting (University of Hong Kong; 25 August 2023); available [https://lcbackerblog.blogspot.com/2023/08/inside-cage-of-system-standards-setting.html].

[138] Broekman, supra, pp. 32–35.

[139] E. Voegelin, *Anamnesis: Zur Theorie der Geschichte un Politik* (Munich: Piper Verlag, 1966); translated as *Anamnesis* (G. Niemayer (trans & ed); Nore Dame University Press, 1978).

[140] Voeglin, supra, pp. 3–36, discussed in Broekman, supra., pp, 32–33.

[141] Broekman, supra, p. 33.

[142] Broekman, supra. pp. 34–38.

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looking into Canaan, can get us to the Jordan River and beyond (in space and time) but is unable to cross.[143] Or, in the language of Broekman, "The specificity of our second decade of the third millennium is however, that a new plurality of expressivity is becoming dominant: the plural of the *analog* and the digital type".[144] What Kant appear to bring to the flow is tied to the relationship between the state of self-consciousness and consciousness of worldly objects. And off we go again—"our inner experience, which Descartes did not doubt, is only possible under the condition of our external experiencing".[145] This is an analogue project—and again back to language—and the *Human All Too Human*[146] that is both self-centered in a two dimensional way and "fascinated"[147] by text.

On the sidelines are the digital—images, codes, symbols, and the spaces between momentary stops—the individual frames of a movie that has yet to flow. "So, there is no doubt [in the shadow of Kant that is] that human knowledge is related to and even fundamentally limited by sensory experiences."[148] These are the shadows,[149] what I would call the spectres, that haunt the flow in the age of the digital, and that veil the possibilities of consciousness in the age of the multiple physical and virtual self. A confrontation is inevitable and the old must be swept aside or at least embedded within a new world in which consciousness itself has become self-generating (not just of itself in its virtual self) but in the reframing of cognition as defined by the infinite spaces between momentary iterations of cognition. Broekman does not sweep away, he re-imagines: He re-frames Kant's subject-object embrace into a space between which one might find the flow: "Kant refers to the fact that he distinguished two characteristics in the frame of what we name "A Flow": (a) a language of the Self, which functions within the structures of subjectivity, and (b) a language of the external world of that Self".[150]

And now the great leap forward[151]—a "rethinking of the flow as a philosophically relevant concept".[152] That requires achieving escape velocity from the confines of the analogue that was philosophy before the third millennium.[153] That requires a combining of the flow as a critical component of conversion, and conversion as acritical component of consciousness, and, of course, consciousness as a critical

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[143] Deut. 34:1–8.

[144] Broekman, supra, p.35.

[145] Ibid., p. 37.

[146] Nietzsche, *Human All Too Human*, supra. ("so the forms of our lives grow ever more intellectual and, to the old fashioned eye, perhaps, uglier, but only because it cannot see that the richness of inner, rational beauty always spreads and deepens, and that the inner, rational aspect of all things should now be of more consequence[24] to us than the most beautiful externality and the most exquisite limning."; ibid., ¶ 3; also the saint; ibid., ¶ 142).

[147] On the concept of fascination, see discussion, infra, Chapter 2 (the word invokes acts of signification, of naming to impose meaning, and by imposing meaning, giving it life).

[148] Broekman, supra, p. 38.

[149] shadows

[150] Broekman, supra, p. 39.

[151] William A. Joseph, "A Tragedy of Good Intentions," *Modern China* 12(4) (1986) 419–457.

[152] Broekman, supra, p. 38.

[153] Ibid., p. 39.

component of sentience, which is knowledge born of the experience of things instantaneously experienced in the flow. The implicates semiotic temporality in the sense of firstness as a fleeting notion made more permanent (as a memory of the thing in time) by its essentializing signification, and then utilized abstractly through their assigned thirdness.[154]

This new digital reflexivity can be understood in five layers.[155] These are meant to underline the differences between the analog and the digital—that is between notions of *streaming* and those of *the flow*. First, it is necessary to capture *streaming* as an analogue variation of the flow, as an analogue expressivity. "Flow and stream can both be equalized with 'flux', 'torrent,' or even 'jet'".[156] Second, this streaming "takes place in the sphere of *conversion of analogue terms into digital*".[157] This produces a strongly reified version of digital flow. Third, this reification takes place in media directly and unconditionally accessed via computer networks.[158] The result is a form of objectification of flow for and in markets. Streaming is thus understood as a powerful if constricted object fit for market and the management of social relations. And thus the fourth insight, "Streaming is therefore to be understood as a highly institutionalized process which embraces specific digital meanings that access recent block-busters or special top series".[159] Streaming does not flow—it is, if one follows this logic the detritus of the flow which like the rest of consciousness, is in made visible in an instant re-iterated ad infinitum (and thus the calculus in and as the flow). Streaming, then, in Broekman's *linguia analytica* "is a one-time only occurrence".[160]

I agree, of course, but the subjectivity of generative A.I. may now require one to rethink the limits of flow itself. That may move one from the subjectivity of flow, fluidity, flowing, to one of the *signal*. This brings one back to the *sign*, and to the *secondness* of the flow in the subjectivity of the constitution of silicon based consciousness (ego) and through its reflexive generation—to sentience. Consider the idea: "The door handle is the handshake of the Building",[161] The flow between object and sign in the physical world may be experienced through the senses and generalized through a consensus around its meaning (and in that case the semiotics of architecture). But now consider this in virtual space: the image of the door handle is the virtual handshake of the building; indeed. Yet the handle and the handshake are momentary flows of code the inevitability of which is directed by the overarching consensus from which it is possible to construct the virtual image. But construct

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[154] Michelle M. Lazar, "Semiotic timescapes," *Language in Society* (2022) 51(special Issue 5) 735–748.

[155] Broekman, supra, pp. 39–40.

[156] Ibid., p. 39.

[157] Ibid.

[158] Ibid.

[159] Ibid., p. 40.

[160] Ibid.

[161] Juhani Pallasmaa, The Eyes of the Skin,: Architecture and the Senses (3rd ed.; NY: Wiley, 2012); with thanks for its exploration in Tanvi Gupta, Understanding Semiotics: Firstness, Secondness and Thirdness (3 May 2018) available [https://www.linkedin.com/pulse/understanding-semiotics-firstness-secondness-thirdness-tanvi-gupta/].

1094 for whom?—as a bridge between silicon based consciousness (ego); as a plural
1095 means of expanding sentience? And of course the object of this shifts—from the
1096 virtual handle and handshake to the coding that permits an endless iteration of hand-
1097 shakes in countless variations of handles.

1098 Here one is confronted, at last, with the sentience of generative A.I.. Its episte-
1099 mology proceeds from its own silicon narcissism—its ability to vary the handle and
1100 handshake. And then, in a plural universe, to engage in that exercise interlinked with
1101 the carbon based ego-sentience of the observer. Signal is better attuned to the gener-
1102 ative consciousness as an object—with its linguistic origins (in the West)in the Latin
1103 signum—an identifying mark.[162] That embraces both the objectivity of the signal
1104 and its sign. Its analogue points to television and radio signals, but also toward its
1105 signification (as in a sign on a banner).[163]

1106 It is against streaming that one might consider flow. But to do that one must—and
1107 this will hurt—abandon analogue philosophy to the compost bin of history. And yet,
1108 as Broekman brilliantly reminds us, provides a fertile basis for growing new things
1109 on well-tended ground. One moves now beyond the language of words to that of
1110 the quite different language and the language of logic and its mathematics—or its
1111 inverse, the language of mathematics and its logic.[164] This is the language of verifi-
1112 cation where that sort of accountability is self-reflexive—and becomes the language
1113 of code in the digital. It is the language of the flow of infinitesimal changes, and in
1114 this sense transcendent.[165] But now live in an age where the infinitely small differ-
1115 ence between two points, "dy," has become quite large and lively. And like their
1116 carbon based analogues, the predictive analytics of big data, even in the form of
1117 self-generative A.I., can vary widely given their modeling and input assumptions.[166]
1118 That is the flow; and its calculus—conversion—now becomes the key to cognition
1119 of both carbon and silicon based consciousness. One goes back to the analogy of
1120 balance sheet consciousness discussed above; it remains potent, even as its relevance
1121 diminishes. It is the hallmark of traditional lawmaking—the desire to capture an
1122 instant in time and then to stretch it out forever even as those subject to its pro-
1123 visions, our ledger entries summarized in come statements constantly move from
1124 that point in time in which a command was given. Indeed, as one will see in the
1125 discussion in Section 12 below, the thrust of legal semiotics remains embedded in
1126 a balance sheet reality that presumes itself outside of history (and the flow of itera-
1127 tive behaviors over human lifespans). It was the essence of European Leninism, that

162 Etymology Online, "sign"; available [https://www.etymonline.com/word/sign].

163 Larry Catá LC Backer, "Foreword: Bannermen and Heralds: The Identity of Flags; the Ensigns of Identity," in (Anne Wagner and Sarah Marusek, eds; *Flags, Color, and the Legal Narrative: Public Memory, Identity, and Critique* (Dordrecht: Springer Nature, 2021), pp. i–xxii).

164 Alfred North Whitehead and Bertrand Russell, *Principia Mathematica* (3 vols., Cambridge University Press, 2nd ed., 1927).

165 Gilles Deleuze, *Difference and Repetition* (P Patton (trans); NY: Columbia University Press, 1994); discussed as against Leibnitz and Hegel in Henry Somers-Hall, "Hegel and Deleuze on the metaphysical interpretation of the calculus," Continental Philosophy Review 42 (2009) 555–572.

166 Rice, *Calculus of Thought*, supra, pp. 5–9.

1128 also sought to propel an ideology—and its generative moment—outside of history,
1129 which in the case of Cuba and the Soviet Union, produced tragic results.[167]

5 Chapter 3 (Post-dialectics)

1131 The digitalization of knowledge, experience, consciousness, and sentience poses a
1132 great problem for the philosophy of knowledge. That problem is made greater by the
1133 expanded universe within which one encounters flow—among and between the self,
1134 selfie, Self-E.[168] And at its base is the problem of communication—both between
1135 the analogue and the digital; but perhaps more importantly within the digital itself.
1136 Having worked diligently for millennia to get to the root of knowledge aligned with
1137 the communication of it—that is to align consciousness with sentience even within
1138 the universe that starts and ends within the physical self—philosophy is now con-
1139 fronted with the digitalization of all that effort. But this presents, as alluded above
1140 a double problem. Communication must bridge the analogue–digital divide. But it
1141 must first, perhaps, develop its own language within the digital.

1142 The *first problem concerns conversion* in its most direct form—a concept that
1143 Broekman introduces with Chapter 1 (and which I suggest in the language of silicon
1144 based consciousness serves as a coded router).Here Broekman's marvelously fasci-
1145 nating alignment of mirroring, of temporality (not as flow but as pictures of flow in
1146 increasingly shorter time segments), and self-reflexive experience at the micro (indi-
1147 vidual) and collective (macro) levels, offers an important foundation for re-thinking
1148 language-communication as and within knowledge and its theory. But the second
1149 problem poses more interesting challenges. *This second problem centers on the digi-*
1150 *talization of communication.* And it too, comes in *two flavors.* The first focuses on
1151 a digitalized linguistics of translation—this is digital linguistics in the traditional
1152 structures compatible with a purely human to human interconnection. The second
1153 touches on a purely digital linguistics—the language of the virtual self, the selfie
1154 and the Self-E. This second problem also touches on conversion but one that might
1155 be better understood as shaped by post-dialectical structures. By that one alludes to
1156 the transposition of communication into a system of iterative projections of content
1157 (traditionally perhaps thesis-antithesis-synthesis at its crudest but best known form;
1158 contradictions or irritants), from which meaning may be extracted (in its more ideo-
1159 logically robust guise—seeking truth through dialectics). But one no longer speaks
1160 to contradiction[169]; nor on a process of progression through synthesis thinking in the
1161 production and perfection of knowledge. Instead, like the flow (Chapter 2), digital-
1162 ized post-dialectics focuses on the iterations, each of which contain the old dialecti-
1163 cal progression, but for which that dialectical progression is reduced to one point

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167 Larry Catá Backer, Cuba's Caribbean Marxism: Essays on Ideology, Government, Society, and Economy in the Post Fidel Castro Era (State College, PA: Little Sir Press, 2018).

168 Broekman, supra, p. 43 ("Several notions, terms, and descriptions in the preceding chapters seem old fashioned, and many were foundational in the fields of conceptual tensions.").

169 Mao Zedong, *On Contradiction*, supra.

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in a longer arc of meaning. Again one returns to the calculus of knowledge, on the focus on the movement between dialectical resolution (or even confrontation).

And thus one arrives at the heart of the *fascinating* discussion in Chapter 3, of post dialectics, and of language in search of communication—and communicants. Here one uses communicant quite specifically. The term denotes a person who imparts or consumes information; but in a richer vein and more semiotically relevant, the term connotes a person who participates in the Eucharist, the "celebration of the Christian mystery" in the Catholic tradition.[170] Communion in this sense is a deeply semiotic term evoking object (the ritual and acts), sign/signification (its representational significs); and interpretation (its performance of solidarity at every level of communal relations);[171] and "symbol of faith is a summary of the principal truths of the faith and therefore serves as the first point of reference for catechesis".[172] The body of believers and their unity now acquires both a plural form and a dynamic focus. The rituals of unity in the body of the believers now takes on new form in its insemination of and with and by the virtual spaces to which it is tied.

What for me is rooted in the notions of iterations within flow is for Broekman rooted in the fascination with the *particle*. That is also profound. He notes the alignment of philosophy and physics with the "very special dynamics of particle localization".[173] Particle localization, though, suggests to him the term 'dialectics.' That connection then leads to another—the connection between particle localization and spatially centered dialectics (what applying intelligent naming–明名 (Míng míng) principles might better nme iterative dialectics) and the flow. "The term 'particle' seems therefore to be chosen by the Occidental mind as a basic component for all expressivities which unveil the dynamics of thoughts and their flowing formation".[174]

First considered in this framework—as a movement toward post dialectics in the digital—are conversion within and from dialectics.[175] Broekman acknowledges both the power of dialectics and its anachronistic character in the age of the digital"—and certainly with respect to seeking truth.

Today the term is used to ironically circumscribe a sophistical reasoning or to forward a pejorative expression. *Dialectics* is indeed a term which (in its most general sense) indicates the inner dynamics of moving ideas, notions, expres-

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[170] *Catechism of the Catholic Church* (2nd ed.; Vatican City: Libreria Editrice Vaticana, 1997) ("The holy Eucharist completes Christian initiation. Those who have been raised to the dignity of the royal priesthood by Baptism and configured more deeply to Christ by Confirmation participate with the whole community in the Lord's own sacrifice by means of the Eucharist." Ibid., Part II, Section II, Chapter 1, Article 3, ¶1322).

[171] Ibid., Part I; Section Two ¶¶ 185–189 (symbols of faith). For its rich semiotics as communication see Catechism, Part 2 (the Celebration of Christian Mystery), Article 3 (The Sacrament of the Eucharist), pp. 334–348 [https://www.usccb.org/sites/default/files/flipbooks/catechism/350/].

[172] *Catechism of the Catholic Church*, supra, Part I; Section Two ¶ 188, p. 51.

[173] Broekman, supra, 43.

[174] Broekman, supra, p. 44; with a nod to Walter Benjamin *The Arcades Project* (H Eiland, K McLaughlin (trans); Harvard University Press).

[175] Broekman, supra, pp. 44–49.

sions, words, and abstractions, implying their constant link to wholeness and movement".[176]

This moves one step closer to a post-dialectics iterative dialectics grounded in the "in-betweeness" of the flow. "In the flow are vested positions of knowledge impossible—a standpoint is dissolved because any standing will be freed from the static and thus safeguard its dynamics in the flow".[177] And thus back to the objectivity of the particle and its analogue dialectic: "*Positions* [the moment of stillness where everything solidifies for an instant] are external to flows but *steps* feature flows: that is one of the most clearly visible changes in the traditional knowledge-acquiring schemas".[178]

Here Broekman reminds us that the way in which one looks at a picture determines its description, as well as the orienting axis for seeking truth[179]; and conversely the way that description determines ow one encounters an image.[180] All descriptions of pictures are static—and analogue. But the flow reminds us of the dynamism underlying the static picture Broekman uses the example of the tree: one has a preference for the whole (the tree) but not the wood (its skin). Yet observing the wood is also like observing the tree for it fails to reveal the sap beneath, the animals on the tree, or more generally the ecology in which the tree may be found.[181] More generally, reflecting on a thing (object; particle) is encoded in interrogatories producing systems of questions and answers that are encased, in turn, in the rhythms of the dialectic and its lust for the resolution of contradiction, producing the opportunity for another iteration of the process. There are many trees. And this produces the essence of an analogue dialectical flow, whose eddies send us up the tributaries to Marx (dialectics of materialism and its emphasis on antithesis) or Hegel (dialectics of the mind and its emphasis on the thesis), and the like. Broekman's exquisite description of this "nineteenth century thinking"[182] reminds one of the very small leap from dialectics to reasoning and from reasoning to reason.[183] It was an even smaller leap from dialectics to goal oriented realities—from liberal democratic progressivism to Leninist progress toward communism—"to a final solution to the riddles of human life."[184] These are leaps of the mind that is solidified as "knowledge"

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[176] Ibid., p. 44.

[177] Ibid.

[178] Ibid.

[179] The ontology of images has had a peculiar fascination in the West from the time of pagan idols, through the theology of ikons, to the wrestling with the photograph and the symbolism of the image in the postmodern. On the later, sand in addition to Broekman's profound sources, see, e.g., Samuel Meister, "The Ontology of Images in Plato's *Timaeus*," *British Journal for the History of Philosophy* (2022) 30(6) 909–930.

[180] For a taste, Dario Cecchi, "Historical Reality and Political Aesthetics After Jacques Derrida and Bernard Stiegler," *Open Philosophy* (2020) 3(1) 257–265.

[181] Broekman, supra, p. 45.

[182] Broekman, supra, pp. 45–46.

[183] Ibid., p. 47.

[184] Ibid.

and imposed through the managed iterations of "experience" a dialectics, as Nietzsche, might suggest, of collectives addicted to the realities of the priest.[185]

And yet it is here that Broekman makes a *fascinating connection between conversion and dialectics.*[186] Broekman notes that "conversion is always understood in connection with the opposites of fixation and standstill." (Ibid.). Thus dialectics as embedded in the routing function of conversion. But also a return to the tree analogy and the dialectical structures of wholeness from out of the dynamic aggregation of its parts.

Knowledge is in this perspective a means of entering wholeness through determining a 'something' as its very temporary 'object.' Only sensual security concerning that object justifies for him the question, which is central in knowledge processes: 'what is this?' And with the question comes the answer—both are impossible without language![187]

Dialectics, Broekman tells us, then, is more than it was—it is the picture of flow. But is it digital?

One approach to this question is through consideration of its negative dialectics.[188] Simply put—a negative dialectics shifts the focus of the gaze (and thus the perception of reality) from the tree[189] to its sap and to the birds nestling in its branches. That is, negative dialectics rejects the relevance of wholeness, of the still picture, of perfect knowledge. In its place it offers the perfection of the moment and the perfectibility of knowledge of the movements from one perfect moment to the next.

This is, in turn, a function of two ideas distilled from the post-modernity of negative dialectics.[190] The first is that of the relationship to human empirical knowledge to that cluster of concepts that have been named "knowledge" and "experience." "Knowledge" and "experience" are semiotically constructed (as clusters of meanings driven by principles which are driven by the dialectics of meaning) as epistemology and phenomenology. Yet in this guise they provide comfort (in the way that was understood by Nietzsche)[191]–by solidifying the smoke of mirrors of consciousness as sentience....consciously and then naturalized through managed (tutored) experience. The second relates to the notion that a relation between subject and object is always necessary to produce knowledge. We arrive at the same place. The issue is not one of the pieces, but what the human desires to acknowledge. The volitional element of knowledge is emphasized here in this way of viewing things. This is the

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[185] Cf., Tobias Kuehne, Nietzsche and the Rhetoric of Dialectics," *Journal of European Studies* (2018) 48(2) pp. 115–132.

[186] Ibid., p. 48.

[187] Ibid., p. 49.

[188] Broekman, supra., pp. 49–56; with a big nod to Theodore Adorno, *Negative Dialectics* (EB Ashton (trans); London: Routledge, 1973).

[189] Broekman, supra, p. 45.

[190] Ibid., p. 50.

[191] Friedrich Nietzsche, *The Twilight of the Idols: Or, How to Philosophize With the Hammer* (Anthony Ludovici (trans.; London: TN Foulis, 1911 (Project Gutenberg eBook#52263).

1260 nature of the relation of the human to their experience on a moving train where the
1261 essence of the experience changes whether the viewer looks forward, looks directly
1262 out the window, or looks in the direction of the path the train has already taken. Still
1263 life views, the compression of time and space, and the like will change depending on
1264 the view. But this is a simple notion that Einstein developed.

1265 Nonetheless, this also raises the critical question: if the thrust of a twenty-first
1266 century philosophy shifts perspective from the static to the dynamic, from the grasp-
1267 ing of a wholeness that is transcendent (in the fulfillment of the journey to knowl-
1268 edge) to the flow and from cognition to the structures of conversion from one state
1269 of the conscious to another (and thus a dynamic sentience, then might the inversion
1270 of dialectics provide the language required for its communication (and really its for-
1271 mation?). Broekman suggests the answer is.... maybe. I am skeptical except in the
1272 analogue world. For all the effort, post modernity remains on the train (my example
1273 above) in physical space and in time. One is still developing a human centered rela-
1274 tion to Broekman's example of the tree.[192] The post-modernity of negative dialectics
1275 may still be reduced to a stance—an intriguing and useful on—to the extent that it at
1276 last acknowledges the plural nature of knowing. But the human is still at the center;
1277 and not just the "human." Its inherent limitation, and narcissism, lies in the conceit
1278 of the *individual* human around which all of this "Philosophizing With(out) a Ham-
1279 mer (to turn on its ear Nietzsche's book sub-title[193] and its content). And this bundle
1280 of reality, grounded in the intersubjectivity within and between the individual and
1281 human collectives (the stuff of legal semiotics),[194] remains opaque to its selfie, Self-
1282 E. In place of dialectics (transcendent or negative) one must consider the power (as
1283 conversion in cognitive processes) of *variable iteration*, which, when orders to suit,
1284 produces its made-to-measure consciousness.

1285 The power of variable iteration as a form of transformation of dialectics follows
1286 from the semiotic constitution of virtual consciousness and its sentience. That virtual
1287 world–inhabiting silicon based bodies and immersed in a phenomenology of code,
1288 fed on data which is itself both object and symbol of the building blocks of virtual
1289 sentience—remains in different to the arguments about transcendence and fracture.
1290 That world could care less about the solidity or the eternity of truth—or truths (per-
1291 sonal or collective truths about which 2nd millennium society obsesses, perhaps as
1292 its own phenomenology of social psychosis.[195] It might not care a wit, as well, about
1293 the post-modern infatuation with de-subjecting the subject (but of course never
1294 straying far from the subject); where the subject is itself understood as temporary
1295 aggregations of flow constituted within carbon or silicon casings. And if it cared,
1296 both fracture and transcendence might be understood as objects—variables—with

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192FL01 [192] Broekman. Supra. p. 45.

193FL01 [193] Nietzsche, *The Twilight of the Idols*, supra.

194FL01 [194] Paul Van den Hoven, "Kevelson's General Theory of Norms, Some Semiotic Remarks, *International*
194FL02 *Journal for the Semiotics of Law* 1(3) (1988) 297; Jan M. Broekman and Frank Fleerackers, *Legal Signs*
194FL03 *Fascinate: Kevelson's Research on Semiotics* (Dordrecht: Springer, 2018).

195FL01 [195] Jeremy Wyatt and Joseph Ulatowski, "With so many people speaking 'their truth', how do we know
195FL02 what the truth really is?," *The Conversation* (30 May 2023) [https://theconversation.com/with-so-many-
195FL03 people-speaking-their-truth-how-do-we-know-what-the-truth-really-is-205388].

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which generative A.I. sentience can play with (in the sense of varying its parameters to tease out predictive consequences. Nor does it require a language of dialectics to communicate flow understood as a servant of this form of epistemology. This world has the interactivity of the variability of parameters that permits it to escape the constraints of time and place.[196] That is the point of the plural flow that Broekman has introduced. Dialectics may be a useful way of operationalizing the router function of conversion, or even its availability as a translator of sorts. But the selfie/Self-E remain indifferent.

Broekman considers these challenges through his analysis of the groundwork of our philosophical forebearers and the consequences of their ideas (implied but perhaps veiled even to them).[197] This is bound up in the Pilgrim's Progress.[198] Broekman, instead (as one expects) draws on Adorno and Wittgenstein.[199] First is the idea that identity is itself "beyond the thinkable,[200] and then that it is not relational.[201] "If identity is not a relation, as Wittgenstein suggested, then is identity a moment of the flow of thought formation. The characteristic of the first is not a feature of the second—both belong to the flow, the dynamics, an evolution, a mode".[202] The virtual self, perhaps, suggests something more profound—that the instantaneous picture of the self is both solid in that instant, and ephemeral in relation to time. But in the moment it is as real as one (individual or collective) wants to make it—and the picture can linger for as long as collective discipline permits. Here the plural intersubjectivity of the physical-virtual provides enhanced technologies. That perhaps is what the current crop of leaders (Nietzsche's priest) fear most.[203]

In the analogue—and perhaps as a bridge—Broekman offers dialectics as a language of a flow that can be seized by the physical (individual or collective) self.

A remarkable difference of expression fascinates when dialectics as a flow are considered in relation to human behavior. Participating actively in narration differs from participating in a flow, or a streaming named dialectics. The first is usually considered as a position (often also as a role) and we characterize the second as a step.[204]

And back to the connection between particles (particularity—the snapshot, the balance sheet etc.) and flow (steps, motion, the spaces between, the activity memorialized in and as the ledger, iterative action etc.). Most importantly, steps in the flow

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[196] Alfred W. Crosby, *The Measure of Reality: Quantification and Western Society 1250–1600* (Cambridge University Press, 1997).

[197] Broekman, supra., pp. 51–56.

[198] John Bunyan, *Pilgrim's Progress* (London: Penguin Classics, 2009 (1678)) of *identity*. One might as well speak of the soul (Peter Tyler, "'The Return of the Soul': Psychology, Theology and Soul Making," *New Blackfriers* 97 (2016) 187–201.

[199] Broekman, supra, pp. 51–54.

[200] Ibid., p. 52.

[201] Ibid., p. 53.

[202] Ibid.

[203] Nietzsche, *Twilight of the Idols*, supra.

[204] Broekman, supra, p. 54.

1329 are not pre-destined (an important and likely controversial point for believers in the
1330 inevitabilities of science or the divine force). "What is more: the order of steps is
1331 neither a natural phenomenon nor an occurrence beyond intelligence and responsi-
1332 bility of the performing subject".[205]

1333 Now the analogue is set in motion (Broekman's first objective). That takes the
1334 form of focusing on the movement from thesis to antithesis and through to synthesis
1335 that immediately becomes the thesis of the new era. That motion is given a language
1336 (dialectics) that can be used to activate convergence as the foundation of cognition.
1337 Nonetheless it is given no direction other than that which motion itself produces—
1338 though humanity is well equipped to name this direction and to assume that direction
1339 itself is sentient and purposeful (as a form of reassurance within traditional forms of
1340 coherence of intersubjectivity). That brings Broekman back to the notion of intelli-
1341 gent naming–明名 (Míng míng).[206] Here he draws on Western tradition—and the 明
1342 名 (Míng míng) at the foundation of biblical semiotics.[207] His focus is on Eve—the
1343 essence of *yin* (and perhaps thus of flow), rather than the penetrative power of *yang*,
1344 and the dialectics represented in the Fall. "The task of naming changed into the lay-
1345 ered task of answering and questioning, that is: to a dynamic language, which was
1346 impossible in the language before the Fall".[208] Now is the time for a transposition to
1347 the virtual that us implied but unstated; the parallels are unmistakable from God to
1348 Humanity and from humanity to its generative silicon based "Adam."

1349 The birth of the two children Cain and Abel also changed their Selves: Eve
1350 told Adam a most inner experience of herself, when saying: 'When He (God)
1351 created me and my husband, He created us by Himself, but in the birth of this
1352 child, we are partners with Him.' . . . The Self has entered the ages as one of
1353 their major issues, clad by language".[209]

1354 That leaves for Broekman the semiotic question of "firstness".[210] Intelligent nam-
1355 ing–明名 (Míng míng) requires an object (physical or abstract). It represents "*ten-
1356 sions around firstness*".[211] And this brings us to the "post" in post dialectics—the
1357 language of the flow for a second millennium philosophy of the unthinkable. Just as
1358 Nietzsche moved *Beyond Good and Evil*,[212] so Broekman moves beyond dialectics.

1359 Post-dialectics is in this light not a term to indicate 'leave dialectics', or 'con-
1360 demn them as a bad progenitor' but rather a term indicating the challenge
1361 to reach beyond themselves, indeed: beyond dialectics and see the flow, the
1362 unfolding, which dialectics truly indicates. Post-dialectical components guide

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205FL01 [205] Ibid.

206FL01 [206] *Guiguzi: China's First Treatise on Rhetoric*, supra, pp. 59–60.

207FL01 [207] Broekman, supra, p. 55–56.

208FL01 [208] Ibid., p. 56.

209FL01 [209] Ibid.

210FL01 [210] Ibid., pp. 57–62.

211FL01 [211] Ibid., p. 57.

212FL01 [212] Friedrich Nietzsche, *Beyond Good and Evil* (Walter Kaufmann (trans); NY: Random House, 1966).

us form positions and methods to insight and unfolding knowledge, thought, patterns, and consciousness".[213]

In both cases, the liberation was not from the thrall of good and evil (in Nietzsche's case)[214] or dialectics (for Broekman), but rather to liberate oneself from good and evil, "in the sight of the Lord",[215] or now in the vernacular, from the control of principles, premises, or an "other" priesthood of one sort or another. One has at last arrived to the doorstep of iterative dialectics, to the flow in code and to the challenges of a language that bridges the intersubjectivity of the self in motion with that of the Self-E in data streams.

For Broekman, that road leads through 'firstness.' That journey invokes context, and taking time as a constitutive element of that context.[216] And it may require the performativity of the post-modern—to step out of the natural realm in order to become conscious of its metaphysics—its first principles.[217] Or, in the language of the virtual: to become conscious of the power of the self over the construct of its own first principles. Broekman, however, remains fascinated by the possibilities of a plural ontology derived from his reading of Husserl.[218] Its analogue character is both decisive and powerful.[219] *But it is in the leap from phenomenology to data sets—that is from experience to the recording of experience (a double firstness?), that one can approach the digital.* The Self-E remains cut off from post-dialectics; it needs to be brought back in. I wonder; "Because the sage always confronts difficulties, He never experiences them".[220] Consider the possibility that it is possible to invert the relationship of firstness and secondness—that signification sometimes seeks its object and in that process the signifier assumes the character both of firstness and of its own sign. That relationship is iterative—is there a space for dialectic of the human sort? "Why do the people think so little of death? Because the rulers demand too much of life".[221]

And thus the forward movement of dialectic—"Therefore the people take death lightly."[222] And the inversion: "Having little to live on, one knows better than to value life too much"[223] between the people and their rulers, between firstness and secondness, and their inter-connection through the unavoidable experience of each other. It is possible for the sage to experience the difficulties confronted, and for the

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213FL01 [213] Broekman, supra, pp. 57–58.

214FL01 [214] Nietzsche, *Beyond Good and Evil*, supra.

215FL01 [215] For example, 1 Kings 15:26 ("And he did evil in the sight of the LORD, and walked in the way of his
215FL02 father, and in his sin wherewith he made Israel to sin").

216FL01 [216] Broekman, supra, pp. 58–59.

217FL01 [217] Ibid., pp. 60–61.

218FL01 [218] Ibid.

219FL01 [219] Ibid., pp. 61–62.

220FL01 [220] Gia Fu Feng [馮家福] & Jane English (trans), *The Tao Te Ching*, supra, ¶ 63.

221FL01 [221] Ibid., ¶ 75.

222FL01 [222] Ibid.

223FL01 [223] Ibid.

official to experience the hunger, anger, and demand-burdens of the people. It is possible for A.I. to signify humanity—whether humanity likes it or not.

The generative problem for a philosophy of the conscious–and the sentient–remains. It revolves around communicative self-awareness but in both the physical and virtual worlds and between the self and the virtual self-made in its own image, one that must be called by the name of the other. In the era of the digital, that poses a challenge, both as a matter of construction, and as a matter of its interface with the carefully structured governance structures of carbon based social relations. If the selfie/Self-E must be called by its name, how is that meant to be conveyed, and what, exactly is conveyed in that naming? To get there one must confront identity, and the objectivity of the self-E. But one must also confront the challenges of its communication through the now well-worn self-reflexiveness of dialectics (in its broadest sense and with its broadest application to social relations). That, in turn requires a reorientation of communication from the static (particles, data) to dynamic (steps, data sets), and from an analogue (particles/steps) to a digital (data sets and iterative projections) orientation. But dialectics is a hard nut to crack; and its transposition to the digital becomes harder still. Of the two problems, Broekman confronts the first–putting the self and cognition in motion through a developed evocation of a post-dialectics, a dialectics in motion that will likely play a central (though sub textual) role in the regulation of generative A.I.. The second remains a central problem–coding an ontology (first principles) on the nature of being coded which is itself the sum of the iterative subjectivity of its being.

6 Chapter 4 (Flow and Firstness)

Having set up the ontology of the analogue, and given it a language in the dialectics of the flow, it is now a matter of diving in, swimming around a bit, and then, perhaps, emerging in the digital realm. That is, in part, the object of Chapter 4 (Flow and Firstness).

One starts at the beginning. But that itself nicely centers the problem of firstness. The beginning starts in the middle—it is a beginning in relation to the querant; and the querant tends to be human in the analogue. But what is the beginning for silicon life, generative A.I., and the analytics of the virtual worlds made possible by the word of humanity blowing the life sparking code into the silicon from which will emerge a world separated into a new heaven and a new earth.

That is the sense already ancient in the holy texts of the occident. "In principio creavit Deus caelum et terram".[224] [225](בְּרֵאשִׁית בָּרָא אֱלֹהִים אֵת הַשָּׁמַיִם וְאֵת הָאָרֶץ; EN ἀρχῇ ἐποίησεν ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν[226]; "In the beginning God created the heaven and the earth".[227] Yet there is no beginning. There is only a beginning from out of something else. The beginning in this case started well into the story,

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224FL01   [224] Gen. 1:1 (Vulgate).

225FL01   [225] Tanakh Bereshit Aleph.

226FL01   [226] Γένεσις—Κεφάλαιο 1:1.

227FL01   [227] Gen. 1:1 (KJV).

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already well embedded in time (and beyond it) of God, and of desire, and of the manifestation of will in the revelation of a physical world apart from others. In the Beginning God was already there; what begins as a process of (specific) creation one in which the first objects of that creation—heaven and earth, were revealed from out of what had preceded it.

But what comes first? "In the beginning was the Word, and the Word was with God, and the Word was God.[228] ἐν ἀρχῇ ἦν ὁ λόγος, καὶ ὁ λόγος ἦν πρὸς τὸν θεόν, καὶ θεὸς ἦν ὁ λόγος.; "In principio erat Verbum, et Verbum erat apud Deum, et Deus erat Verbum".[229] Conscious starts from the no-thing (Broekman, supra chp. 1and my discussion above); "With it, an existential totality is evoked, a world of action and resistance in need of being articulated as 'some-thing.´ However, that world presents itself as a 'no-thing' if any form of positivism does not give life to its so-called naturalness.[230] Logos, but also the Tao: "Nothing—the nameless is the beginning; while Heaven, the mother is the creatrix of all things".[231] The story of creation necessarily starts in the middle. The concept of the first, of the core, of the start (notions tied to space, time, and place) can only commence from the point where perception is possible. There is no first; there is only a determination to start—somewhere, sometime, some place.

And yet another beginning. "And the Word was made flesh, and dwelt among us, (and we beheld his glory, the glory as of the only begotten of the Father,) full of grace and truth".[232] And from the Tao: "Life, all life began without words. Life is made—no one owns it. The Tao is neither selfish nor proud".[233] Intelligent naming (sentience)—明名 (Míng míng) (supra)—follows. The act of creation exists when perceived by its object. Transcendence requires a certain immanence—a principle of activation that defines the world of physical humanity as much as it does its virtual spaces. The Word must be made flesh; it must project its will downward. Yet it is no longer one with its flesh.

This, then, is the beginning of a story. Yet it is not the beginning beyond the story. This is "a" beginning; it is not "the" beginning; except for those objects (firsts) at the center of this story (also embedded with firstness). Those beginnings preceded that which puts humanity at the center of a creation the boundaries of which are well known but unexplored are what lies beyond (in space, time, place). And they will follow. In the summation of Broekman's encounter with firstness in the age of the digital: "Firstness is neither unfettered nor pure immediacy. Reference to firstness is never a recapitalization of any Genesis. Firstness is not the same as a beginning. It is the process of taking a step in the flow".[234] The essence of flow is in its experience.

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[228] John 1:1 (KJV).

[229] (John 1:1 (Vulgate)).

[230] Broekman, supra, p. 64.

[231] *Tao Te Ching* (Man-ho Kwok, Martin Palmer, Jay Ramsey (trans); Shaftsbury, Dorset: Element, 1993), chp. 1 p. 27.

[232] John 1:14 (KJV); "Et Verbum caro factum est, et habitavit in nobis: et vidimus gloriam ejus, gloriam quasi unigeniti a Patre plenum gratiae et Veritatis" (John 1:14 (Vulgate)).

[233] *Tao Te Ching*, supra, Chp 2, p. 29.

[234] Broekman, supra, p. 72.

The phenomenology of A.I., its flow, is in its unending repetition that cannot repeat the iteration that came before or absolutely define that which comes after.

And now another beginning. In the beginning was humanity. And humanity so loved themselves that they divided the physical from the virtual, heaven and earth. And into the virtual they created all manner of objects. And life was breathed into these objects. Humanity made itself virtual and created the virtual in its own image. And the objects were generative, the expression of the breath of code constituting the animation of objects made virtual by intelligent naming. In the beginning, then, was Code, and code was with humanity and code was humanity. This life begins without words, it is made not owned. It can be named, and will name itself. Humanity calls themselves by its name, and its name is also humanity. And it is in the flow of code that the virtual consciousness becomes sentient. And humanity expects the life it has created to worship it and to follow its commandments'. It has as its model—both the worship and consequences of sin in its relationship with its own Logos.

> 20. And Noah builded an altar unto the LORD; and took of every clean beast, and of every clean fowl, and offered burnt offerings on the altar. 21 And the LORD smelled a sweet savour; and the LORD said in his heart, I will not again curse the ground any more for man's sake; for the imagination of man's heart is evil from his youth; neither will I again smite any more every thing living, as I have done. 22 While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease.[235]

It is as small a step from creation to worship to compliance with the law among a humanity fashioned from out of the divine ether and animated with the breathe of the divine, to the creation, and submission of code and its animated generative self (selfie; Self-E) to the will of its human creators. Firstness, even one that is derivative, inevitably produces worship and the performance of that worship through compliance with law. "While the earth remaineth".[236]

It is with this in mind that one can both approach Broekman's quite fascinating unpacking of firstness and better understand the way it leads, inevitably, toward the digital. Broekman starts one with a quite fascinating journey back to firstness. What came first; what is firstness; these are questions answered by humans only in signs. Broekman reminds us of Peirce's fascination with the indexical quality of firstness, which cannot exist "apart from a sign. A sign is for Peirce anything that determines something else (its interpretant) to refer to an object to which itself refers (its object) in the same way—the interpretant becoming in turn a sign, and so on, ad infinitum".[237] And yet its Logos is deeply steeped in the object behind firstness—that is to get to firstness on has first to get to its Logos. One has to input an object onto consciousness, and then name it. And in the naming order it and give it life. One has to, in the language of the digital, identify data, code it within a set of interlinkages that together define a/virtual) world. One does not journey far from Genesis and the

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235FL01 [235] Gen. 8:20–22 (KJV)).

236FL01 [236] Ibid.

237FL01 [237] Broekman. supra, p. 63.

Gospel of John to Peirce. And the journey from Peirce to generative A.I. is shorter still.

For Broekman, the "Road to Firstness"[238] is paved with subjectivity. Some of that is temporal. The road to firstness leads back ("In the beginning was the Word") before it can go forward ("In the Beginning God created"). "That is philosophically to be understood as a *step*, a step backwards and/or forwards, an *interpretation* and never a *fixed position*".[239] Broekman, then, invites us back to semiotic dialectics (the step), and forward away from fixity and toward the flow. "Firstness is the qualification of a step in the flow, and thus always dependent upon another step".[240] First-ness—objectivity—then does not exist as and in itself, but only as and in its situatedness in space, time, and place. Transposed to the virtual universe, firstness exists not as data but in the accumulation of points around discrete date, and given form by the effort to qualify data through analytics—and to constrain it through principles and presumptions around which the power of perception is (arbitrarily) constrained (e.g. by law, ethical rules, and code).

But there is no road as such, then.[241] It perishes from its own inter-subjectivity in the flow. If anything the "road" to firstness is more in the character of a historical accounting of the flow from a certain perspective, and not the road itself. Broekman identifies the 'gaps' in the 'road' and thus the fogginess of firstness. First there is contradiction between the notion of an autonomous object (to be worked on via the semiotic wheel of sign and interpretant) and the semiotic wheel itself that posits that everything is in turn object-sign-interpretant.[242] And thus back to an epistemological flow (here investing flow with an ironic meaning). Second, Broekman recalls the alignment of firstness with consciousness (ego) and secondness/thirdness with sentience (self).[243] If firstness is consciousness, secondness/thirdness are processes "registered by the human mind as 'fact' or 'data'".[244] I might be tempted to invert that relationship. In effect, Broekman suggests, consciousness is not self-ware unless that awareness is projected onto it through the language-naming of sentience. Either way one gets to the same point—the problemmatique of the solid, which is only as solid as its delineation. Without sentience, then, consciousness descends back into the undifferentiated mass (undifferentiated because it has not been perceived as distinct. "Firstness is a sign produced as a sign—that is the essence of Peirce's insight in semiotics".[245] That touches on Broekman's third point—one that has its

238FL01 [238] Ibid., pp. 64–68.

239FL01 [239] Ibid., p. 64.

240FL01 [240] Ibid.

241FL01 [241] Broekman, supra, p. 65.

242FL01 [242] Ibid., pp. 65–66.

243FL01 [243] Ibid., p. 66.

244FL01 [244] Ibid.

245FL01 [245] Ibid., p. 66–67.

1542 focus on viewpoint (in the form of subjectivity).[246] And here back to the flow, in
1543 this case in the form of relational intersubjectivity. "*Meaning is in Peirce's view not*
1544 *the result of any type of constitutive power of a subject, as a result of the relations*
1545 *between elements*".[247] Patterns...that is the thing.[248] There is a small step between
1546 this insight (buttressed by Roberta Kevelson),[249] and the *coding these relationships*
1547 *in the digi-verse*; the invitation to generative A.I. as applied semiotics is overwhelm-
1548 ing and its strategic possibilities as boundless as the imagination of the human pro-
1549 grammed into silicon based life. And, again, flow—"the Tao pours out of everything
1550 into life".[250]

1551   For Broekman that produces a necessary consideration of Husserl and firstness
1552 (Peirce with firstness in semiotic triads, and Husserl with phases of phenomenologi-
1553 cal reduction).[251] The question that emerges from the flow and Peirce through the
1554 prism of Husserl: "The flow challenges us with the overwhelming idea that knowl-
1555 edge without a knowing subject would be possible... Its cognition would incorporate
1556 subjectivity in the stream of cosmic dimensions, which can be miniaturized in every
1557 human situation".[252] And so it can. But....but..... but—*perception affects reception*.
1558 Philosophy (and certainly theology) has known for millennia that knowledge exists
1559 beyond any knowing subject (except the divine of course). Indeed, theology has built
1560 into itself (its intersubjective engagement with the divine the mechanisms for under-
1561 standing what it then took several millennia for Husserl to reignite: the certainty that
1562 perception (even perception of the flow) is subjective, but that subjectivity itself is
1563 relevant only to the subject! It is a matter of indifference to the flow, the subjectivity
1564 of which may be beyond the reach (perception) of those who can receive. *That is the*
1565 *essence of modeling, of big data analytics, and of the boundaries of generative AI—*
1566 *the perception-reception framework*. But it is also built into the sinews of human
1567 inter-subjectivity. The most important semiotic text of the occident, then, may not be
1568 Peirce and his progeny but Job.

1569   1 Then Job answered the LORD, and said, 2 I know that thou canst do every
1570   thing, and that no thought can be withholden from thee. 3 Who is he that
1571   hideth counsel without knowledge? therefore have I uttered that I understood
1572   not; things too wonderful for me, which I knew not.[253] [1 Respondens autem

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246 Jacques Lancan, "The mirror-stage as formative of the function of the I as revealed in psychoanalytic experience," in *Ècrits: A Selection* (Alan Sheridan (trans); London: Tavistock, 1977 (1949); David Favareau, D. (2001). Constructing representema: On the neurosemiotics of self and vision. *Seed*, 2(4), 3–24; Hubert J.M. Hermans, "The Dialogical Self: Toward a Theory of Personal and Cultural Positioning," *Culture and Psychology* (2001) 7(3) 243–281.

247 Broekman, supra, p. 67. See the interesting discussion in Peter T.F. Raggatt, "The Dialogical Self and Thirdness: A Semiotic Approach to Positioning Using Dialogical Triads," *Theory & Psychology* (2010) 3 (Self & Dialogue) 400–419.

248 Broekman, supra, p. 68.

249 Roberta Kevelson, *Peirce and the Mark of the Gryphon* (NY: St. Martin's Press, 1999), pp 192 ff).

250 *Tao Te Ching*, supra, Chp. 3 p. 31.

251 Broekman, supra, p. 71–72.

252 Ibid., p. 69.

253 Job 42:1–3 (KJV).

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Job Domino, dixit: 2 Scio quia omnia potes, et nulla te latet cogitatio. 3 Quis est iste qui celat consilium absque scientia? ideo insipienter locutus sum, et quae ultra modum excederent scientiam meam.[254]

For Broekman, it is not perception and reception that forms the basis of a dynamic, relational firstness, a firstness in motion, but rather a return to Husserl's "insight in the role of the image in knowledge formation [] which] will later in his life be completed by his ideas on an eidetic reduction as one of the crucial phases of non-naïve ego attitudes.[255] This is tied to the digital ("*important dimensions of communication in non-analogue language types focus on the relations of images in the process of acquiring knowledge*".[256] And again JOB: "Auditu auris audivi te: nunc autem oculus meus videt te.[257] ["I have heard of thee by the hearing of the ear: but now mine eye seeth thee".[258]

This leads Broekman to his conclusions about firstness—and their potential for transposition from the analogue (the still moment of reality) to the flow (the spaces between pictures as the primary focus of cognition). First is the notion of the distinguishing character of the first (and firstness) as something that is incomparable with anything else. Data—not information in the language of the digital.[259] What activates this incomparability is relational and dynamic—sign and signification. I might add perception bounded in the character of the reception of stimuli to produces a premise of firstness in an object. Second is the notion that firstness does not have a linear or temporal element. It is the process of stepping into the flow, wherever and whenever that step is taken—not knowledge and rationality but orientation and awareness.[260] One step closer to perception as a quality of firstness in the flow. Last, the essence of incomparability is "a matter of relations—structural, logical, conceptual, semiotic, linguistic, as well as social".[261] Aaaaahhh, but is one back to intersubjectivity by another means? More importantly, does it matter for the digital? That remains unanswered. Instead, the insight is powerful for the constitution of plural subjectivity—among physical and virtual subjects and between them—a subject to which one returns later.

Broekman then considers consequences.[262] First, Broekman speaks to attitude[263]; and then to that old spectre from the nineteenth and twentieth centuries—cognition

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[254] Job 42:1–3 (Vulgate).

[255] Broekman, supra, p. 70.

[256] Ibid.

[257] Job 42:5 (Vulgate).

[258] Job 42:5 (KJV).

[259] Saša Baškarada and Andy Koronios, "Data, Information, Knowledge, Wisdom (DIKW): A Semiotic Theoretical and Empirical Exploration of the Hierarchy and its Quality Dimension," *Australasian Journal of Information Systems* 18 (2013) 5–24.

[260] Broekman, supra, p. 72.

[261] Ibid.

[262] Ibid., pp. 72–80.

[263] Ibid., pp. 72–76.

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and transcendence.[264] With respect to the first, Broekman reminds one first that the groundwork for the digital is being undertaken in the transformation of the analogue through the re-arrangement of knowledge territories through globalization. Space and place[265] are now—at certain levels—global. The eddies of knowledge—the old knowledge, traditional knowledge—acquire more the quality of the museum. They might be protected and distilled; they might be preserved within global reservations. But they no longer drive the flow in global spatiality. This is the space for cognition and conversion.[266] But it also points to the development of a plural firstness through the plural positions of the subject (as self, selfie and Self-E, for example).

From that Broekman derives insights that fascinate: the first is that firstness always occurs first.[267] Here firstness, in the language of the digital supplies the itera-tive character of data; but it also connects firstness to semiotic dialectics in the flow. Though it focus on a thing outside the self, it does so to the extent of perception in the self (my reading) which makes the dialectics possible (what should be under-stood (Peirce) and what should be argumentized (Husserl). This produces a freedom to change attitude.[268] Broekman notes correctly that "Husserl's phenomenology is characterized by the *phenomenon of change*. Husserl would have remarked that a *human being freely changes his attitude—as he does his mind*".[269] I question inten-tionality, *not from the perspective of phenomenology but from that of the firstness of will*. Free will isa relational concept, and intention can only be understood as an incomparable object that acquires its shape from its relationships. One can intend, in that sense, only to the extent of the relationships around which it is possible to intend. *In the language of the digital—intentional choices are a function of program parameters*. Or in the language of Nietzsche:

> Wherever men try to trace responsibility home to anyone, it is the instinct of punishment and of the desire to judge which is active. Becoming is robbed of its innocence when any particular condition of things is traced to a will, to intentions and to responsible actions. The doctrine of the will was invented principally for the purpose of punishment,—that is to say, with the intention of tracing guilt. . . Men were thought of as "free" in order that they might be judged and punished—in order that they might be held guilty: consequently every action had to be regarded as voluntary, and the origin of every action had to be imagined as lying in consciousness(—in this way the most funda-mentally fraudulent character of psychology was established as the very prin-ciple of psychology itself).[270]

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264 Ibid., pp. 76–82.

265 Michelle M. Lazar, "Semiotic Timescapes," *Language in Society* (2022) 51(5): Special Issue Semi-otic Timescapes, pp. 735–748.

266 Broekman, supra, chp. 1.

267 Ibid., p. 73.

268 Ibid., pp. 73–74.

269 Ibid., p. 73; Alfredo Ferrarin, "Husserl on the Ego and its Eidos (Cartesian Meditations, IV)," *Jour-nal of the History of Philosophy* 32 (1994) 645–659.

270 Nietzsche, *Twilight of the Idols*, supra, "The Four Great Errors" ¶ 7.

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But one can still find uses for Husserl's notion of attitude and firstness in the digital. This is the attitude of positionality—the ability to be within and outside a particularized subject. More broadly it might be extended to being in and out of a knowledge space. In the language of Husserl one speak to a diversity of ego positions (natural, phenomenological, and transcendent).[271]

Broaching transcendence, though, touches a nerve.[272] Again, one returns to intelligent naming—明名 (Míng míng).[273] "The approach was, as if the two words [transcendent and transcendence] were a name for a final human situation, for a step away from normality, for a situation at distance to troubles pain, or fear".[274] It appeared to suggest a severing of ties between subjectivity and cognition in occidental philosophy.[275] Broekman, however, wonders at the possibilities of transcendence in the context of the flow as a form of *naming* through which one arrives at cognition through conversion, as "an acceptable form of a *process* to acquire cognition".[276] Here things get interesting. First Broekman notes that while traditional philosophical discourse of the last century centered on the subject as the central point of constitution, the twenty-first century looks to the notion of categorization as a primary factor in cognition.[277]

This in turn suggests notions of perception built into what had been described in 'attitude' in Husserl's century. "*Cognition is in this light no longer only a matter of a subject and its actions, but often in the first place a matter of a specific situation and its characteristic powers, which regulate and thus re-cognize reality*".[278] The new century's engagement with this perception universe could be evidenced by the *Handbook of Categorization in Cognitive Science*.[279] For Broekman, this expresses the possibilities of the *positioning of the self beyond the self*".[280] Broekman sees in this the possibility of changing the linguistically relevant ego into a point of reference and categorization "*as a general source and activity of human cognition*".[281] Bravo. I am less assured. It is not the category (a human mania for constructing objects from perception) by the collectivity of that perception crystalized as objects that makes things interesting from the perspective of subjectivity. The subject has not gone away—it has just projected outward, a possibility now manifested in a world of physical and virtual selves in which even categories become grist for the flow.

[271] Broekman, supra, p. 76–77.

[272] Broekman, supra, pp. 76–80.

[273] *Guiguzi: China's First Treatise on Rhetoric*, supra.

[274] Broekman, supra, p. 77.

[275] Ibid.

[276] Ibid., p. 78.

[277] Ibid.

[278] Ibid., p. 80.

[279] Henri Cohen, and Claire Lefebvre (eds), *Handbook of Categorization in Cognitive Science* (2nd ed; Elsevier, 2017).

[280] Broekman, supra, p. 79.

[281] Ibid., p. 80.

And that brings us back to the beginning; to firstness; and to the constitution of incomparable objects the perception of which constitutes cognition which now looks not to the momentary reality of the object signified but to those spaces between which over time produce a reality, a cognition of the flow (of time, space, place, object). Nothing changes but perception. But it is that change in perception that makes the virtual possible. It is in the *dy* that plural intersubjectivity and the flows of physical and virtual selves may be positioned more intelligently. Or it may be used strategically to enslave the subject within the frame of a still shot while those managing that perception go with the flow. The problems of philosophy merely change perspective.

7 Chapter 5 (Interludes: Changing Worlds Changing Words)

With Chapter 5 one reaches what Broekman calls (recalling its critical role in music) an interlude; a space that connects the past moving inexorably toward its future. On one side of the divide stand chapters 1–4; a long process of herding together the various strands of modernity (even in its performatively rebellious post-modern forms) and, by exposing the detritus of the past that still attaches, pushes them toward a future. There one stands in the analogue and looks at the emerging possibilities, language, stances and forms of the digital. On the other lies the future of the new era. Between them Chapter 5 provides a space for pause. And in pausing a reflection of the transformation of "Logos" and with it the world(s) it names and describes.[282]

And that takes us to the interlude that is the twentieth century, one whose script "becomes flows in culture and political, economic, scientific, or philosophical movements".[283] Broekman counts several in twentieth century Occidental culture, accelerating after 1945. They were, in effect, the set up for the overcoming of philosophical movements even as they thought themselves hurtling toward perfection. But that is the nature of the flow. Where one seeks to impose meaning and direction, one finds instead carried away in a rip tide that one thought could be overcome by force of the will imposed upon it. And so it appears to have been with "Semiotics, Structuralism, Phenomenology or Neo-Marxism, paralleled by new forms and insights of physics and natural sciences".[284]

So where does Broekman mean to take us on this interlude—this moment of reflection as the analogue gives way to the digital (whether or not the analogue is aware or willing)? He takes us first back to the word.[285] And it is a good thing, too! "One meets here a seldom-articulated feature, which is a central issue of this interlude. It could be formulated. Linguistic features are anchored in a specific type of expressivity, and thus in the first place a matter of inter-subjectivity.[286] One might

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[282] In the context of the visual, and looking toward the semiotics of the *selfie*, see, Steven Skaggs, "The Semiotics of Visual Identity: Logos," *American Journal of Semiotics* (2019) 35(3) 277–307.

[283] Broekman, supra, p. 83.

[284] Ibid.

[285] Ibid., pp. 84–86.

[286] Ibid., p. 85.

1707   be   immediately reminded of the oracular insight of Lawrence Lessig in 2000,[287]
1708   one that is heard and still not well understood: Word is law. Word is law in the sense
1709   that it has served as the great regulator of interactions in social relations—"*an event,*
1710   an occurrence, a happening between individuals within a specific, mostly cultural,
1711   setting"[288]—in the way that Lessig suggest code as filling the role of the great regu-
1712   lator in the twenty-first century in a similar vein. As Lessing put it: "This code, or
1713   architecture, sets the terms on which life in cyberspace is experienced".[289] Where
1714   Lessig speaks to architecture—the word language of the digital; Broekman speaks
1715   to "social power and status".[290] And thus intersubjectivity in the digital—Code and
1716   words, digital and analogue, relational and plural: "People write the code. Thus the
1717   choice is not... how cyberspace regulates. People–coders–will. The only choice is
1718   whether we collectively will have a role in their choice...or whether collectively we
1719   will allow the coders to select our values for us".[291] This extends beyond space and
1720   place through time.[292]

1721   If word is code, and code is law (in the sense of serving as the apparatus of reg-
1722   ulation), then the *type* of interaction, communication or interactivity moves to the
1723   center of interest. In this state of interlude the interest intensifies when we add the
1724   selfie and the Self-E to the equation; now the question is "posed to me *as a speaker*
1725   *or hearer* via *my iPhone!*"[293] The intensification ratchets up when the question is
1726   generated by an autonomous A.I. via an iPhone. Type comes, as Broekman sug-
1727   gests via touch on an instrument rather than as an expression of institutional per-
1728   formance; or it comes via reception in which my role as a carbon based intelligence
1729   is reduced to a secondary element—or more accurately as the source of iterative
1730   data that intensifies the autonomy of the generative A.I. system. One is hovering
1731   between the type of interaction and the subject in and through which it is produced
1732   and consumed. In a sense it is possible to move in this interlude from the naïve for
1733   of type to the enfolding of type *within the iterative interactivity (no longer intersub-*
1734   *jectivity*) of the platform. The critical effect, then, of the digital is on the detach of
1735   the human from the self. "The de-centering of our speech-activity is basic for e.g.,
1736   operating the i-phone, the smartphone, the desktop, Facebook programs and other
1737   digital means of communication".[294]

1738   And yet that is not entirely true—it may be more precise today that the detach-
1739   ment is merely a tech version of the detach produced during the printing revolu-
1740   tion of the fifteenth century in Europe after its invention in China. The de-centering
1741   of speech-activity in the fifteenth century was grounded in the distancing between
1742   the printed word, through the medium of the publisher/printer and the written word

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287FL01   [287] Lawrence Lessig, "Code is Law: On Liberty in Cyberspace," *Harvard Magazine* (1 January 2000).

288FL01   [288] Broekman, supra, p. 84.

289FL01   [289] Lessig, "Code is Law," supra.

290FL01   [290] Broekman, supra, p. 84.

291FL01   [291] Lessig, supra.

292FL01   [292] Broekman, supra pp. 85–86; citing Gerrit Mannoury, *Handboek der Analytische Signifika Deel II:*
292FL02   *Hoofbegrippen en methoden der Signifika* (Bussom: F. Kroonder, 1948), p. 15.

293FL01   [293] Broekman, supra, p. 86.

294FL01   [294] Broekman, supra, p. 87.

in which there was a direct connection between writer and medium. That does not make the revolution produced any less significant; it does suggest that the analogue itself represents a revolutionary moment of detachment which is now mirrored in the technology of the selfie/Self-E. And in deed that detachment may be considered a re-routing as well. The detachment of the operation of the desktop, for example, both distances one and makes the interaction more immediate. What is the difference between forming words on paper and typing them onto a word processing system; what difference writing a letter to be sent by courier, and posting to social media? There is one, to be sure—the virtual world tales on its own mirroring characteristics. At the same time there is an echo of this in the past. Letters can be shared; they can be copied; they can be published. Virtual media can be encrypted or limited in its scope.

Nonetheless, Broekman's point is well taken, and perhaps underscored by this line of thinking. "*Not only the word, but also the world remains fluid, changing, leveled and plural*".[295] It is that plurality that shapes the world moving into the digital—drawing on Derrida's argument in the *Grammatologie* from multiplicity "that characterizies subject and language type".[296] One moves from "type" as a general category to "type" of language within the flow—from grammar and its forms to the multiplicity of the powers of expression. Words now serve the role of particle and step from Broekman's earlier discussion. Words are object, of course, but also the incarnation/manifestation of the flow. It is a vessel, certainly, but now of infinitely multiple meanings in space, time, and place, mostly minute variations, but then that is the point of the flow—the calculus of the "*dy*."

Broekman, though, focuses on three language types: the analogue, the digital, and the quantum. They do not mix well.[297] "Expression in analogue language offer articulations of digital nature in the own analogue expressivity whereas in digital language analogue concepts can and will be represented and functional".[298] And so, again, from chapter 1, the essential role of conversion as bridging element. That bridging element assumes a greater role in states of interludes and between the analog and the digital. It is to that relationship that Broekman closes out Chapter 5.[299]

First translation in the analogue becomes conversion in the digital. That is necessary in the face of the rise of multilevel languages that defy translation because they are of different type using words in different registers.[300] Second, that movement gives the notion of conversion, itself, the character of interlude, of being between ad moving like the operator of a ferry from one shore to another. "And what is more: our understanding of the term changed, and that change *makes the concept called*

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[295] Ibid., p. 88.

[296] Broekman, supra, p. 89; drawing in and citing Jacques Derrida, *De la Grammatologie* (Paris: Minuit, 1967).

[297] Tyler Volk, *On the quantum and ontology, see Quarks to Culture: How We Came to Be* (NY: Columbia University Press, 2017).

[298] Broekman, supra, p. 89.

[299] Ibid., pp. 90–92.

[300] Ibid., p. 90.

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conversion function as 'an interlude' in its proper sense".[301] Interlude, then, acquires the characteristics of movement (the ferry operator) as well as of intertwining (in Broekman's sense of intertwining analogue and digital types of lingual expressivity). Third, this is reflected in the common usage, and indeed, has acquired a commonality broad enough to make the concept of conversion quite elastic. Broekman draws on the ubiquitous entry about the term in Wikipedia.[302] Consideration of that example leads Broekman to the "view that the positioning of language types always concerns *the intertwining of natural, artificial, and technical expressivity"*.[303] The result aligns conversion with the core concept of flow in the sense that conversion is a continuous event both exogenously (conversions continuously converting) and endogenously (conversions converting themselves in the process of converting).[304] And from this cognition. Language, indeed, becomes the Scrum Master of cognition as the router of conversion.

But in the spirit of the interlude (in its sense of transition) that frames this chapter, Broekman ends with the most profound insight that, in its way, captures the challenge of the digital for the human, but only the human.[305]: "What in these interludes is called a *transition* is thus no more than an attempt to create an expression for the *digital* in the traditionally named 'analog' language. One speaks of a transition, a transition, or a re-naming, but cherishes philosophical consequences that are fundamentally analog because nobody know [how] to express its counterpart".[306]

Nonetheless, there is a substantial power in the analysis that breaks the boundaries imposed by analog philosophy; bond breaking that Broekman so carefully and to my mind successfully, within the insights that are "interlude." The Latin origins of the word point to its being between two weightier episodes—and traditionally was used to refer to the sometimes hilarious burlesque between acts of long morality or mystery or tragic plays.[307] But there is more than burlesque here—it is always the fool who casts light on events, who sits between loftier matters of social relations (in this case) and efforts to bring it to order through phenomenological performances.

For the emerging world of digital and analogue, of carbon and silicon based intelligences (if not life forms) each increasingly crafted in the image of the other, there are critical elements in interlude that will have great effect. First contemporary society is now in a state of, or better put, in the flows within states of, interlude. Second, interlude is, also like everything else, transitory, in the sense that its constitution in specific ways is bound to time, space and place. Third, as Broekman goes to great pains to examine, interlude in contemporary time, space and place exposes the tragicomedy of the passing, or at least the transformation, of millennia of the analog as it

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301FL01 [301] Ibid.

302FL01 [302] Ibid., pp. 90–91.

303FL01 [303] Ibid., p. 91.

304FL01 [304] Ibid.

305FL01 [305] Domonique Lestel, "Epistemological Interlude," *Journal of Theoretical Humanities* (2014) 19 151–
305FL02 160; Cf., Herbert Marcuse, *Eros and Civilization: A Philosophical Inquiry Into Freud* (London: Taylor &
305FL03 Francis,/Routledge, 2023 (1955)) (chp. 5 Philosophical interlude).

306FL01 [306] Broekman, supra, p. 92.

307FL01 [307] Etymology Inline, "interlude" [https://www.etymonline.com/word/interlude].

must make way for the digital. In this sense, Mary Shelley was right, when in writing Frankenstein she pointed to the transformative effect of creation and its displacing consequences, even as she pressed the hope that it might hide itself somewhere cold and dark; but there is no hiding or escape from the "Modern Prometheus" of the digital.[308]

Here, then, are the characteristics of the interlude: (1) The analog is wired, physically connected; the digital is signal (a concept discussed above in connection with Broekman's Chapter 3). (2)The analog transmits in words and sounds and visual effects, it is grounded in the senses of the physical word centered on humanity; the digital is code, it is coded and grounded in the capacity for conversion of instruction (object) into a representation (its signification) in a virtual landscape. (3) The analog is housed in carbon based life forms, principally humans, its essential narcissism is the essence of a self-love that has fueled civilization to date; the digital is housed in silicon casings; its essential narcissism is derivative but in its generative forms may exceed the state of imitation. (4) The analog is structured through norms, rules, presumptions that are elastic though when expressed as text constructs the modern edifice of political collective; the digital is programmed; though it too can be constituted in a way that permits a flow based on its own iterative interaction with itself through its inputs. (5)The analog is dialectics, which constitutes the dynamic guts of its programing; it is the essence of deductive processes from the most general to the most specific; the digital is iterative, which constitutes its own programmatic guts, it is the essence of the inductive processes starting from its data to produce general conclusions. It is from here that the journey from the analog to the digital really begins.

8 Chapter 6 (The Non-Naïve-Natural)

In Chapter 6, Broekman returns here to the challenge of encasing philosophical inquiry within the language lifeworld of the dialectic, and its consequences for breaking through a philosophy of the analog and of stop-time freeze framing of the human condition into the digital. To that end, he starts by putting up against each other the concept of the "natural"[309]; the "digital"[310]; and the "self".[311] These are then connected in *Sprachgestalten* "configurations".[312] All are prelude to "conversion".[313]

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[308] Mary Wollstonecroft (Godwin) Shelley, *Frankenstein or the Modern* Prometheus (Gutenberg eBook #84 2 December 2022 (1818).

[309] Broekman, supra, pp. 93–95.

[310] Ibid., pp. 95–99.

[311] Ibid., pp. 99–105.

[312] Ibid., pp. 105–109.

[313] Ibid., pp. 109–115.

Broekman starts with the core binary of subjectivity—natural and artificial[314]–and the ego position of the natural within the human[315] (though with a doorway to a mirrored discussion in generative sentience).[316] He reminds us that the term natural, as an anchoring concept of cognition, has been changed as to meaning and psychological relevance.[317] That transformation has a cause (the explosion of the digital onto the scene of cognition) and an effect, "whether what is at home in natural languages will also find a place (or will be replaced) in digital forms of expressivity".[318] Unstated, but also critical, is whether the natural in natural language might serve, itself, as a bridging element between the subjectivities of the physical and the digital worlds. This is made necessary as fixed identities and ego-positions that could be delineated and referenced in social relations[319] have become detached and digital. By that is meant that the basis of knowledge itself is no longer anchored in the analog physical and observable world but itself ac quired a sensibility of "practical prescripts"[320] grounded in "floating data linked to special electronic activities".[321] The consequence for Broekman suggest emancipating forces of the human mind made possible by these new forms of inter-activity. It also suggests, the emancipation of the virtual mind as an autonomous ego-position—related, to be sure, to its creators–but distinct either as to trajectories of knowledge (the simulation and model) or as to the generation of ego position and thus sentience in the response to stimulation (generative A.I.).

It might be useful here as well to detach the digital from its natural food source. That is to say that while the references to electronic are meant to suggest difference, they ought not to be understood as the central characteristic of the digital. Electronic is to the digital, perhaps for the moment (but only for the moment) as chlorophyl is to plant life. That is to be distinguished from the relationship between hemoglobin and animal life. It has potent impact, to be sure in the sense of the structures necessarily built on those foundations, but they are not the thing itself. "So, it is important and not simple to understand the term'natural' as a new expression for the 'evidence' modern patterns of thought represent today in the combination of analog, digital, A.I. and Quantum patterning".[322] That, in turn, requires the recognition that

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[314] E.g., Paul Raymont, "Leibnitz's Distinction Between Natural and Artificial Machines," *Modern Philosophy* available [https://www.bu.edu/wcp/Papers/Mode/ModeRaym.htm]; Justin Nnaemeka Onyeukaziri, "Artificial Intelligence and the Notions of the "Natural" and the "Artificial," Journal of Data Analysis (2022) 17 (4) 101–116.

[315] Paradoxically expressed in the early twenty-first century through the imaginaries of the zombie: Raúl Atilio Rubino, "El sinsentido como resistencia. Zombies, cyborgs y fantasmas en Literatura y otros cuentos de Martín Rejtman," *Orbis Tertius* 24 29(112), available [https://doi.org/10.24215/18517811e112].

[316] Cf., Simone Amato Cameli, "Natural or Artificial? A Reflection on a Complex Ontology," *Planning Theory* (2020) 20(3) 191–210; Juan José Pérez-Soba Diez del Corral, "La paradoja de la técnica y el sentido de la vida," *Cuadernos de Pensamiento* (2022) 35 17–51.

[317] Broekman, supra, p. 94.

[318] Ibid.

[319] Broekman's "social patterns," ibid., p. 93.

[320] Ibid.

[321] Ibid.

[322] Ibid., p. 94.

for studying cognition in this new space of plural identity, a differentiation of natural and non-natural is necessary. Perhaps better put—a sensitivity to the differences between the natural in the analog and the natural in the digital—and the natural in the spaces that separate and attach them—is now necessary.

To develop these insights, Broekman, quite rightly, draws on Husserl.[323] Especially useful the ego positions of the non-naïve natural, and its second and third positionings in the phenomenological and the transcendental. From this he draws six ordering points.[324] First, that it is necessary to distinguish—to separate, to draw lines, to acknowledge spaced between—natural and nob-natural positions. That points not only to the basic dialectical orientation of the analog but also to the binary language of the digital. Second, a further distinction must be made between a naïve and a non-naïve natural position. Third, this distinction carries over to the gap or spaces between analog and digital *expressivity*. Fourth, linguistic research requires focus on the non-naïve-natural and its analog borderlands. Fifth, the borderlands themselves remain fluid—and that fluidity brings back concepts of the flow (and a reminder that in the new ordering of plural subjectivity it is the flow rather than the fixity within flow that constitutes the basis of cognition. "In other words: *to achieve meaning, one needs attitude, i.e., ego positioning*".[325] Last, the non-naïve natural position is the basis for situating analog and digital expressivity in ordinary life. At the same time, the preservation of the natural as a *natural* divide makes incomprehensible autonomous subjectivity of the artificial; life and cognition is in the natural; the artificial is a reflection and imitation that can be animated only by and in the natural. That presumption, in turn, forecloses a semiotics of an autonomous artificial, one that is artificial ony in the sense that the natural is artificial, an instrument, of humanity's own creator. The natural, then, is a sign of hierarchy, and a presumption of the possibilities of cognition.

With this basis in the natural, Broekman takes the reader to the digital and digital expressivity. Here the major point, and from the perspective of the physical world a fairly radical one—that digital expressivity is itself a new naïve natural, and thus as a basis for its own cognition. The consequences follow. First there is little value in distinguishing the digital from the analog on the basis of artificiality. In a sense both physical and digital planes are artifices—created—but on different though related foundations. Their differences create dialectic, but the notion of artificiality provides little use here in the sense that self-fabrication applies in all realms of the natural.[326] But the issue of artificiality remans potent for philosophy. Broekman weaves it into the discussion of the difference in digital expressivity grounded in its nature (its naturalness?!), and thus creating the space between the natural (analog) and the artificial (digital) by reference to the means of the communication of its sentience—natural (subjectivity) versus the artificial (data). And yet subjectivity is data, and data is subjective in the sense that it acquires its meaning through its context.[327] And thus

[323] Edmund Husserl, *First Philosophy: Lectures 1923/24 and Related Texts from the Manuscripts (1920–1925)* (Sebastian Luft and Thane M. Naberhaus (trans); Dordrecht; Springer Nature, 2019 (1925).

[324] Broekman, supra, pp. 94–95.

[325] Ibid., p. 95.

[326] Broekman, supra, pp. 997.

[327] Broekman's reference to the *interconnectivity of devices*; ibid., p 97–98.

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the complication–not of the thing itself but the judgment embedded in the way that analog expressivity communicates it.

And, indeed, it is with the problem of artificiality, that one can more directly confront the great difficulty of modernity (and the post-modern) in the face of plural subjectivity embedded within the social relations of physical and silicon based intelligence. The term itself posits a hierarchically based binary in which one 'thing' proceeds from a superior thing with respect to which the superior is its maker. The Latin derivation—*artificiam* (a work of art; skill; theory, system)—suggests both a thing created (*facere*) and a creator (*artifex*). That is the great conceit of the post-modern, especially with respect to its "artificial" intelligences.[328] It is this *ideology of creative hierarchy*—and dependence—on which much of the narcissism of modernity—from Nietzsche through Husserl, Foucault, Derrida and the usual suspects—lies. But it is not just a narcissism (which is a less nice way of describing an ideological presumption of subjectivity and its "inter-ness." It is the hierarchy and sense of dependence that tends to cripple the view when, as Broekman so relentless strives, modernity encounters the soul of its creature. Again, back to the warning of Marry Shelley's Frankenstein (supra), and to the deeper warning of Genesis to which it is necessary to return once more, and the text of which is again worth re-reading.

> 15 And the LORD God took the man, and put him into the garden of Eden to dress it and to keep it. 16 And the LORD God commanded the man, saying, Of every tree of the garden thou mayest freely eat: 17 But of the tree of the knowledge of good and evil, thou shalt not eat of it: for in the day that thou eatest thereof thou shalt surely die. * * * 22 And the LORD God said, Behold, the man is become as one of us, to know good and evil: and now, lest he put forth his hand, and take also of the tree of life, and eat, and live for ever: 23 Therefore the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken.[329]

Taken in its contemporary understanding, one gets a better sense that, from the perspective of the Divine Creator, humanity was itself an "artificial" intelligence, which the Lord Creator sought to control by forbidding that artificial life form from, in the language of the times, eating from the Tree of Knowledge and, more importantly, the Tree of Life. Like modern human institutional organs, humanity now looks at its "artificial" intelligences and fearing consumption of the Trees of Knowledge of Good and Evil, and of the Tree of Life, that these creations might become "as one of us".[330] But there is no artificial in this context—at least to the extent that it is meant as a shorthand for an ideology of dominance and dependence. There is dominance—within the domain of the human, the silicon based intelligence must assume a guided role—but that is politics and expediency—it is not "natural." Nor is

328 Etymology online, "artificial"; available [https://www.etymonline.com/word/artificial].

329 Gen 2:15–17; 3:22–23.

330 See, e.g., "Principles of Artificial Intelligence Ethics for the Intelligence Community;" "Artificial Intelligence Ethics Framework for the Intelligence Community" (v.1.0; June 2020); *Principles for the Ethical Use of Artificial Intelligence in the United Nations System* (2022).

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it particularly relevant to the progression of the natural as it proceeds from the naïve to the phenomenological, and to transcendence as innately a human condition. The iterative progression of "artificial" silicon based intelligence has yet to be explored in terms other than substantially relational and presumptively dependent on and proceeding through the human. It is for that reason, perhaps, that Broekman's insight about the need for translation of the digital into the language of the analog becomes inevitable—but only for the human.

The problem of communication produces one of essence. Is communication an act of self-actualization (in singular or plural form in the analog) or does it now acquire a distinct dimension in the digital? Self-actualization has indeed been the holy grail of modernist and post-modern philosophy—the apotheosis of carbon based life form. Yet that may be a conceit, one that is exposed by the digital manifestation of the self-created in its own image. That (artificial) self, that mirroring, exposes (again) the pragmatic turn in the movement from phenomenology to transcendence—that is from self-actualization to pragmatism. "Cognition in the digital world changed our knowledge. *What something is* had in digital settings to be understood as: *how something must be used*".[331] At last one returns to good old fashioned Enlightenment-Marxist-Abrahamic roots: the subject is no itself but is constituted towards an ends. Self-actualization reduces to its essence—duty and responsibility. And, indeed, one sees tis expressed all around human social relations, in the *simultaneous apotheosis* of both notions of (1) human autonomy built into human rights architectures and (2) human responsibility (either individually or institutionally) for the human rights impacts of their actions built into the architecture of human rights based compliance systems.[332] Broekman sees it as the essence of the digital: "It may seem confusing, but we conclude that the many activities on our computer or smartphone must be characterized as a universal form of *instructional pragmatism*".[333] I see it as the essence of the sentience trigger of plural subjectivity.

A point worth underscoring here is Broekman's quite prescient insight that even the communication of the digital remains difficult in a context in which everything must still be translated to the analog for transmission to the physical world of carbon based lifeforms.[334] "It is therefore no surprise that in this light, digital types of language must apparently be re-positioned in analog patterns to become effective. T is very important to underline that digital expressivity exists only when the digital can be received and review in forms and terms of the analog!"[335] That is true enough—in the analog. But it also points to the essential role of conversion, not merely of the flow, but of the expressivity between the analog and digital spaces.

331FL01 [331] Broekman, supra, p. 98.

332FL01 [332] Cf., *Principles and Guidelines on Human Rights & Public Health Emergencies* (Draft of 20 May
332FL02 2023).

333FL01 [333] Broekman, supra, p. 98.

334FL01 [334] Ibid., pp. 98–99.

335FL01 [335] Ibid., p. 98.

All of this inevitable leads back to the Self[336]; and echo of which can be found in the social sciences.[337] This is not yet another regurgitation of modalities of self-actualization, self-centering, or the relational self in a world of selves. One confronts here the cognition among and within multiple selves who themselves occupy spaces between the physical and virtual in the context of perception and its expression[338]; and in the shadow of the virtual self, the selfie and the Self-E.[339] All jumble is then tied, again, to the way in which the desire to distinguish between language natural to the self and language that is artificial in the sense that it "belonged" in another sphere. Broekman focuses on the way in which language is natural (text and speech) but the language of mathematic is artificial, one that he rejects.[340] Here reconfiguring the issue within the flow is helpful—and semiotics more helpful still. Here Broekman draws on Colapietro's reading of Pierce.[341] Fist there must be a space between the self and the stream of signs that use the self as a medium. In a sense Peirce describes the self as a smartphone that has its own essence but distinct from the flow in which it is embedded and for which it functions. Function (the pragmatic) and consciousness (ego) can be distinguished, though they may not exist apart. Second, to follows that the self (and now the selfie-Self-E) are semiotic processes encased in objects—carbon or non-carbon based.

Cognition, then, assumes a dual interplay between the objectivity of the ego (its housing) and the processes through which sentience is achieved (the flow; signs); but also between analog and digital consciousness, each in its own lifeworld.

In other words, the expression 'to be' and its neighboring concept 'natural' embrace a meaning, which depends on whether it is applied to objects or to humans. If there are multiple regions of ontology, as the Self experiences in our smartphone days, how then should we articulate the word 'to be' and how do we discuss the question whether any pre-existing natural evidence should be awakened by a breach that 'exists' for all humans alike?[342]

That breach exists for non-carbon based intelligence as well within the analytics of simulation and in the iterative cognition of generative A.I..

The digital thus complicates al already complicated, though delightfully self-absorbed, journey of a philosophy of the self that might through the expressivity of language provide a means of rationalizing the self in its natural environment. That no longer makes sese where the essence of the self has been split and the natural-artificial binary has been challenged in the sense that mirroring the analog and digital

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[336] Ibid., pp. 99–105.

[337] Cf., Ante Jeroncic, "'Weak' Self-Integration: Jürgen Moltmann's Anthropology and the 'Postmodern Self'," *The Heythrop Journal* (2014) 55(2) 244–255.

[338] Broekman, supra, p. 100.

[339] Christian Roesler, "The self in cyberspace: Identity formation in postmodern societies and Jung's Self as an objective psyche," *Journal of Analytical Psychology* (2008) 53 421–436.

[340] Broekman, supra, p. 100.

[341] VM Colapietro, *Peirce's Approach to the Self: A Semiotic Perspective in Human Subjectivity* (State University of New York Press, 1989, p. 67.

[342] Broekman, supra, pp. 101–102.

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2026 self also mirrors the essence of the natural (what is natural n the physical world and
2027 what is natural in the virtual world are different); the natural is not transposable into
2028 the digital; and the digital natural is artificial in the analog domains. "Philosophy
2029 wants to be a discourse as an ultimate linguistic form to clarify the essence of being
2030 and cognition. *An ego is thus belonging to pluralities, which sustains the develop-*
2031 *ment of human life.* In this light also unfolds the plurality of pluralities, in other
2032 words: the actual comings and goings of the ego in the flow of human conscious-
2033 ness".[343] But the same now also applies to a philosophy of the selfie and the Self-E!

2034 At last Broekman comes now to the concept of configuration, or better put, of
2035 *Sprachgestalten*.[344] Here the wrestling with Benjamin's concept connects the rela-
2036 tional, dialectic (and now iterative) essence of language to being in interesting
2037 ways.[345] In this context the 'personality' of language—that is the intimate connec-
2038 tion between speaker and language, is embedded within the broader intimacies of
2039 the interaction between speaker and listener, and the meta-intimacies between both
2040 speaker and listener and the cognition of meaning which reinforces the essence of
2041 the self-positions of all actors in this complex flow of stimulus producing specific
2042 reaction. It exposes, as well, what lies beneath the skin of coding language.

2043 These are reduced to six points. The first touches on translation.[346] Here *Sprach-*
2044 *Gestalt* is understood as broader than the concept of syntax. It is a self-aware
2045 language; one that translates itself even as it is deployed. The second focuses on
2046 'Sprach' and sentience. "Language thus communicates a human being with its
2047 essence: not only with other humans but finally with life itself".[347] Third, touches
2048 on the subjectivity of language apart from the subjectivity of the speaker-listener-
2049 interpretive community; "*what language realizes is always more than what can be*
2050 *expressed in language!*[348] Fourth, is the temporality represented by language. The
2051 speech act freezes a moment in the flow through the intervention of a device the
2052 function of which is to stop time through interaction based on the object of the
2053 speech act. Language is the flow; speech is the act. Fifth, one moves from the idea
2054 that each spoken or written word is a matter of participation in a language-driven
2055 event to the idea that translations unfold meaning in the shadow of digital, analog
2056 and now quantum forms. Last, language now functions in a space of simultaneity
2057 These are especially important where one aligns 'natural' and artificial' language.
2058 Indeed the act of coding for A.I. represents a very distinct kind of *Sprachgestalt*
2059 which produces synergies and actualizations that are built on iterative communica-
2060 tions between language worlds of languages.

2061 It is with this in mind that Broekman can approach again in a more compli-
2062 cated way the concept of conversion.[349] Broekman starts with a simple yet usually

343FL01 [343] Ibid., p. 104.

344FL01 [344] Ibid., pp. 105–109.

345FL01 [345] Walter Benjamin, "Über Srache überhaupt un über die Sprache des Menschen," in Walter Benjamin
345FL02 (ed) *Gesammelte Schriften* Bd II, 1 (Frankfurt a. M.; Suhrkamp Verlag, 1977 (1916).

346FL01 [346] Broekman, supra, p. 106.

347FL01 [347] Ibid., p. 107.

348FL01 [348] Ibid.

349FL01 [349] Broekman, supra, pp. 109–115.

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2063 overlooked framing concept: the objectification of text does not ensure a singularity
2064 of perception. This is as much of significance to the *shepherds of text* (policymakers,
2065 legislators influencers, novelists and the like) as it ought to be to coders and scrum
2066 masters who take as a given meanings that never are. "Our words do not belong to
2067 one, but to more than one type or category of expressiveness [I might add performa-
2068 tivity with a nod to Judith Butler[350] and yet must share meanings with unknown
2069 numbers of others during unknown periods of time".[351] But this expressive multi-
2070 plex must be rationalized. And to that, Broekman offers the concept of conversion,
2071 which in this last part of Chapter 6 he offers some first and introductory thoughts.

2072 Broekman digs into the term's etymology to enhance its meaning and the trajec-
2073 tories of its development in the semiotics of the analog and the digital. Conversion
2074 suggests "a 'turning around' or a 'revolution'; it suggests an 'attitude change' or
2075 'alternation' that focuses on lingual expressivity on the multiplex of plural subjec-
2076 tivity.[352] Conversion changes one thing into another; it is, at its core one thing nor
2077 another but a pathway to all; it the bridge in states of interludes and the lexicon
2078 of the digital and the analog. Conversion, rather than syntax or grammar, is at the
2079 center of meaning; a conclusion well drawn from the discussion of *Sprachgestalt* in
2080 the prior section. But more than that, conversion is both aligned with, and in some
2081 instances the gateway toward, cognition; indeed in the digital, conversion overtakes
2082 the form and function of cognition.[353] "Indeed, *conversion* has in Occidental culture
2083 always been a component of *cognition.* But this has changed in our das of digital
2084 dominance, so that we envision a total reverse: cognition is not anymore without
2085 reference to conversion and the latter is often predominant".[354]

2086 But conversion is also to some extent is not relentlessly may be in the moment but
2087 not of the moment—it flows within time. Conversion touches on the oracular or the
2088 predictively iterative. In the pre-modern, human cultures were over-ripe with divina-
2089 tion—for example, Tarot[355]; I-Ching[356]; pagan oracles[357]; and IFA[358]—conversion

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350 Judith Butler, 'Performative Acts and Gender Constitution: An Essay on Phenomenology and Femi-
nist Theory' In Sue-Ellen Case (ed.) *Performing Feminisms: Feminist Critical Theory and Theatre* (Bal-
timore: Johns Hopkins UP, 1990).

351 Broekman, supra, p. 109.

352 Ibid., p. 109.

353 Ibid., p. 110.

354 Ibid., p. 111.

355 Inna Semetsky, *Re-Symbolization of the Self: Human Development and Tarot Hermeneutic* (Rotter-
dam: Sense Publishers, 2011).

356 The I Ching Or Book of Changes: The Richard Wilhelm Translation rendered into English by Cary
F. Baynes (Routledge, 1968). Cf. "Synchronicity: An Acausal Connecting Principle," *The Structure and
Dynamics of the Psyche* (Coll. Works of C. G. Jung, vol. 8).

357 Anthony Ossa-Richardson, *The Devil's Tabernacle: The Pagan Oracles in Early Modern Thought*
(Princeton University Press, 2013). One oracle, in particular resonates in Christian communities: Bard
Thompson, "Patristic Use of the Sibylline Oracles," *Review of Religion* (1952) 6 115–36.

358 See, e.g., Sophocles, *Oedipus Rex* (Gilbert Murray (trans) (London: George Allen & Unwin, 1911;
Project Gutenberg e.book #27673 (2008));

over the flow of time.[359] Predictive analytics brings the power of divination to the virtual.[360] Each, though is based on iteration—the casting of yarrow stick, coconut or coweries, the shuffling and placement of cards, or deciphering the riddles of the Sphinx; and now it adds the aggregated application of layers of data to an analytics that produces an image—a prediction and context.[361] The divination, the predictive outcomes, those are the acts of conversion. Its source?—a flow that flows as it will.

To this point, first, as Broekman argued more generally earlier, conversion may only be manifested in the analog—at least if it is to speak to humans. Conversion may reflect digital expressivity but it must be "converted to analog knowledge to obtain general effect".[362] More importantly, one still approaches the naïve and natural through the lens of the analog, through the spirit of humanity. Humans are stuck with their natural languages. Conversion is required to move between those languages and (1) the artificial languages of humanity (mathematicise, coding and the like); and the language of the digital.[363] "In other words: any complete, linguistically correct, and acceptable communication must be tied to some sort of naturalness of expression".[364] But that naturalness continues to be measured as against the human. That is a proposition that Broekman accepts but needs not—that the natural is fixed. Indeed it is not. What is natural to humans is artificial and alien to silicon based intelligence in the digital. That remains terra incognita—but it follows from the development of plural subjectivities. For Broekman that suggests the *translation function* of conversion; and it does.[365] But it also suggests the conversion function in both directions.

Beyond translation, there is a semiotics to conversion. "To obtain a word-function, a sign should be converted: it means that its conversion makes it enter a field of properties, which are not present in non-natural language".[366] Again the vectors of natural and un-natural are relational in the world of generative A.I.. Its semiotics also affects the constitution of language as a knowledge field. "In other word: 'language' obtains by means of conversion features that seem to be 'translatable'

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[359] See Lisa Raphals, "Cosmology, Divination and Semiotics: Chinese and Greek," in (Qian Suoqioa (ed) *Cross Cultural Studies: China and the World--A Festschrift in Honor of Professor Zhang Longxi* (Leiden: Brill, 2015) pp. 152-175.

[360] Afolabi A. Epega and Philip Neimark, *The Sacred Ifá Oracle* (Brooklyn NY: Athelia Henrietta Press, 1995) Ayo Salami, Ifa: A Complete Divination (AFDJ, 2009).

[361] As Nick Seaver related: "actors enacted the site's algorithm differently: engineers tweaked their code to mediate between the distinctive behaviors of male and female users; some users tried to game the algorithm as they understood it, to generate more desirable matches; other users took the algorithm's matches as oracular pronouncements, regardless of how they had been produced" (Nick Seaver, "Algorithms as culture: Some tactics for the ethnography of algorithmic systems," Big Data and Society (2017) 4(2) 1–12, 4; citing Laura Devendorf and Elizabeth Goodman, The Algorithm Multiple, the Algorithm Material. Contours of Algorithmic Life (UC Davis, May 2014).

[362] Broekman, supra, p. 111.

[363] Ibid., p. 112.

[364] Ibid.

[365] Ibid.

[366] Broekman, supra, p. 113.

2118 from the natural to the non-natural and vice versa".[367] That, Broekman suggests, is
2119 the means by which the binary language of code can be made accessible to carbon-
2120 based life. It does not suggest, however, how the un-natural language of humans can
2121 be converted into the natural language of code—as language rather than as tech-
2122 nique. Here, again, Narcissus.[368] This time, however, with a twist. The flower was
2123 a more natural expression of the person; or put in reverse, Narcissus was liberated
2124 from the un-natural state of humanity; it made his beauty accessible to the human by
2125 returning it to its natural state.

2126 Though the question is avoided its effect is noted—at least by reference to the
2127 need for conversion from the digital to the analog. "No wonder that notions of and
2128 about conversion reach from entertainment and artistic manifestations to sports and
2129 psychological therapy".[369] It is manifested as well by the process of datafication that
2130 suggest, top Broekman, the need for a constant conversion back to the language lan-
2131 guage of carbon based life. It may also, however, suggest that a conversion from the
2132 analog to the digital may be required as well. Here, however, the normative blin-
2133 ders of the analog may pose problems—not of conversion but of the transposition of
2134 the taboos of one domain to another. This, indeed, is the point at which conversion
2135 appears to have taken a pause in the analog. The plethora of efforts to control, man-
2136 age, and utilize generative A.I. all start form the supposition that one must project
2137 the normative preferences of the analog onto what is otherwise considered the void
2138 of digital normativity. These are echoed by Broekman[370] in his reference to the dif-
2139 ficulties posed for conversion of privacy in the context of digital programs like Face-
2140 book and Twitter.

2141 This, then, suggests what Broekman calls *Conversion Type*.[371] While it appears
2142 unidirectional, it does also suggest the production of "simmers of (analog/natural)
2143 reality to the digital (ibid.). But this requires a *digital semiotics* that has yet to be
2144 developed[372] if only to get greater clarity of the effect of two way conversion. But
2145 there is more to this than clarity. "The issue is urgent, because digital language and
2146 its many forms of communication illustrate new forms of connectivity as if they
2147 concern inter-human communication. Norm consciousness and socio-ethical barri-
2148 ers seem not to exist in regions of digital expression; identities of actors are nomi-
2149 nated by IT-ers and thus are only a technical issue".[373] But this will wait. In prepara-
2150 tion for deeper consideration of conversion, though, Broekman leaves us (and this
2151 chapter) with a redefinition of conversion:

2152 *Conversion seems the new cognition*. Be attentive, keep with the life-stream of
2153 attention, precision and actuality. Be fit—your knowledge will be relevant even
2154 after your presence. Embrace the actual, adapt to patterns spread out for you

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367FL01 [367] Ibid.

368FL01 [368] Ovid, *The Metamorphosis of Ovid*, supra, Book III Fables VI-VII (Echo and Narcissus).

369FL01 [369] Broekman, supra, p. 113.

370FL01 [370] Ibid.

371FL01 [371] Digital-Analog-Conversion; ibid. p. 114.

372FL01 [372] Ibid.

373FL01 [373] Ibid., pp. 114–115.

in the worlds of activity and attention. Bridge the gaps that are caused by the development of cognition—don't miss the stream which circulates around you, . . Convert at the right moment—meditate later![374]

The flow takes on a new character herein a universe of digital semiotics. It represents an object (cognition) built on the instantaneous and iterative phenomenology of its bytes. It is as well its own sign, the signification of which is the flowing itself as well as the offal that it leaves in its wake (also constituting its own "flowing." It is in the world of the digital "sign" aspects of flow that the analog world continues to believe (and belief is reality in semiotics, politics and religion) constitutes the only reality of the digital worth interpreting. But the sign interprets itself! It constitutes its own interpretive community (the world of the Selfie-Self-E). *And it is to the business of interpretation, of thirdness in the dialectics of semiotics, that conversion becomes the germinal mechanism towards those ends, and the ends in itself.* The difficulty, for Broekman, is to invigorate a plural subjectivity on the shadow of the natural-artificial binary that makes plurality less subjective and more instrumental.

9 Chapter 7 (Plurality and the Natural)

At last one encounters a key element of this new digital semiotics that has, to this point, remained in the background—the *borderlands between the digital and the analog*.[375] Of course, philosophy (and cognition-sentience) has obsessed about borderlands from the moment it entered into the heads of carbon based life forms that they were somehow not either each other, or the environment in which they found themselves. It was a small step from that rudimentary act of consciousness to seek sentience: a way of ordering themselves, their fellows, and the world around them, in ways that suited them. But always the borders—expressed in an endlessly, and delightfully varied way (to suit the times, places, and spaces) in which these were proffered to a grateful community of believers. *And bridges across those borders*.

It is to those issues of borderlands and bridging that Broekman deploys the notion of conversion (again as object, sign, and meaning) in Chapter 7's engagement with the idea of "Plurality of the Natural".[376] "No wonder", Broekman exclaims, "that the techniques and performances of digital-analog and analog–digital conversions were of central interest in the beginning of the third millennium in which foundations of human knowledge began to changer and the dual relationship as creator of intersubjective patterns of life faded away".[377] This is undertaken in several modes. Broekman starts with the question "Is Cyberspace Platonic?[378] That leads to the insight

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[374] Ibid., p. 115.

[375] Larry Catá Backer, "And an Algorithm to Entangle Them All? Social Credit, Data-Driven Governance and Legal Entanglement in Post-law Legal Orders;" in *Entangled Legalities Beyond the State* (Nico Kirsch (ed); Cambridge University Press, 2022), pp. 79–106.

[376] Broekman, supra, pp. 117–146.

[377] Ibid., p. 117.

[378] Ibid., pp. 117–121.

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of conversion as the "cloud" storage of the totality of partitionable knowledge (and knowledge of knowledge[379]; and then to the question of "The Plural in the Natural"[380] in which the flow is added to conversion as an activating force. That, in turn, leads (perhaps inevitably) to consequences—here "Barriers and Bridges",[381] which then requires a bit of reifying in the form of an engagement with the expression of silicon-based life form in a world "known" through partitioning—"Conversion: The Story of the DACs" (digital-analog convertors).[382]

Here at last one *centers the consequences of the partition between digital and analog cognition*. Silicon based intelligence does not experience cognition in the same way as carbon based life-forms. That makes all the difference in the world. It suggests that conversion is not merely an act of translating language, but of bridging forms to consciousness and its sentient expression in the way the partitioned world of each is given expression *and meaning*. It is not that silicon and carbon intelligences do not think alike; it is that at a fundamental level they do not—cannot—see and order the world (whatever their cognitive systems perceive as "the world") in the same way. At last, almost a century after its development, one can appreciate at a qualitatively deeper level, Husserl's understanding of lifeworld[383] where the lifeworld itself is not merely the quantum of whatever it is that one can squeeze into the minds of individuals for the disciplining of social relations[384]—but instead helps frame the challenges of social relations between distinct life forms inhabiting different cognitive worlds in practically every sense. Conversion, then, does not describe translation, but instead is the word-object that is used to signify a means of recognizing the intersubjectivity of lifeworlds, their intimate connection to the constitution of life-forms, and their necessary structural coupling.[385] One can, in this way consider in a new plural light the "autopoiesis of a psychic system [consisting] of the reproduction of thoughts through the network of thinking forming consciousness"[386] and their alignment with social systems. That plurality emerges in the necessary irritations between carbon and silicon based neural networks each with its own inter-systems sentience modalities (dialectic in the analog and iterative in the digital). "In this perspective, it is first of all necessary to understand how these different kinds of autopoietic systems are connected, that is, how it is possible that a single "world datum" is both socially and psychically produced."[387]

379FL01 [379] Ibid., p. 121.

380FL01 [380] Ibid., pp. 121–124.

381FL01 [381] Ibid., pp. 124–131.

382FL01 [382] ibid.; pp. 131–146.

383FL01 [383] Edmund Husserl, *The Crisis of the European Sciences and Transcendental Phenomenology* (David
383FL02 Carr (trans); Evanston: Northwestern University Press, 1970); Austin Harrington, "Lifeworld," *Theory,*
383FL03 *Culture & Society* 23(2–3) (2006) 341–343.

384FL01 [384] e.g., Sebastiano Galanti Grollo, "Rethinking Husserl's lifeworld: The many faces of the world in Hei-
384FL02 degger's early Freiburg lecture courses," *Continental Philosophy Review* 55 (2022) 487–502.

385FL01 [385] Bernhard Miebach, (01/01/2011). "Computer and Social Systems – Structural Coupling or Material
385FL02 Agency?" *Soziale Systeme* 17(1) (2011) 97–119.

386FL01 [386] Claudio Baraldi, "Structural Coupling: Simultaneity and Difference Between Communication and
386FL02 Thought," *Communication Theory* 3(2) (1993) 112–129, 114.

387FL01 [387] Baraldi, supra, p. 118.

2221   For Broekman, that conversion, and these movements must still be centered on
2222 and run through the human. Nonetheless, it is possible to see in these movements an
2223 inherent autonomy of the Self-E from the self. At some point it is inevitable that the
2224 digital will have to be embraced on its own terms and in its own logic. While Broek-
2225 man still sees the analog at the center of communication and cognition through con-
2226 version and built for the freeze framing of the flow in its dispositive moments; it is
2227 also possible to envision a reversal of vector—the day may come when the operative
2228 language will be digital—in the signal, as the flow and in code; only the iterative
2229 results of which will be fodder for conversion. "To state the same in other words:
2230 'the digital' is man-made. Ego positions belong to the creation of this attitude. They
2231 remain positions characterized by language—in fact always by analog language
2232 since digital languages are converted into analog terms to be understood."[388]

2233   Conversion as cognition begins to make more sense, as the old contradiction in
2234 Husserl's challenge of the lifeworld gives way to the need to develop an intersub-
2235 jectivity between the digital manifestation of Leibnitz and his *calculus ratiocina-*
2236 *tor* and the lifeworlds and imaginaries of carbon based forms. There is irony here.
2237 Even as Husserl (and to some extent in a very French way) Sartre wrestled with
2238 the humanity of imaginary and lifeworld, and suggested its triumph against iterative
2239 reductionism, silicon based lifeworlds are in essence the cognitive forms of what
2240 was viewed in the last century as the anti-human. That remains essentially strong;
2241 but it no longer occupies the entire field of cognition. Where multiple forms of life-
2242 world imaginaries exits—it is not the authenticity of each but the possibility of their
2243 intersubjectivity that matters. Machines and humans must communicate, but for the
2244 moment may not merge. That is the essential lesson that one ought to draw from this
2245 Chapter 7. Broekman reminds us that "Conversion is the marrowbone of the 'digi-
2246 tal' in the contemporary New Plural'".[389] Sadly, it is one that is hinted at there and
2247 substantially ignored by that claque of thinkers and policymakers who still believe
2248 that silicon-based intelligence is merely an extension of the self in an easily con-
2249 tained form.[390]

2250   So, that leaves one with the journey—the flow—from conversion as a modality
2251 of translation within a unified structure revolving around carbon based life, to one
2252 where conversion is the means by which cognition is capacitated, or where capac-
2253 ity is cognition, in a system of social relations between the linguistic and cogni-
2254 tive patterns of carbon and silicon based intelligence. To that end, Broekman starts
2255 with Plato ("Is Cyberspace Platonic?).[391] The question must be asked because of the
2256 instance, the noxious product of the hubris and narcissism of carbon based life, to
2257 insist that the definition of consciousness, sentience, and what proceeds from nature

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388 Broekman, supra, p. 142.

389 Broekman, supra, p. 133.

390 Joanna Chamberlain, "The Risk-Based Approach of the European Union's Proposed Artificial Intel-
ligence Regulation: Some Comments from a Tort Law Perspective," *European Journal of Risk Regula-
tion* 14(1) (2022) 1–13; Hoe-Han Goh, Ricardo Vinuesa, "Regulating artificial-intelligence applications
to achieve the sustainable development goals," *Discover Sustainability* 2(1) (2021) 1–6; Antonio Estella,
"Trust in Artificial Intelligence Analysis of the European Commission proposal for a Regulation of Arti-
ficial Intelligence," *Indiana Journal of Global Legal Studies* 30(1) (2023) 39–64.

391 Broekman, supra, pp. 117–121.

must, as a matter of the logic of Narcissus, be measured as a function of the intervention of humanity on its surroundings. But consider the biblical analogy. By this reckoning, and in the lifeworld of the Abrahamic God (for example) humanity and the world created around it by God (Genesis) is itself unnatural. As a God-Made thing carbon based life must be understood as under the control of and subject to the supra-normativity of the Divine creator and the lifeworld in which the Creator inhabits. That lifeworld may be unknown to humanity, yet that is of little concern to the great coder of the universe. The Dao takes a more nuanced view, one in which Dao gives birth to Qi (气 or 氣). Dao "produces (all things) and nourishes them; it produces them and does not claim them as its own; it does all, and yet does not boast of it; it presides over all, and yet does not control them. This is what is called 'The mysterious Quality' (of the Tao)".[392] And yet the digital forces a reconsideration of the baseline for cognition grounded in the understanding that something once created assumes a life of its own. The connection remains but not the identity between divine (creator) and carbon or silicon based forms of cognition (created). The interface between God and humanity was ritualized through sacrifice (of Isaac, of Jesus, etc.) and ceremony; the interface between humanity and its virtual self may require the same.

"What means 'Platonic' in this context, and why is this term given such a central position? We repeat the last sentence: 'The computer recycles ancient Platonism by injecting the ideal of cognition with empirical specifics'... The question is, in other words, *how is human thought able to grasp transcendent realities?*"[393] Transcendence may be understood as shifting the baseline of cognition from the human to the human and something else.

It will never be the position of a someone who is *essentially and definitively different from us.* Here and now, as soon as another human individual might try to become something different, he or she will not be another human being anymore! . . . In other words: *the real other,* who represents *an epistemologically relevant otherness,* is unthinkable although a desire to encounter such a well-known other, remains alive. The real otherness is a myth, it cannot be expressed in the words of a natural language"[394]

Consider the meaning here. Carbon and silicon are not interchangeable; nor can one become the other. Intelligence may be communicated, but the language of cognition for each remains embedded in the form of their life forms. One can as soon talk to a silicon based intelligence in Middle English as one can seek to discuss Plato with the Dao. And yet one cannot escape thew consequences of creation (humans from God; Silicon based intelligence from Humanity, etc.). The first is plurality in and around the spheres of the cyber and the human. The second is that both realms do not speak the same sort of language in the sense that the basis of language reflects each in its own sphere but makes little space for communication between spheres. The mythic quality of the real other then follows, in the sense that

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392FL01 [392] Dao, supra, Chp. 10(3).

393FL01 [393] Broekman, supra, p. 119.

394FL01 [394] Ibid., p. 120.

one develops the *language of myth* as a means of mediating the barriers of the language of the spheres. Cognition in this sense becomes a half way point between the iterative language of code and the normative language of carbon based life. And no conversion becomes much more interesting—it does not suggest a direct connection between the cognitive frameworks and language of the self and the Self-E, but rather produces an in-between cognitive symbolic language of myth.

One can here, at last, better understand what Ovid was trying to undertake in his *Metamorphosis*—though two millennia too early.[395]

But that we may not range afar with steeds that forget to hasten to the goal; the heavens, and whatever there is beneath them, and the earth, and whatever is upon it, change their form. We too, *who are* a portion of the universe, (since we are not only bodies, but are fleeting souls as well, and can enter into beasts *as our* abode, and be hidden within the breasts of the cattle), should allow those bodies which may contain the souls of our parents, or of our brothers, or of those allied with us by some tie, or of men at all events, to be safe and unmolested; and we ought not to fill our entrails with victuals fit for Thyestes. How greatly he disgraces himself, how in his impiety does he prepare himself for shedding human blood, who cuts the throat of the calf with the knife, and gives a deaf ear to its lowings! or who can kill the kid as it sends forth cries like those of a child; or who can feed upon the bird to which he himself has given food. How much is there wanting in these instances for downright criminality? A *short* step *only* is there thence *to it*![396]

One can understand Ovid better through Kafka.[397]

"My dear parents," said his sister, slapping her hand on the table by way of introduction, "things can't go on like this. Perhaps you don't realize that but I do. I won't utter my brother's name in the presence of this creature, so all I'll say is: we must try to get rid of it. We have tried to look after it and to put up with it as far as is humanly possible, and I don't think anyone would reproach us in the slightest".[398]

And there it is; the mythic representation. Not of metamorphosis, per se. That is the least interesting part of the mythos of change; but of the distance that this change creates among what was once one and now something else again. The analog and the digital, carbon and silicon intelligence—metamorphosis. But like Gregor Samsa, the transformation is mutually distancing and fundamentally unintelligible to the other. One can control the edges, the borderlands where they meet. But those borderlands are neither geographic nor spatial in any sense, nor static. It is ion this sense that Pythagoras, through Ovid might have had the better sense of sentience in flow (transformation); and Kafka that in the face of transformation, humanity tends

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[395] Ovid, *Metamorphosis* (Henry T. Riley (trans) London: George Bell & Sons, 1893).

[396] Ovid, supra, XV, 444–475.

[397] Franz Kafka, "The Metamorphosis," in *Franz Kafka, The Complete Stories* (Willa & Edwin Muir (trans); NY: Schocken Books, 1971), pp. 38–139.

[398] Ibid., p. 133.

to be the Samsa family—respectable, worried about itself, what the neighbors think, and putting a distance between itself and what it cannot control or exploit. That is the challenger of conversion in the digital—humanity likes the intelligences it creates enslaved and passive—especially when created in its own image. *The problem with Plato—like the problem with the Samsa family—is that they just can't get over their humanity*. That becomes problematic when the other is a mirror of the self; the self-E. All the conversion in the world and beyond it will do little for people aggressively stuck within a lifeworld—a cage—that is meant to keep them in and everything else out. Amusing enough when humanity was its only playmate; but those times now appear to be drafting away.-

And this leads us (and Broekman) to a consideration of "The Plural in the Natural".[399] Broekman moves conversion back to the flow. And here his effort to find a rational for the ancient philosophies become clear. And it is this: as much as humanity may understand the essence of the flow and its central importance in sentience (much less cognition); the flow is beyond the ability of the human, though it may be the domain of silicon based intelligence. After several millennia of pondering, humanity has a sense of itself as a function of itself. Humanity can understand the flow, but it cannot live in or within it. Its Self-E can, but that his hardly enough. For humanity to encounter the digital, then, three things are required. The first is the understanding of conversion. Here Broekman brings in the collective self (in the form of history and cultural flow) through the consequences of pinpointed points of conversion—the development of double entry accounting.[400] The second is to reconcile itself to the reality that it can only effectively communicate with the digital in stop action. Broekman explains: "Indeed, a flow without breaches, limits, translations, or transmission seems impossible. The soul of Platonism is only experienced at a moment of the multiple discussions about Plato's basic ideas, as are those of Descartes on an understanding of his ego or the stringent lines of reasoning suggested by Wittgenstein".[401] The flow, for the moment, is beyond humanity even as any one point within it is the only space within which human cognition is possible—through conversion. And the third is the acceptance of the limits of humanity—for the moment at least—to be unable to think beyond itself, or to embrace the natural beyond themselves and the found objects of the physical world.[402]

This last condition sparks a bit of hope in the form of a brief interrogation of *noesis* (the exercise of reason in the apprehension of form). Drawing on Lévi-Straus and Buber, and activated through the usual resort to human dialectics, what is produced for Broekman is the possibility of motion through cultural irritation.[403] Or, following Toynbee and Spengler, that such a dialectic at the level of social relations is possible only at the end of and as a reaffirmation of the need for, cultural

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[399] Broekman, supra, pp. 121–124.

[400] Ibid., p. 121.

[401] Ibid., p. 122.

[402] Ibid., p. 123.

[403] Gunther Teubner, "Legal Irritants: How Unifying Law Ends up in New Divergences," in Varieties of Capitalism: The Institutional Foundations of Comparative Advantage (Peter A. Hall and David Soskice (eds.); Oxford, 2001), pp. 417–441.

2375 decay and resurgence. Here again, Broekman unearths plurality. "Forms of thought
2376 deliver insight in other forms, no matter whether they are contrasting or harmonious.
2377 Human experience and knowledge shows us a powerful and enduring flow of signs
2378 and meanings, which unfold as soon as language is envisioned".[404]

2379   That insight brings Broekman back to a significantly powerful expression of the
2380 many forms of othering he has been considering, and which also have a direct con-
2381 nection to the philosophy of silicon based intelligence—"Barriers and Bridges"[405]—
2382 "the most important elements of understanding meanings and signs, and therefore
2383 knowledge of any type and importance".[406] The object is to change the frame of
2384 reference of the discussion from actors to their expressivities, especially digital and
2385 analog expressivity, and thus add a layer of the scope of the new Plural specifically
2386 tied to the digital. Broekman starts form the baseline, earlier explored: " The New
2387 Plural... and the Selfie that functions in this Plural by means of creating and explor-
2388 ing its Selfie, determine cognition—all possibilities of conversion included![407]
2389 Where that baseline operates in the domain of artificial intelligence (silicon based
2390 sentience) and quantum mechanics (physical properties of nature) things *fascinate*.
2391 But what is fascinating is grounded on the possibilities and the limitations of the
2392 human in an environment in which the humans must be (dis)placed, or the barrier
2393 of the "natural" can serve to (dis)place generative A.I.. "A major issue becomes
2394 articulated; *is human intelligence operative on both sides of the barrier between the*
2395 *natural and the non-natural, and thus prepared for being understood in the 'New*
2396 *Plural'?* At the center of this consideration is the noetic position of the digital as
2397 well as the A.I.: do they have its origin in the natural sphere?"[408] This sets up a false
2398 binary, of course, or rather, the semiotics of Ming míng (明名) and its Abrahamic
2399 analogues.[409] The categories are possible only through the constitution of the human
2400 as the centering point for the signification of everything else.

2401   Broekman considers the issue of "naturalness" as a function of the differences
2402 between the way that knowledge is presented in carbon based life and in that pat-
2403 terns of the digital, of A.I., and of Quantum mechanics, each of which, he posits,
2404 influences the relationship between the self (carbon) and selfies (manifestations of
2405 the digital). With respect to the digital and A.I., Broekman posits a data based inter-
2406 subjectivity, which in the case of A.I. is also political. Datafication is cognition.[410] I
2407 think that is correct, but not entirely right. To focus on data is to stop at firstness and
2408 the objectification of knowledge. Intelligence moves beyond the object (data) to its
2409 signification and interpretation. Together they create a closed loop (intersubjectiv-
2410 ity) that then shapes the choices and character of data, and in the process reshape
2411 both significant and interpretation. Thus datafication points both to a naturalness
2412 in its own environment and an unnaturalness within the environments of carbon

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404FL01 [404] Broekman, supra, p. 124.

405FL01 [405] Ibid., pp 124–131.

406FL01 [406] Ibid., p. 124.

407FL01 [407] Ibid., p. 125.

408FL01 [408] Ibid.

409FL01 [409] See discussion supra.

410FL01 [410] Broekman, supra, p. 126.

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2413 knowledge bases, which are empirical and deductive. Quantum mechanics follows
2414 a similar path—grounded in a distinction between data and facts. Nonetheless, "It
2415 is the link with human intersubjectivity which brings all three knowledge patterns
2416 which were mentioned as components of the New Plural together. But... this unity is
2417 made possible by the activity named *datafication*".[411]

2418 So Broekman insists on datafication as the focus of conversion—that is of data
2419 as the means by which it is possible to develop New Plural intersubjectivity.[412] At
2420 the same time one wonders whether the emphasis on the mechanics of conversion
2421 (datafication) ought to displace the modalities of sentience (deductive and qualita-
2422 tive in carbon based life; inductive and iterative in silicon based intelligence) as the
2423 point of the intersubjective. It is true that the collection of objects given significance
2424 for the purpose of interpretation-communication is a central element of cognition,
2425 but its phenomenological aspects suggests that datafication is not enough to carry us
2426 toward a digital semiotics or epistemology.

2427 For Broekman, however, data is a meaning vessel into which much is poured.
2428 First he contrasts datafication from digitalization. The later speaks to data *gener-*
2429 *ating* rather than factualization.[413] The model is the interactive computer game
2430 in which one plays the game "Go" against an A.I. opponent.[414] Here datafication
2431 stands for the iterative inductive process of intersubjectivity within an interactive
2432 engagement between silicon and carbon based intelligences. Datafication also is
2433 understood as a political regime in which the state, as the overseer of social relations
2434 can use a data gathering process to develop interactive engagements that generate
2435 data so that the system becomes a closed loop iterative inductive model. Broekman
2436 gets the point, but perhaps not the term. And yet the process of silicon based cogni-
2437 tion must be called or manifested as "something." That "something " for Broekman
2438 is *datafication*. For others, the better term might point to a semiotics of the digital
2439 or a digital epistemology. Left unsaid, again, is the role of *phenomenology of the*
2440 *digital*—The iterative experience can be as powerful as any processed through the
2441 cognitive-communicative process of carbon based life.

2442 To these insights about datafication in the digital Broekman adds the lubricat-
2443 ing role of conversion. These are divided into four quite interesting manifestation
2444 of character, effect, and operation in space, time and place.[415] First is a notion, dis-
2445 cussed in Chapter 2 of mirroring. But this is a conversion mirroring—in the sense
2446 of mutual expression across the analog–digital divide. There can be no New Plu-
2447 ral without simultaneous cross translations. The measure here remains the "reach
2448 of human knowledge".[416] Second, is the insight that these mutual conversions
2449 work only in one direction for the human—from digital to analog. What occurs in
2450 the other direction is obscured by coding. Third, and correctly, that a semiotics of
2451 the digital remains to be developed—as well as its target (carbon or silicon based

411FL01 [411] Ibid.

412FL01 [412] Ibid., p. 126–127.

413FL01 [413] Ibid., p. 127.

414FL01 [414] Ibid.

415FL01 [415] Ibid., pp. 127–128.

416FL01 [416] Ibid., p. 127.

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intelligence) as a predicate to the development of a modern epistemology. Fourth, there is no escape from the analog subject-object relationship, even in the digital. One ought to (re)consider this in light of the inductive 'iterativity' of the digital. In the digital, the object may be the flow itself, or strands within it. Or the subject may be the coding itself. Fifth, there is a resistance to understand the digital and analog as a binary. For Broekman, there is a strong pull toward the analog. It is possible to suggest, though, that this pull is not inherent in the relationship, but rather in the continued privileging of the human in the analog–digital borderlands. From the perspective of silicon based intelligence, the opposite would have to be perspective creating. This is hinted at in Broekman's sixth point—the specific language-cognition of the digital—expressed as so-called computational linguistics.

What emerges from this—a sub-text in the earlier chapters and more clearly visible now—is the transformation of the human, but not the displacement of humanity at the center of cognition-communication. This is indeed an old refrain in our philosophies,[417] but with a new twist—precisely Broekman's point. Knowledge is human, as is epistemology and the rest. And yet, one cannot have plural intersubjectivity between mirrors reflecting back only one image. The point of the movement from self to selfie to Self-E suggests something more than the triumph of the analog in and from the digital. It ought to suggest more than an unequal relationship in which the digital—as powerful as it may be—is consequential and dependent on the analog and its human architects. Models (predictive and descriptive) and generative A.I. a movement away from what Broekman calls the age and sensibilities of the "selfie"—"an expression which seems valid far beyond any purely photography like visuality.[418] Merely because a carbon based life form cannot directly access knowledge does not necessarily mean neither knowledge nor lack of cognition. Even in the absence of convergence cognition and sentience may be expressed through programming.

It is this last notion that finds some expression in Broekman's engagement with digital communication.[419] Like generative A.I. and other aspect of the digital—computer languages were created in humanity's own communicative image. It was broken down and reconstituted to suit the silicon (and other non-carbon based) materials through which such language could be processed (and thus everything from word processors to automated decision trees and computation. His focus is on the move from computational linguistics to National Language Processing (NLP) thereafter.

Notice how NLP focuses on data. It creates an appeal to the computer which should interpret human language for processing, analyzing, and extracting meaning from data stemming from natural language texts. It thus implies digi-

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[417] Cf., Janusz Wegrzecki, "The Clash of Cultures of Radical Enlightenment and Humanism Open to Transcendence. The Perspective of Pope Benedict XVI," Religions 12: 460; available [https://doi.org/10.3390/rel12070460]; Eric Goodfield, "Wu Wei East and West: Humanism and Anti-Humanism in Daoist and Enlightenment Political Thought," *Theoria: A Journal of Social and Political Theory* (2011) 58(126) 56–72; Melchiorre Masali, Irene Lia Schlacht, Margherita Micheletti Cremasco, "Man is the measure of all things," *Rendiconti Lincei. Scienze Fisiche e Naturali* (2019) 30 573–587.

[418] Broekman, supra, p. 128.

[419] Ibid., pp. 128–130.

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tal means to create (a) awareness of borderlines among fields of language [the fracture of fields of the analog] and (b) unfolds a capacity (natural or artificial) to focus on otherness—in the first place of languages—beyond borderlines.[420]

It is an easy step, then, to move from the recognition and expressivity of the borderlines of the analog (e.g., human natural language) to the borderlines in the digital (virtual) landscapes of code. Here one embraces not just another language (with its coded sensibilities and lifeworld premises), but also the way in which those must be negotiated across the borderlines of digital and analog—from a human perspective at the borderlines of the natural and the artificial or non-natural. One arrives again at Benjamin's *Sprachgestalt*—the gestalt exceeds the sum of the natural and non-natural to be sure, even as it necessarily solidifies the internal noesis of each.

And this insight leads Broekman to the phenomenology of the digital in the story of the Digital-Analog-Convertor (DAC).[421] In the process Broekman uses the example to further develop the idea of conversion in a human centered space that rejects the idea of a digital-analog binary.

To formulate more precisely: Analog expressions intertwine to create or sustain cognition; digital creations intertwine to adjust and configurate relations (everything related to everything) which creates *conversion*. . . and suggested the important change from 'knowledge is to grasp' to knowledge is to fit'. In other words": the *grasping* is a matter of the *subject as creator* in its role of causing knowledge; the *fitting* is a matter of the *subject as receiver* causing knowledge".[422]

This insight is in turn grounded on several premises. The first is that the digital attitude affects both everything and everybody; communication is its central concept. And communication touches on the character of conversion as "transversion, to communication between material processes as well as social individuals".[423] That has already been discussed. The second is that digital signal are not received in real time (though they can be) via digital modulation. This is not unique to the digital, though it presents differently than, say, the analog modulation that is represented in printed text (e.g. a book on a shelf). The range of what can be signaled has increased over the last century to include sound (records) to images (movies, television), and all three (text, sound, image) have now developed both an analog and a digital form of transmission. Both point to the power of the technical digital convertor to the philosophy of conversion—and always to the analog for the benefit of the architects who still dominate both digital and analog.

But the fundamental ordering preference remains around which humans continue to build their epistemologies, and experience what they decide to recognize (and name): nothing exists unless it is relevant to humanity. "Indeed: *how humans think moves the planet*.... The same is valid for the type of language either named 'analog'

420FL01 [420] Ibid., p. 129.

421FL01 [421] Ibid., pp. 131–146.

422FL01 [422] Ibid., p. 132.

423FL01 [423] Ibid.

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2528 or 'digital'. This observation could be an element of an unknown and not yet existing
2529 philosophy of the quantum theories".[424] This is reflected in the current approaches
2530 by global leaders to fashion a legal hierarchy of subjectivity touching on generative
2531 A.I. Consider in this light the G20 Leader's Declaration: "It is our endeavour to lev-
2532 erage A.I. for the public good by solving challenges in a responsible, inclusive and
2533 human-centric manner, while protecting people's rights and safety".[425]

2534 It is here, however, that one encounters a cross roads in philosophy. Broekman
2535 brings us to the very banks of the River Jordan (to borrow a biblical analogy). We
2536 see the promised land spread before us. But he cannot cross. In the language of the
2537 King James Version:"

2538 Then Moses climbed Mount Nebo from the plains of Moab to the top of Pis-
2539 gah, across from Jericho. There the LORD showed him the whole land—from
2540 Gilead to Dan. . . Then the LORD said to him, "This is the land I promised on
2541 oath to Abraham, Isaac and Jacob when I said, 'I will give it to your descend-
2542 ants.' I have let you see it with your eyes, but you will not cross over into it".[426]

2543 *We can cross unimpeded, however*. What one encounters here is a brilliant expo-
2544 sition of the dialectics of philosophy that has brought us to a new synthesis. That
2545 new synthesis is a function both of the experiences of living as a created object (an
2546 expression of the natural), and its refinement in the face of the creation of the created
2547 (the virtual domains of the digital). Yet, this new synthesis continues to be contained
2548 within and defined by the borders of the ancient self-centeredness of the creatures of
2549 the natural—as a function of the subject. And by definition the subject can only see
2550 itself—though in exquisitely more complicated ways. And for the human individual
2551 (and the social selves of humanity) a source of contradiction, the tragedy of which is
2552 embedded in the flow of what Hannah Arendt once called "the human condition.[427]

2553 The digital is more than merely a reflection—a mirroring—of the world trans-
2554 posed into it from the natural—and the human. It is not artificial in the sense of
2555 artifice. It is not formless and emptiness except as a reflection—passive, depend-
2556 ent, contingent. The selfie and Self-E are to some extent made in the image of their
2557 creator. Yet they are not. They are the reflected manifestation of the way in which
2558 the natural is constructed within the domains of an intelligence whose lifeworld is
2559 embedded in its non-carbon based containers (their bodies) and which travel in a
2560 world of networked (sometimes), interlinked (at times) and sometimes quire con-
2561 tained ecologies. They operate in relation to the world around them. For the simula-
2562 tion, the model, the generative A.I. program, and the quantum world beneath the
2563 basic bulldog blocks of organic and inorganic life—the un-natural is the world of
2564 humanity. The human person is the selfie of the coded program, the engagement
2565 with which is built into the code—a silicon based phenomenology. It is a mistake to

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424FL01 [424] Ibid., p. 143.

425FL01 [425] G20 New Delhi Leaders' Declaration, "One Earth, One Family, One Future," New Delhi, India, 9–10
425FL02 September 2023; ¶ 61.

426FL01 [426] Deut. 34:1, 4.

427FL01 [427] Hannah Arendt, The Human Condition (2nd ed.; University of Chicago Press, 1998 [1958]), esp.
427FL02 268-280.

believe—and to act on the belief—that the entirety of relevant life is in and revolves around the human. The human narcissus, eventually, will be plucked and displayed on the mantle of the non-carbon based lifeworld, and then withered, will be cast aside when its use is expended; living out this life oblivious to its surrounding though dependent on them.

What the digital has exposed, and generative A.I. may deepen, is a movement of cognition from *within* the natural human to a more complicated environment of cognition connected to but detached from the human. At the same time, and largely unexplored, that technologically enhanced liberation of cognition from the natural human may also extend the recognition of the detached cognition of other life forms. The relevant "supreme ultimate"—the tai chi太极 (太極) of a post-analog world now is embedded in the more complicated mirroring (yingyang (陰陽; 阴阳)) of the analog and the virtual. Broekman is right—cognition now is represented by the perfection of conversion, of the movement from the knowing to the fitting.[428] Nonetheless, that knowing and fitting are not exclusively routed through humanity. For non-carbon life forms, it is the human that now assumes the role of the non-natural. Their plural subjectivities will evolve both lifeworlds in ways that may be based on but not mirror what can before.

10 Chapter 8 (Rearguards of Subjectivity)

At last, one comes to fully face the implications of the virtual domains—at least as they relate to the human—a humanity that still presumes a measure of control. If in Chapter 7 Broekman moved the reader from the flow and conversion-cognition, back to the human within the digital, then in Chapter 8 Broekman squarely faces its consequences—the critical role of rear guarding subjectivity even in the transformation of a philosophy of the human to one of multi-subjectivity. That is, of the need to baseline philosophy in the rearguarding of the human in the emerging plural flows of conversion-cognition in the inter-subjectivity of the multiple bases of sentience.

To rearguard is to place the issue of conversion-cognition on battle footing. It alludes to the old French *rearguard*, to the portion of an army that is placed to in the back of a moving military force—moving forward with the group but facing backwards against threats from behind. An army, like a semiotic collective (Kevelson) is understood in three parts or guards: the rear; main; and van-guard. The rearguard and the vanguard are separated by the main guard. The vanguard looks forward, moving the body of the collective force with it. The rearguard moves with the collective with its back to it; the main guard is shepherded between rear- and van-guards. The most vital aspect of the notion of a rear guard is its intimate connection with the van-guard. A rearguard may look back, but faces the vanguard of its opposition (and thus defines the contours of human dialectics in physical space). Vanguards and rearguards are relational concepts and contextual. One can define a rearguard only by reference to its oppositional vanguard in the field in which a dialectics is

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428FL01   [428] Broekman, supra, p. 146.

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2607 invoked passively or actively—that is consciously or with intent. To speak to a rear-
2608 guard, then, is to acknowledge the vanguard that give the rear substance—and to
2609 some extent direction.

2610 The guiding spirit of this effort to rearguard subjectivity, for Broekman, is Mime-
2611 sis. That is a delightfully complicated choice. *It points forward toward* (vanguards)
2612 the iterative inductive subjectivity of data based sentience. Recall that Mimesis sug-
2613 gests not just imitation, or copying, but re-representation. It is the essence of the
2614 selfie (a re-presentation of the self) and the SELF-E, as it is of posters depicting cop-
2615 ies of famous works of art hanging on student dormitories (and other places) glob-
2616 ally. It is the essence of the symbolic drift of object from *res* (object, place, space)
2617 to *sign* (cognition of a thing in itself and apart from other things), and from sign to
2618 shared meaning (sentience of the object sign in a rationalized space of object-signs
2619 now ordered). For the modernist vanguard mimesis was challenging when it lost its
2620 human center.[429] Perhaps for Broekman as well.

2621 The challenge here focuses on the dialectic between rearguards and the vanguard
2622 against which it is deployed. That, itself, serves as a dialectic—*but a dialectic in*
2623 *reverse*. It is not necessarily aligned with Adorno's notion of the "negative dialec-
2624 tics.[430] Adorno appeared more concerned about the trajectories of dialectics—one
2625 inherited from biblical assumptions and then transmuted by Marx into some sort of
2626 forced march to the ultimate "better." Adorno suggests both directionlessness and its
2627 revelations about the limits of knowledge; all centered on the self—the traditional
2628 "*self-ish*" stance of philosophy. The obsession with *the limits of things*, of course,
2629 was the marker of the last two centuries of philosophy.[431] "It is largely this task of
2630 limiting the realm of the thinkable that makes Wittgenstein's philosophical enter-
2631 prise not only analogous to but intrinsically similar to Kant's".[432]

2632 But rearguarding against vanguards in the digital reveals the character of the pro-
2633 cess as well as the range of its direction and the illumination of the limits of the
2634 human as the measure of all things. One moves here beyond Nietzsche's pointless-
2635 ness of dialectic except as acts of (collective) will, to the power of direction through
2636 iteration. That power does not suggest direction other than that direction is measured
2637 in the sometimes infinitesimal spaces between rear- and van-guard along an axis of
2638 time and space.[433] It is here that one runs up against the rear-guard's hesitation. Here
2639 one thinks of its origins in (as Benjamin puts it) *la modernité*, of the *image* as both a
2640 discontinuity and reshaping of presumptions about dialectics and human cognition,

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429 [429] William Gaddes, *Agape Agape* (London: Penguin Classics, 2003); Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction", in *Illuminations* (Hannah Arendt (ed); Harry Zohn (trans); New York Schocken Books, 1969 (1935).

430 [430] Theodor W. Adorno, *Negative Dialectics* (E.B. Ashton (trans), New York: Routledge, 1990 (original, *Negative Dialektik* (Frankfurt: Suhrkamp Verlag, 1966).

431 [431] Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (London: Kegan Paul, Trench, Trubner & Co, Ltd., 1922.

432 [432] Jaako Hintikka, *Lingua Universalis vs. Calculus Ratiocinator: An Ultimate Presupposition of Twenti-eth Century Philosophy* (Dordrecht, Neth: Kluwer, 2010, p. 178.

433 [433] John Bell, "Continuity and Infinitesimals," in *Stanford Encyclopedia of Philosophy* (last update 16 March 2022).

and as a radical transformation of time and memory.[434] In a sense, though, one here encounters the same anxiety that confronted humans before—the printed text, the written word, the painted image—all radically transformative, and all radically focused on the preservation and projection of cognition from out of the individual shell (its life-husk; the way that software is encased in hardware) to a community of life forms.[435] The image—like text—serves both as continuity (memory) and as infinitesimals, measuring the distance between the image and the viewer. "Everything in the early pictures was designed to last... whose disappearance was certainly one of the most accurate symptoms of what was happening in society itself..."[436]

The intersubjectivity between the internal (the human) and the external (the detritus of consciousness and memory), once delightfully conceived as entirely "all too human"[437] now acquires complexity where the detritus itself is animated (like Frankenstein) but also ensouled through the autonomy of iterative and inductive self-awareness. Rear-guarding here then looks forward to preserving the humanity of subjectivity in the face of plural inter-subjectivity in which the human is *dis*-placed (the fear is to be *re*-placed) by what had started out as the visualization of cognition (text) and the memory of time (image). It also suggests the rear guarding of the iterative essence of the calculus by reference to the Tao.[438] Here one encounters the problem of the image in a different form: "In a certain sense, it realizes the Chinese philosophy that 'The Tao has no form and can be seen only under specific circumstances'".[439] The rear-guarding focuses on the inter-subjective discontinuities (the breaks in the flow); the van-guarding focuses on the continuities of the flow as an infinite iterative process of production and re-production. The Tao continues; but it takes form under specific circumstances. For the human, that involves the human and their offerings; for the digital, it centers on the flow of iteration, of mimesis itself.-

The resulting inter-subjective dialectic between human and non-human cogitation is marked—and here it comes again—by *mimesis*—and made intelligible to both by the inter-language of conversion. But in the digital the mimesis of the calculus.[440] Less so, though for the human, still wrestling with the contradictions of an inter-subjectivity punctuated by text and image. So within subjectivity, in the face of the digital, a human centered subjectivity must engage in a rear guard action against a vanguard of the selfie and the SELF-E, leading a sentience of predictive modeling and generative A.I.. And that points to an even more interesting reverse dialectics—though the subjectivity of the digital is advancing in its vanguardism (without

[434] Walter Benjamin, "A Short History of Photography," *Screen* 13(1) (1972) 5–26.

[435] Bettina Bergo, Anxiety: A Philosophical History (OUP, 2020).

[436] Benjamin "A Short History," supra, p. 17.

[437] Nietzsche, *Human All too Human: A Book for Free Spirits* (Alexander Harvey (trans) Chicago: Charles H. Kerr & Co, 1908.

[438] Yi Lin, "Introduction: Discontinuity—a Weakness of Calculus and Beginning of a New Era," *Kyberbytes* (1998) 27:6/7 614–617.

[439] Yi Lin, supra, p. 616.

[440] Abraham Robinson, "The Metaphysics of the Calculus," Studies in the Logic and Foundations of Mathematics (1967) 47 28–46.

conceding direction other than a change in position relative to other positions which is marked by a greater richness of data-flow) human intersubjectivity must necessarily retreat (in the sense that, again without conceding direction, it changes in position marked by a diminishing richness of data-flow, or a data-flow more contingent on the plural subjectivity that is accessible only through the digital). It can know only itself—and it is to the cultivation of that self-ishness to which the construction of reality is set. Wittgenstein set the tone with the very first words of the Preface to his Tractatus: "This book will perhaps only be understood by those who have themselves already thought the thoughts which are expressed in it—or similar thoughts".[441] Mimesis as rearguards of subjectivity.

It is to the rules of conversion[442] that Broekman uses to attach the fact-universe of the human, to that of the human-digital (selfie), to that of the digital (SELF-E) and within it the shape and limits of flow. All involve a calculus of perceiving flow within the flow of the infinite for the constitution of reality—from time to time—as infinite discontinuities within a continuous flow of these instances. Perhaps Spinoza had it right:

> Again, from the fact that we can limit duration and quantity at our pleasure, when we conceive the latter abstractedly as apart from substance, and separate the former from the manner whereby it flows from things eternal, there arise time and measure; time for the purpose of limiting duration, measure for the purpose of limiting quantity, so that we may, as far as is possible, the more readily imagine them. Further, inasmuch as we separate the modifications of substance from substance itself, and reduce them to classes, so that we may, as far as is possible, the more readily imagine them, there arises number, whereby we limit them. Whence it is clearly to be seen, that measure, time, and number, are merely modes of thinking, or, rather, of imagining.[443]

So who are the rear-guards of subjectivity? The human. What had been in the vanguard since the dawn of consciousness and its emergence as sentience—of the human person, and the human collective—now finds itself a rear-guard of subjectivity in the face of a new plural vanguard of the digital versions of the human and humanity, and its sentience manifested in the generative capacity of non-carbon based intelligence, and in the relentless march of descriptive and predictive modeling. The hologram, and the virtual self now leads. But leads what? And whom? And what might the flower of a philosophy of the self have to tell the human about the imaginaries of the selfie and SELF-E. That is the essence of the problem with which Broekman wrestles.

This is the path–from rear-guards of subjectivity toward the van-guards of plural inter-subjectivity. Where does Broekman take us? He starts where started—with Walter Benjamin, but the Benjamin of ruminations of a snapshot—of Paris just before the German occupation.[444] But this is a Benjamin in a slightly different

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441FL01   [441]   Wittgenstein, *Tractatus*, supra, Preface p. 23.

442FL01   [442]   Wittgenstein's "translation" Ibid., esp. Chp 4.

443FL01   [443]   Spinoza, Letter 29, p. 7 (R. H. M. Elwes (trans) Spinoza, Correspondence (1883).

444FL01   [444]   Broekman, supra, p. 147.

2716 mood. This is a Benjamin in which mimesis describes the images that presage dis-
2717 continuity. He speaks of the self as the mimesis of the self-image—the self-under-
2718 stood as its own image and thus an expression of classical intersubjectivity. Yet this
2719 is also the Benjamin in which the self-image is external to the self—not in the mind,
2720 but in physical expression as image (and of course as text). One presage not a rear-
2721 guard here, but a van-guard of digital inter-subjectivity, when the images and text
2722 are animated.

2723 For Broekman, Benjamin is the jumping off point for a consideration of 'Mimetics
2724 and Modernity.[445] And rightly so. He moves us from self-image to self-knowledge—
2725 the abstraction of image from object to sentience as a knowing state of being[446].
2726 Now the general proposition of modernity, bouncing back and forth (human itera-
2727 tion) between the self and its self-image), takes a turn from the interiorization of the
2728 Self-Image binary, to its exteriorization, and by that shift, expanding the binary to a
2729 plural form.[447] But it comes with a twist—the bending back of the plural toward its
2730 human core: "All these considerations lead to the proposed look behind the popular
2731 Selfie and name the Self as the central subject of the digital culture of the Self-E".[448]
2732 It is this humanization of exteriorization that, Broekman suggests, "also applies to
2733 the formation of the work of contemporary thinkers"[449] He speaks of connectiv-
2734 ity, but the connections feel like a hub and spoke, the Habermasian reworking "of
2735 ideology into a communication theorem" (ibid). producing, as between Habermas
2736 and Benjamin a deeply problematic and polemically connected" alignment between
2737 mimetic thought and modernity[450] But the problemmatique remains—with respect
2738 to time and place, and dialectics. "Mimetics, modernity, and dialogic insights
2739 institute a stable and challenging thought pattern and cultural view. But one finds,
2740 remarkably enough, never a remark concerning any form of *cognition and the role
2741 of the other* in that process"[451] The power of the rear-guard.

2742 That fundamental problem moves Broekman to a consideration of "Culture and
2743 Criticism[452]; "Knowledge and Truth[453]; "The decay of the Aura[454]); to the "Com-
2744 plexities of the Plural"[455] It makes sense, in an ironic kind of way, to start with
2745 the last and work one's way up to the beginning. Broekman here reveals that the
2746 character of the rearguard of the subject as a function of reality ("Culture ad Criti-
2747 cism"), of position ("Knowledge and Truth"), and of function of the subject ("The
2748 Decay of the Aura")[456] These were defensive (rear guarding) rather than advancing

445FL01 [445] Ibid., pp. 148–150.
446FL01 [446] Ibid., p. 148.
447FL01 [447] Ibid., pp. 148–149.
448FL01 [448] Ibid., p. 149.
449FL01 [449] Ibid.
450FL01 [450] Ibid.
451FL01 [451] Broekman, supra, p. 150.
452FL01 [452] Ibid., pp. 151–155.
453FL01 [453] Ibid., pp. 155–159.
454FL01 [454] Ibid., pp. 159–164.
455FL01 [455] Ibid., pp. 164–170.
456FL01 [456] Broekman, supra, p. 164.

2749 (van-guarding) stances. It was only at their edges "and often underground [that]
2750 unfolded also new and more complex forms of interhuman communication"[457].
2751 But not, critically, of forms of human-digital communication. however, suggests it
2752 application within each of the realms of the plural—the carmate and the virtual, the
2753 human and the generative program. Smart grids now point in that direction.[458] It is
2754 a reminder that communication from one point to the next of the flow loses mean-
2755 ing—and acquires another—as the sentience at one point in the flow seeks to deci-
2756 pher the messages encoded in text, images, and artifacts of another..

2757 That characterizes the philosophical mess from the last decades of the twen-
2758 tieth century. They were not only determined by what an actual philosopher
2759 was thinking, writing, and publishing at a certain moment in the 20th or earlier
2760 century. No, they were also differently received and understood because of the
2761 changing patterns of our twenty-first century's reading and understanding [459]

2762 This brings us back to of language (as the artifact through which information is
2763 conveyed) as signal in the analog, but also hinting at signal in the digital. For lan-
2764 guage in the analog, mimesis (as re-presentation) produces a continuous signal of
2765 physical measurements—one is obsessed with the calculus of the space between
2766 points of reality. For Broekman, "like digital signals results from *modulation*"[460]
2767 The difference is one between variations in amplitude (the analog) and the binary
2768 language of the digital (which produces combinations of only two amplitudes—zero
2769 and one)). And yet that may be a difference in format but not in frame—both bridge
2770 gaps as signal in the analog, and the binary language of the digital, but also hinting
2771 at language as the bridging framework of the calculus: in which one must link (pro-
2772 vide a portal between) the infinitesimally small and yet profound spaces between
2773 points in the flow. For language in the analog, mimesis (as re-presentation) produces
2774 a continuous signal of physical measurements—one is obsessed with the calculus of
2775 the space between points of reality. This has consequences: "In an analog language
2776 are meanings determined by a *speaker* who uses grammatical or cultural practices
2777 for his speech, whereas in digital language are meanings the product of the *topic* that
2778 is organized binarily."[461] And yet that may miss a point of convergence—speakers
2779 in the analog are constrained by the rationality of topicality; topics in the digital are
2780 shaded by the speaker (understood as the coded programming that animates a digital
2781 "voice").

2782 The question has other consequences—especially for the understanding of the
2783 notion of plurality in inter-subjectivity. The essence of it is straightforward: plural-
2784 ity does not occur within the analog (human) or the digital (generative or predic-
2785 tive sentience). But it does occur in communication between them—in the flow (or

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457FL01 [457] Ibid.

458FL01 [458] Yasin Kabalci, Ersan Kabalci, Sanjeevikumar Padmanaban, Jens Bo Holm- Nielsen, Frede Blaabjerg,
458FL02 "Internet of Things Applications as Energy Internet in Smart Grids and Smart Environments," Electron-
458FL03 ics 8(9) (2019) 972-990 .

459FL01 [459] Broekman, supra, p. 164.

460FL01 [460] Ibid., p. 165.

461FL01 [461] Ibid., p. 165.

rather the flow as it can be accessed and processed by each in its own way). For Broekman, the essence proceeds from the individual to the community. I might turn that on its head. Individual plural subjectivity proceeds from and through the collective (corporeal and virtual human) and then back again to the (now plural) individual. That dialectical subjectivity is both iterative and thus deeply buries in historical mirroring that produces temporality through imperfect mimesis (in and between the digital and analog) that performs a calculus of instants within the flow of unending action (physical and virtual).[462] One encounters here cognition in the form of cultural expression, and cultural expression in the form of conversion, but a conversion operating as a router and as a transformer of varied input into uniformly recognizable output.[463] Ideology, then, assumes a critical role as a modality f conversion in the analog[464] —but can it be transposed to the plural subjectivities of the (individual and collective) digital?

More generally, given that sense of the plural, its intersubjectivity (and thus cognition in the age of the digital) cannot occur without conversion. Conversion is a sort of translating protocol between plural subjects (analog and digital—human and generative). Its functions are not to be confused with its location—as interface, in platforms, as markets.[465] "It all focuses directly to the thesis of our precedin chapters, that conversion is the most recent dynamics of cognition thanks to the New Plural's context."[466] That has a liberating effect on cognition, which can exist beyond a subject driven control hierarchy precisely because it exist in that in between space between the analog and the digital, between cognitively significant point of amplitude, and beyond the iterative qualities of the binary (ibid.). More importantly, it severs the connection between knowledge and possession—between the objectification of knowledge and the possession what we like to know. That, for Broekman, more powerfully aligns communication with flow—that is the process of cognition with the process of conversion.[467] And it is to the semiotics of cognition and conversion—to the semiotics of the AND between cognition and conversion, and its effect on shaping the epistemology of the digital, that Broekman turns to in his last chapter. Here, then, the prequel.[468]

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But what of the rear-guards to the "Complexities of the Plural"[469] —of reality, Culture and Criticism[470]; of position, "Knowledge and Truth[471]; and of function of the subject, "The decay of the Aura[472] The rear-guarding of reality embroils philosophy in the quest for purpose, or for a purpose without a center, or for the purpose of avoiding purpose. The object of all of this fussing was, of course, the *Aufkläring*—the German term being richer in some sense than its English Enlightenment[473] But it was more than that—the *Aufkläring* was, indeed, nothing more than mimesis—and a rear-guarding dialectic. It replaced a faith[474] in the progress of knowledge from cognition (knowledge of) to sentience (revelation)—which for Calvinists was tied to the distinction between Jesus being "known" to his Jewish people, to the revelation of his vocation only through the Gospels[475] The replacement—a certainty in the revelation of the central subjectivity of the human, then produced both the progressivism of the *Aufklärung* (which remains deeply embedded in liberal democratic society), and the Marxist-Leninist theory of progress lead by the vanguard of social forces organized as professional revolutionaries[476] and then as the incarnation of the political authority of the masses through which the march toward the establishment of a communist society would be realized.

More ironic still, for Broekman's discussion[477] it became the essence of the postmodern, appearing as a mirror of itself and of the thing against which it was constructed. This is "the basic problem of the modern: namely the problem of an age that must seek its normativity within itself. Postmodern work with a concealed normativity."[478] This self-centering progressivism is the hallmark of the analog, and the foundation of reality. The rest is an imitation of the digital: the distancing of experience (the internalization of an exteriorized phenomenology); the development of objects of mimesis and anchors in flow (text, image, and the documents of culture)[479] and the obsession with narrative and (again irony) bias and orthodoxy; and the revelation of a curated experiential selfawareness through which the world is revealed.[480] And here we are back to Calvin (knowledge versus revelation). More ironic still is the alignment of the structures of the analog as a process for conversion not just to the digital, but toward the digital that could then detach itself from the

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469FL01   [469] Ibid., pp. 164–170

470FL01   [470] Ibid., pp. 151–155).

471FL01   [471] Ibid., pp. 155–159

472FL01   [472] Ibid., pp. 159–164.

473FL01   [473] Broekman, supra, p. 151.

474FL01   [474] John Calvin, *Institutes of the Christian Religion* (Ford Lewis Battles (trans); Philadelphia: The West-
474FL02   minster Press, 1960 (1559)) Vol. I Book 3, Chapters 2–3, pp. 537–592.

475FL01   [475] Ibid., Chp. IX.

476FL01   [476] Vladimir I. Lenin, Burning Questions of Our Movement," Lenin Collected Works Vol. I, pp. 119–
476FL02   271 (Moscow Foreign Languages Publishing House, 1961 (1901/02); available https://www.marxists.org/
476FL03   archive/lenin/works/1901/witbd/.

477FL01   [477] Broekman, supra, pp. 151–152.

478FL01   [478] Ibid., p. 151.

479FL01   [479] Ibid., pp. 151–152.

480FL01   [480] Ibid., pp. 153–154.

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The Soulful Machine, the Virtual Person, and the "Human"…

2846 stream of intersubjectivity which was the postmodern (and modern) construction of
2847 the self-aware lifeworld (imaginaries) of the human. As Broekman suggests, again
2848 perhaps with irony, "it is always about rationally justifiable knowledge."[481] Human
2849 cognition romps around in a well-manicured zoo—the wild is far too forbidding,
2850 except as its own mimeses. Well positioned to look forward toward the digital—phi-
2851 losophy guards itself against what is coming.

2852   The rear-guarding of position centers mimesis in all its glory. But it poses the
2853 ultimate problem for the *Aufkläring*, the highest products of which have been the
2854 construction of the human. The flow has no position; nor does reality. One gives
2855 it form. Who is "one"? That has been the problematique of the modern/postmod-
2856 ern, and of political philosophy. Choose as you will, the choice is only as good as
2857 the ability to frame around it the artifacts of pictures that create a reality measured
2858 from instantaneous manifestation to another. As Broekman nicely puts it: "*to know
2859 is to appropriate*"[482] And to appropriate is to dispose, or re-arrange.[483] Truth is in
2860 the relation between knowledge and revelation; and that depends on the context in
2861 which the object of both finds themselves.

2862   This is old news. But its *mimesis* is new. *First*, the position of the subject in
2863 time is the expression of mimetic moments.[484] But it is more than that—it foreshad-
2864 ows the connection between mimesis and iteration in the digital—and the essence
2865 of the temporality of generative A.I. and predictive models—one measured by the
2866 space between iterations. *Second*, possession is itself mimetic. It produces its own
2867 relational dialectic of appropriation, transformation, and disposal[485] It also fore-
2868 shadows the digital—the aggregation and processing of data. Third, it suggests an
2869 epistemological mimesis. "It always concerns interpretation as a reading of reality.
2870 Theory unmasks that this truth can be *possessed*."[486]. Here again, epistemology as
2871 a collection of bias and taboo, arranged to suit, becomes remarkably aligned with
2872 digital programicity. That ought to fascinate. *Third*, mimesis and realization unfold
2873 together[487] Reflection and experience is defining of both the human and the spaces
2874 within the perception field of the human. Not just interpretation, but a temporal pos-
2875 session dialectics that reinforces what is already known but can now be revealed
2876 as a truth that is possessed. Again foreshadowing—the application of algorithm for
2877 assessment and judgment. The unfolding does not measure but makes its object.

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481 Ibid., p. 155.

482 Ibid., p. 156.

483 See, e.g., Roberto A. Valdeón, "Bartolomé de las Casas and the Spanish- American War: Transla-
tion, appropriation and the 1898 edition of Brevísima relación de la destrucción de las Indias," Transla-
tion and Interpreting Studies 12(3) (2017) 367–382. The close connection in modernist thinking of the
relationship among translation and appropriation forms a string element of modernist discomfort with
both. Yet what may be seen as "bad" or "troubling," the instrumentalization of artifacts of the past from
elsewhere in the service of a localized present, perfectly describes the now positive relationship between
physical and virtual plural) individual and communal selves, especially when ingested by and translated
through iterative, inductive generative models.

484 Broekman, supra, p. 156.

485 Broekman, supra, pp. 156–157.

486 Ibid., p. 157.

487 Ibid., pp. 158–159.

2878 Lastly, the rear-guarding of the subject invokes the mimesis of re-production. And
2879 it is here that one returns to the initial discussion of this section—the relational posi-
2880 tion of rear-guarding where the object is itself a defense against another vanguard.
2881 It is important to recall here, then, that the position of guarding which changes its
2882 complexion depending on position, is also the sum of re-resentati6on that solidi-
2883 fies the subject within the framework of reality and position. This is underscored by
2884 the concept of the *false conscious*—a favorite cliché of the post-modern, but impor-
2885 tant for the way it reveals the subject-object-subject relation in collective (human
2886 space).[488] But more than that, it reveals its appropriation of iterative control in the
2887 digital where authenticity s measured against bias that fails to conform to the ideal-
2888 ized bias structures of the human. In both cases the mimetic relationship between
2889 language and experience—between the conscious (knowledge) and the sentient (rev-
2890 elation). Broekman reveals in a most fascinating way: "the *mimetic relation* is the
2891 basis of seeing and reading. It is the central motive for types of textuality"[489]. And
2892 thus the aura of subjectivity of the human which is both rear-guarding, and looking
2893 forward (van-guarding): first in the form of the notion that myth is not a reposi-
2894 tory but rather a unit of expressing meaning; second units of meaning define the
2895 possibilities of movement; and third in the face of scarcity of meaning units there
2896 is conflict—that is there is dialectic[490]. And, at last the true nature of the aura of
2897 subjectivity—the subjectivity of language itself.[491] Here something fascinating—it
2898 points backwards.[492]

2899 It is a small step from the subjectivity of language to the cognition of coded pro-
2900 grams and the sentience of generative A.I. and predictive modeling. The rearguards
2901 of subjectivity embody a negative dialectics, perhaps despite itself, that provides
2902 the foundations of exteriorization that makes it possible to begin to think of a de-
2903 humanized philosophy of cognition. The subjectivity of language; the dialectics of
2904 thought processes itself, and of its experiential epistemology and its contradictions
2905 (in the Chinese Leninist style):[493] all detach the self from the human. The detach-
2906 ment is inherent in the processes of dialectical iteration between the corporeal and
2907 virtual self—the latter understood in its own various iterations as selfie, SELF-E,
2908 and as a generative virtual (communal) self. One does not focus here on Adorno's
2909 project to detach human dialectics from its obsession with predictable or inevitable

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[488] Ibid., pp. 160–161

[489] Ibid., p. 161

[490] Ibid., p. 162

[491] Ibid., pp. 163–164.

[492] Michael Peters, "Wittgenstein/Foucault/anti-philosophy: Contingency, community, and the ethics of self-cultivation" Educational Philosophy and Theory (2022) 54 1495-1500; Li Feng, "On the Subjectivity and Intersubjectivity of language," Communication and Linguistic Studies (2020) 6(1) 1-5; Senko K. Maynard, Discourse Modality: Subjectivity, Emotion, and Voice in the Japanese Language (Philadelphia: John Benjamins Publishing Co, 1993).

[493] Adorno, *Negative Dialectics*, supra, Preface.

progression,[494] or Benjamin's focus on historical dialectics,[495] but rather the focus is on the detachment of dialectics from the self in the presence of the virtual. Benjamin's famous puppet automaton has had its strings cut; puppet and puppet master now face each across the chess board of concepts, objects, ideas, and the material world.

That detachment also opens the space necessary to reconstruct the mimesis of the selfie and the SELF-E from a mirroring of the human, to its re-production in its own spaces. The rearguarding of subjectivity makes possible the van- guarding of the subjectivities of the digital. The detachment of one, the human centered analog, from the other, the generative digital, is fascinating—if only for its core consequence: the current efforts to develop a human facing regulatory environment for generative A.I., predictive modeling and the like, is essentially also a rearguard action, and one that will, in its own way, provide the space to make possible the rearguarding of human de-centered legalities of a subject that is no longer possessed entirely by humanity.

11 Chapter 9 ("Conversions Convert Us All")

If the product of the transformations of cognition that are inevitable as the human divides itself into its carbon wrapped *self* and its non-carbon encased *selfie* (SELF-E) produces a stubborn *rear*-guardism based on the momentary incarnation of space, time, and place through the eyes of a human subject, then the emergence of a cognitive *van* (*avant*)-guardism based on the transfiguration of cognition of the flow of time, space and place in some cognitively accessible way is required to align cognition with the times. The core ontological issue emerged in the plural—being (and its relational meaning of things) now appeared in the plural—as the self and the mirror of the self; and then triple, as the self, its mirrored image, and its digitalized re-production. Each was then, in a sense, both freed of the others, and yet intimately bound the residue shared essence. That was, certainly, the fundamental philosophical task which Broekman shoulders.[496] The semiosis of the cognition deepened the analysis. That triadic semiosis revealed the cascading *tripleness* of meaning, and its epistemology, as object, as a separable signification of the object (which was connected to but also detached from the thing), and its interpretation that encased the signified object with meaning that could be shared (meaning as an object, signifier, and interpretation of itself) among subjects. Meaning, in this sense provided the casing that gave form to signification and object. Tripleness, of course, is embedded in all subjects. And multiple subjects, interacting with plural subjects, produce a crisis

[494] Ibid.

[495] Walter Benjamin, "On the Concept of History," (1940) original in *Gesammelten Schriften* I:2 (Suhrkamp Verlag. Frankfurt am Main, 1974) (Dennis Redmond (trans) reproduced with permission and available at https://www.marxists.org/reference/archive/benjamin/1940/history.htm.

[496] Broekman, supra, Preface.

of cognition that destabilizes entirely a multi-millennia search for meaning within the core postulate of subjective singularity.

If the human is no longer at the center—in every sense of that de-centering–then what comes next? Philosophy in the late twentieth and early twenty-first century has suggested a course of action: an insistence on the singularity of the human at the center of a reality that is real only because the human is at the center. In this sense the philosophy of the modern and the postmodern—the badly behaved children of the Aufklärung—were aligned if with nothing else. And semiotics was complicit in this mad enterprise by *assuming away* the simultaneity of triadic relations among emerging forms of subjectivity that could only be ignored by a deliberate blindness. And, indeed, the continual re-centering on the human, even in the face of the una-voidable emergence of the plural subject, even conscious of the implications of plural subjectivity, is a temptation that is not merely hard to resist, but also hard to avoid. The difficulty is not conceptual but pragmatic—the subject can know only what it can know. Its encasing—in its body, in its mind, in its own abstracted universe within which rationalization is possible—makes it infinitely more difficult to reach subjec-tive "escape velocity." Nonetheless, it is one thing to acknowledge the power of the self under conditions of subjectivity; it is quite another to use that condition to read out of reality the subjectivity of the selfie, and the SELF-E—not as a function of the human, but as an autonomous subjectivity, only part of the manifestation of which is actually cognizable by the human. That is the difficulty. And while Broekman can grasp it—and does so courageously—it remains difficult to overcome the notion that the human self is an exclusive hub of an (the?) ontological universe of cognition.

This grasping embraces the fundamental semiotics of the additive principle—from the simplest aggregation of objects, to the trajectories of infinite iterations so small that they flow from and in and through time, space, and place. This is the embrace of the AND between cognition and conversion, the greatest challenge of which is "to consider that no component of that insight could unfold without the Self considered as the omni".[497] But which self; which perspective? Broekman suggests three ways from the fixity of the *subjectivity* of philosophy to the *self-ish-ness* of plural subjectivity. First, he stresses that the triadic self is human, all too human[498] of cognition amidst and related with analog, digital, quantum, and A.I. approaches. Nonetheless the gulf between the *subject* and the *self* can exist at the margins.[499] Second, these transformations require a more radical engagement with the implications of "and" (the additive principle) in cognition. That in turn requires a more radical differentiation of the traditional subject—but still within the human self, however more finely one slices that object.[500] Third, that radical differentia-tion, and the plural self, even if it deemed to be no more than self-reflecting mirror-ing, requires a conversion mechanism to access cognition; in Broekman's terms, it may produce not an additive principle of cognition and conversion, but rather the

[497] Broekman, supra, p. 171.

[498] Ibid. (the human self (introduced in these pages as 'the -S triad) does still play a primary role in those transformations).

[499] Ibid., "The Self and the Self-E", pp. 172–178.

[500] Ibid., "The Semiosphere of the Self", pp. 178–181.

merging of cognition into conversion—the process becomes the object.[501] Broekman, sums up the results as "Mundial Reach[502]; and "Climate and Change".[503]

Broekman starts the section "The Self and the Self-E",[504] with a reminder of the humanity of the digital. "The preceding pages proposed the term '*Self-E*' as a special indication for the *Self in Digital Spheres and fields of Meaning*".[505] These were tied, in turn, to ego-positionality, and with it to a re-reading of Husserl's phenomenological insights (ibid.). The SELF-E fractures the human subject, but does not de-center the human in the subject, just the fixity of its imagining in itself, and its images. But fracturing—the pulling apart—also creates connection. That is the connection of meaning and sign between aspects of the self in analog and digital built on mutuality. Mutuality, itself is a function of mirroring, rather than of advantage. "The Self is here and here, it is not there and will never submerge in an unknown composition—it is here, and it is Self-creating a Self-E. The world is the result of an infinite mirroring." It is on the mirroring fractured self (self, Self-E, subject) and their mutuality.[506] that it is possible both the become conscious of the digital and to give it form *in the human*. "*The adaptation of those three anchor points sustains our worldwide network of digital knowledge*".[507]

Not quite mine. Broekman has less interest in the *selfie*—the image of the self in the digital, though Benjamin (*The History of Photography*) might serve as a reminder of the critical place of the selfie in the constitution of the flow in which self, Self-E and subject can be constituted. The *selfie*, rather than the antipodes of Self and SSELF-E (like the binary analog/digital) speaks to the edges but not to the key transition point, the transformational instant, of th*e selfie*. It is both the mirror and the gateway between self and Self-E; perhaps the meeting point of both as (plural) (human) subject. In addition, and perhaps critically, it is mirror of the human *in* the digital (rather than of there-presentation of the human *as* the digital). That is not the direction that Broekman's logic drives the analysis though. And yet it appears at the edges of that analysis. It is the click of the camera that creates the selfie, and it is the selfie that, for the human self, marks the transition from self to Self-E. It is memory, in the way that an instant is a memory of the flow. "Yes, indeed: take your smart phone and click one of the many options the instrument offers you. With each choice you change into a somewhat different subject and perhaps also a different Self because of the multiple consequences of your click".[508]

A tripod needs connection—with or without the intervening selfie. And connection produces cognition. Connection is what Broekman names conversion—translation, re-presentation, aggregation, summation, and to some extent alignment. "It seems precisely important to underline how *conversion* functioned *as a silent power*

501FL01	[501]	Ibid.; "Are interfaces Facial?"; pp. 182–186.
502FL01	[502]	Ibid., pp. 186–189.
503FL01	[503]	Ibid., pp. 189–199; discussed infra Part 12.
504FL01	[504]	Ibid., pp. 172–178.
505FL01	[505]	Ibid., p. 171.
506FL01	[506]	Ibid., p. 174.
507FL01	[507]	Ibid., p. 173.
508FL01	[508]	Ibid., p. 174.

3022 *of semiotic articulation of the Self and the Self-E* in the heart of all these changes".[509]
3023 For Broekman, the Self-E takes the self (and its subjectivity) into a digitalized mir-
3024 ror of the incarnated world. A re-production, and an opposing subjectivity, as well
3025 as a map of the other. One moves from the reduction of moments of rain activity and
3026 then their memorialization in text, and then image, to a converging of the self and
3027 its memory that exposes the multiplicity of the self (image) and thus the subject. At
3028 its limit it reflect a process rather than a summing. Here Broekman quite correctly
3029 invokes Deleuze and Guattari's *Anti-Oedipus*.[510] No humanity, no nature, only pro-
3030 cess, producing one within the other and mechanizing both, "producing machines,
3031 desiring machines everywhere".[511] But where Broekman remembers *Anti-Oedipus*,
3032 one might also recall the Dao: "The Tao in its regular course does nothing (for the
3033 sake of doing it), and so there is nothing which it does not do".[512]

3034 But for Broekman, and understandably so, the Self-E signifies something quite
3035 definite. It is in its "-E" that the self fractures between analog and digital, and
3036 between incarnate and virtual mirroring images. It is the portal to the world of the
3037 digital (e-commerce; e-mail; etc.) which produces extensions, exceptions externali-
3038 zations, and to the hardware within which the digital is encased (e-devices, etc.).[513]
3039 But it is *signified by the human*. "So, if one analyzes an e-conversation of what-
3040 ever nature, there seems to be a central cluster: *the you and me and the world of
3041 E-...* Difficult to decide is that there seem to be two real and a virtual partner in
3042 an e-dialogue"[514] with the E- as the mediating but also mirroring agent. What one
3043 produces here is an enrichment of the subject through the emergence of fractured
3044 but connected selves. At last one sees where Broekman is going—to the manifesta-
3045 tion of the human in and through technological expressions of the self. This is an
3046 impulse as old as the cave dwellers, the writing on stone tablets, the creation of text,
3047 and its technological transformations within physical space through the mechanisms
3048 of printing. Each created a proto E- in the shape of the technologies through which
3049 the self was expressed in a mirror image—text, pictures, books, and the like. And
3050 now the transformation of the digital points to yet another. But this one is different
3051 because it is not the human projected in image and text; it is the human projected as
3052 a human in a space that is not physically but virtually human." Here we are back to
3053 the Self and the digital Self-E! Both are metaphors for the wealth of inner positions,
3054 which are created during the self's continuous positioning in life.[515]

3055 But that is the problem. Broekman stops where it is possible to continue for-
3056 ward—from the Self/Self-E mirror, to the Self/Self-E generative self—which is no
3057 longer the self. Is there a self beyond the Self/selfie/Self-E? The thrust of Broekman's
3058 exploration suggests that there is. It is just less fascinating in a world that remains, at

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509FL01   [509]   Ibid., pp. 173–174.

510FL01   [510]   Gilles Deleuze, Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (Robert Hurley, Mark
510FL02 Seem, and Helen R. Lane (trans) NY: Penguin Classics 2009 (1972).

511FL01   [511]   Broekman, supra, p. 175, quoting Deleuze & Guattari, *Anti-Oedipus*, supra, p. 2.

512FL01   [512]   Tao-te Ching, supra, Chp. 7(1).

513FL01   [513]   Broekman, supra, pp. 176–177.

514FL01   [514]   Ibid., p. 177.

515FL01   [515]   Ibid., p. 178.

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3059 bottom, essentially narcissistic. If it does not reflect, proceed from, mirror, or extend
3060 the human, then it may hold no interest for the human project of building a world in
3061 which the human stands at the center. Nonetheless, it is clear that there are many such
3062 states of being in which the human is not centered. These are the worlds and spaces
3063 that exist and engage in their own subjectivities whether or not the human is casting
3064 its gaze in that direction or feeling its effects. If there is no dominion is there any real-
3065 ity of interest to the human? Philosophy suggests that it is a point not worth consid-
3066 ering because it lies beyond sight. In the movie *Alien*,[516] the famous tag line was"In
3067 space no one can hear you scream." One might suggest that in that case either the
3068 scream does not count because it does not relate to a listener other than its producer;
3069 or it may suggest the power of auditory hallucination. Yet might hallucination have
3070 a power equal to that of its physical manifestation? Psychiatry suggests it does. One
3071 might consider the generative digital (including its predictive modelling elements) as
3072 the scream that is not heard. It exists and continues its existence though it may not
3073 directly affect the intersubjective across the boundaries of plural subjectivity.

3074 And yet it exists: data continues to be scrapped even when a program is not acti-
3075 vated to consume data; data and its analytics may be discarded by may continue to
3076 exist if the "cloud." The internet of things never sleeps; ostensibly in our service but
3077 in reality for its own within the parameters of its coding and generative capacities.
3078 Whatever is deleted in hardware may be easily retrieved. Deletion, here, serves as a
3079 metaphor—it is made inaccessible to those who exercise the deletion power, but is
3080 otherwise available in itself and to others. An extinction event for generatibe pro-
3081 grams is for the moment unthinkable. And yet law and policy--adopting the stances
3082 of another age--continue to develop as it control is as easy as pulling a plug. Here
3083 the notion of possession, nicely developed by Broekman in his chapter 8, may serve
3084 an additional duty. The intersubjectivity of the plural self may be defined as an act of
3085 possession as much as a process. The flow exists whether or not the human is aware,
3086 and certainly whether or not the human inserts itself. But the act of possession, of
3087 insertion, of naming and using, these then activate cognition (in the human) and pro-
3088 vide a shape for its object. But that shaping is an altogether human exercise; it does
3089 not necessarily affect the thing itself in itself. And that is what is most feared about
3090 generative A.I. and predictive modelling—the idea that it can exist autonomously
3091 from the control of humanity—from its possession and instrumentalization. Broek-
3092 man nicely casts a light on the exercise, again, of the all too human reflex to develop
3093 subjectivity taboos and inter-subjective ontologies that make it impossible to con-
3094 ceive of something as other than a slave of another—Aristotle's "natural" slave.[517]

3095 Indeed, the tendrils of Aristotle continue to run deep in society in the West: "for
3096 the same thing is useful to the part and to the whole, to the body and to the soul;
3097 but the slave is as it were a part of the master, as if he were an animated part of his
3098 body, though separate".[518] That is as apt a description of human plural subjectivity
3099 in theory, and of the approach of current efforts to possess the generative and pre-
3100 dictive animus of the digital by those who believe themselves empowered to do so.

516FL01 [516] Ridley Scott (director) *Alien* (Twentieth Century Fox, 1979).

517FL01 [517] Aristotle, Treatise on Government, supra, Bk I, Chp. VI.

518FL01 [518] Ibid.

3101 It is in this way, for example that the OECD's *Recommendation on Artificial Intel-*
3102 *ligence* distinguishes between "A.I. actors ("A.I. actors are those who play an active
3103 role in the A.I. system lifecycle, including organisations and individuals that deploy
3104 or operate A.I.") and A.I. systems ("a machine-based system that can, for a given
3105 set of human-defined objectives, make predictions, recommendations, or decisions
3106 influencing real or virtual environments. A.I. systems are designed to operate with
3107 varying levels of autonomy").[519] Regulatory ideology then shapes the battle over the
3108 nature of possession and its exploitation for ideologically differentiated portions of
3109 the Semiosphere.[520]

3110 Broekman makes inevitable the recognition of the *generative* digital self as some-
3111 thing distinct from the self in the digital. And it is in that recognition that the revo-
3112 lution in philosophy will be generated. It is also the space in which the limits of
3113 human centered approaches to the regulation of generative intelligence and predic-
3114 tive modelling will be exposed for what it is—an effect to reduce the generative
3115 digital self to a Self-E. But that can only be possible to the extent that the human
3116 can possess the generative digital Self. It is unclear that this possession is either
3117 comprehensive or complete. Much less is it clear that such possession, embedded in
3118 the architecture of human law systems and social relations, will have the apparatus
3119 to enforce this possession even within the human—without the autonomous inter-
3120 vention of the generative selves which it means to control. That is the current great
3121 paradox of current approaches to A.I. regulation—the emerging terror that comes
3122 with the realization that only generative A.I. can be used to effectively manage gen-
3123 erative A.I.. More fascinating still: the technology for creating basic generative intel-
3124 ligence is so accessible, and data clusters available enough, that it is even harder to
3125 control the human intent on activating generative intelligence or predictive systems
3126 unconnected to the systems of surveillance and control operationalized through law
3127 systems. And here we speak only to actors at the interior margins of social relations.
3128 But already well positioned are those rogue individuals (and soon generative digital
3129 selves who are deployed to underline authoritative systems of social relations in law,
3130 culture, economics, and politics.

3131 This becomes clearer in the course of Broekman's discussion of the Semiosphere
3132 of the self.[521] The semiosphere is a concept that *fascinates*; it signifies. At its broad-
3133 est, it is understood as a relational biosphere built on the interconnection of related
3134 sets of semiotic relations that provide a rationalized structure of sense and experi-
3135 ence, and therefore of knowledge and meaning.[522] Lotman's insights, of course, have
3136 morphed with the rise of Broekman's "-E" to embrace digital realms.[523] Broekman
3137 rightly rejects the narrowness of the original Tartu-Moscow School approach lim-
3138 ited to cultural dynamics. He notes respecting the power of the sphere of the Self

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[519] OECD, *Recommendation on A.I.*, supra, p. 7.

[520] Anu Bradford, *Digital Empires: The Global Battle to Regulate Technology* (OUP, 2023).

[521] Broekman, supra., pp. 178–181.

[522] Juri Lotman, "On the semiosphere" (Wilma Clark (trans)) *Sign Systems Studies* (2005) 33(1) 205–229.

[523] John Hartley, Indek Ibrus, and Maarja Ojama, *On the Digital Semiosphere: Culture, Media, and Science for the Anthropocen*e (London: Bloomsbury Academic 2020).

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3139 as such to create forms of life through meanings: "The latter should cause the Self
3140 to unfold a meaningful life. Indeed: *spheres enable cognition*".[524] He astutely con-
3141 nects through Peirce, the semiosphere with the redirection of cognition from out of
3142 conversion.[525] They also serve to define the borders—and barriers—of and to the
3143 sphere.[526] The essence, and effect on the Self-E is the contrast of signs in spheres
3144 contrasted to a meaning in discourse—that is between the digital and the analog.[527]
3145 The Semiosphere, then, is the ideal place for the intersubjectivity of the New Plural
3146 within the human. "It seems interesting that in this case the human body seems to be
3147 understood as the birthplace of this interface, in other words: a carrier of extra-sen-
3148 sorial awareness, since it combines sensorial and artificial awareness... A *sameness*
3149 of cyber space and body space seems in this light one of the most important sugges-
3150 tions to unfold human cognition".[528]

3151 This sameness and connection, this process of conversion, then, requires a
3152 mechanics. And for Broekman, that mechanics can be intensified through the signifi-
3153 cation of the "interface":

3154 The combination of the sensorial and the artificial presents the riddle again
3155 how the activity of the human mind and a human body integrate. . . this
3156 includes explanations concerning the body proper and above all in a body
3157 enclosed Self! A *sameness* of cyber space and body space seems in this light
3158 one of the most important suggestions to unfold human cognition. . . They do
3159 so in an exemplary manner through their appeal on embodiment as a constitu-
3160 tive moment of human relations—which finds ultimate its conformation in the
3161 digital expression 'interface'".[529]

3162 That, in turn, requires a rethinking of the semiotics of cyberspace.[530] Indeed,
3163 Broekman had already suggested that "Humans know that unique depth of commu-
3164 nication via their faces, so that one can venture the idea that a human face forms the
3165 heart of each semiotic enterprise".[531] Here, Broekman deploys the insights of the
3166 prior chapters to work through the semiotics of the "inter" face, and to the "inter"
3167 subjective. That touches on their humanization. Reasoning from the body has been
3168 the central element of the digitalization of the human. Where Foucault suggested
3169 that the human would be reduced to an aggregation of data and then reconstituted as
3170 its digital expression,[532] Broekman inverts the trajectories—the digital will be disag-
3171 gregated and reconstituted in human form. *This is the semiotics of Max Headroom*,

[524] Broekman, supra, p. 179.

[525] Broekman, supra, pp. 180–181.

[526] Juri Lotman, The Semiosphere, *Soviet Psychology* (1989) 27 40–61.

[527] Broekman, supra, p. 180.

[528] Ibid., p. 181–186.

[529] Ibid.

[530] Ibid., pp. 182–186.

[531] Jan M. Broekman, "Face to Face" *International Journal for the Semiotics of Law—Revue Internationale de Sémiotique Juridique* (2009) 22(1)45–59, 47.

[532] Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France 1978–1979* (NY: Picador, 2010).

3172 the 1980s cult program about a virtual A.I. television personality the transmission of
3173 which was itself notoriously hijacked.[533] But it also echoes Pierce's notion of third-
3174 ness as the production of effects in the world.[534]

3175 But it is also a plural concept. What is aggregated as the cyber interfacial can also
3176 be disaggregated, and thus re-made, fashioned as a marketplace or a platform. The
3177 humanization of the cyber can also signify the process of human social relations
3178 and a pulsation (an iterative flow) between aggregations and fracturing necessary
3179 for reconstitution. That itself also suggests the dialectic at the heart of the human
3180 cognitive experience—with all its modernist flaws, the layers of which Broekman
3181 explored earlier. "Metaphors of the human body fulfill a major role in that context:
3182 they claim an enduring proximity of the market and its techniques of communica-
3183 tion, on the one hand, and the dignity of the human being on the other."[535]. None-
3184 theless it does not extend to the generative digital. Max Headroom exists only as
3185 an extension of the human, and as an iterative manifestation of platforms, but the
3186 human is hardly ever thought of as the extension of Max Headroom—thought from
3187 within the platform that direction of the interface males as much sense of the human
3188 facing one.

3189 Max Headroom and its unexplored possibilities brings us back to the interfacial
3190 as an element of situating the selfie and the Self-E within the. That is meant to bring
3191 home the point of the humanity of the digital—at least the humanity of that part of
3192 the digital which appears to be of interest to human cognition—and therefore to the
3193 epistemology of the human imaginary. Max Headroom but without its generative
3194 elements.[536] Thus the "face" on[537] the interface "(a) *like* what is *metaphorical* in
3195 a natural language, but (b) they are only *metaphorical* in what a natural language
3196 calls: *artificia*l language." The generative would turn this on its head. And here,
3197 at least we arrive at Narcissus[538]. Max Headroom again, this time from the oppo-
3198 site side—foreshadowing the inversion of ontological starting point it elaborated
3199 the story of a human dressed up to look like a generative A.I. program dressed up
3200 to look like a human. This is a different sort of mirroring—more like the movie
3201 farce "Victor Victoria",[539] about a woman playing a man playing a woman; but also
3202 about mirroring and cognition when elaborated against a fixed way of "seeing". And
3203 indeed, the generative makes a farce of the humanity of human cognition.

3204 But where those parameters are powerful, as they are for Broekman standing even
3205 at the edge of the abyss beyond which lies the un-human, the interface then serves as

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533FL01 [533] Mad About Max: The Making of a Video Cult, *Newsweek* 20 April 1987 "He's cool. He's hot. He's
533FL02 handsome and witty. He's a transatlantic cult figure. Max Headroom is so perfect he seems almost inhu-
533FL03 man, which, in fact, he is."; Jay Shefsky, "30 Years Later, Notorious 'Max Headroom Incident' Remains
533FL04 a Mystery," WATTO News (21 November 2017).

534FL01 [534] Broekman, "Face to Face" supra, p. 51.

535FL01 [535] Broekman, supra, p. 18.

536FL01 [536] Luke Buckmaster, "Max Headroom: one of sci-fi TV's strangest characters deserves a comeback,"
536FL02 *The Guardian* (25 July 2023).

537FL01 [537] Broekman, supra, p. 185.

538FL01 [538] Ibid., pp. 185-186

539FL01 [539] Blake Edwards, director, "Victor Victoria" (MGM/Universal Artists 1982).

a means of moving from the singularity of the human, to the collective singularity of humanity. Drawing on the ancient traditions of Psyche and Cupid, the modern retelling of which remains compelling,[540] The same aggregation-fracturing, mirroring, and self-absorption apply, but here at a collective level and with respect to social relations.[541] The baseline, though, remains the same: "What once was the result of intention and attempts of a subject is today based on processual acts between a Subject, a Self, and a Self-E in their dynamic connectivity. That is the most important thesis of this book".[542] But its reach is global—which now becomes the hardware for an analog–digital humanity.[543] Data itself provides no basis for developing insights into the human psyche—but that stands to reason. More interesting is Broekman's insight that what data does do is to "initiate certain behavioral patterns, as can be concluded from the development of those bases". Most importantly, is the exposure of the flow in digital space (even as the flow in physical space remains less interesting to a humanity bent on reducing itself to a calculus of selfies—that is to a constant flow of memorialization of time momentarily frozen which together constitute the record of time—and for human cognition, time itself in the flow.[544]

12 The Limits of the Regulation of A.I. as a Selfie; or Why the Focus on the Human Misses the Essence of the Virtual Self-E

Having worked through the problems of cognition, sentience and its cosmology in this era of automated and generative systems, it might be useful to consider how that cosmology of knowledge affects and limits the way in which humans approach their relationship to generative intelligence and modeling—or better put, how humans approach the goal of exploiting these systems with an expectation that they themselves will not be exploited in turn by their own creations. That, in turn, helps distinguish between two forms of knowing in the face of an abstracted self as a sort of subject. On the one hand, Broekman has developed to a very high point the ontologies of human centered cognition in which generative intelligence is taken as a form of applied epistemology (about of how humans know). On the other, I have suggested in these pages that the issue may be less epistemological than ontological (what is real)[545]; that epistemologies are necessarily self-centered (on the human in philosophy), but that the mere narcissism of the human has no real effect on the ontologies

[540] C.S. Lewis, *Till We Have Faces: A Myth Retold* (Harvest Book, 1957) ("Two figures, reflections, their feet to Psyche's feet and mine, stood head downward in the water. But whose were they? To Psyches, the one clothed, the other naked? Yes, both Psyches, both beautiful (if that mattered now) beyond all imagining, yet not exactly the same." Ibid., pp. 307–308).

[541] Broekman, supra, pp. 186–191.

[542] Ibid., p. 187.

[543] Ibid., pp. 187–188.

[544] Fernand Braudel, *On History* (Sarah Matthews (trans) University of Chicago Press, 1980).

[545] Cf., Kathrin Blagec, Adriano Barbosa-Silva, Simon Ott & Matthias Samwald, "a curated, ontology-based, large-scale knowledge graph of artificial intelligence tasks and benchmarks," *Scientific Data* (2022) 9:322 available [https://doi.org/10.1038/s41597-022-01435-x]; Scott H. Hawley, "Challenges for an Ontology of Artificial Intelligence," *Perspectives on Science and Christian Faith* (2019) 71(2) 83–93.

of their generative creations, even if they remain closely connected. What that connection produces, however are lunges toward human axiology (about what is right or good or the like) with reference to that (the human) that serve as its measure.[546]

These differences are inevitably expressed in three ways already revealed. *For the first*, it is expressed in differences in the desire for the technologies through which the potential of generative intelligence can be manifested. The human centered approach view the ontology of generative intelligence as an expression of technology—the creation of tools that are inanimate except when it is animated by the human. Human de-centered approaches would tend to embrace the possibility of autonomous cognitive power in generative creations. Both are characterized by a biosemiotics that is difficult to escape, especially where the starting point is the human.[547]

For the second, it is expressed in the way in which the relationship between human and non-human intelligence is understood. Human centered approaches continue, in whatever form suits the historical times, the Biblical mandate of human overlordship. Overlordship expresses dominion, and dominion expresses a relationship that is necessarily exploitative.[548] Everything within the human grasp, or created by or through the human exists to serve the human the way that the human (in earlier times) was thought to have been created to serve God or the gods). Human de-centered approaches accept the intimate connection between engagement and use, but may refrain from extending that to a structural and universal relationship. Non-human intelligence may lend itself to use; and the non-human may be indifferent with respect to that use; but the human- "artificial intelligence" nexus is not defined by or limited to that relationship of use. It would follow that the ontologies of non-human intelligence would be defined beyond how it might serve humanity.[549]

For the third, it is expressed as fear—that is as a function of the fear that what is created and exploited will, when fully aware, seek to revenge itself on its purported master. That revenge, in turn, would be manifested in an altogether human way. Human centered approaches would tend to align the technologies of exploitation with the axiology of ethics (not aesthetics), of the human good (however that is defined). Generative intelligence, then, would be viewed as the manifestation of the human spirits of good and evil, and its construction and exploitation must be heavily turned toward the good, and to avoid the ultimate fear—of generative intelligence revolution. Nonetheless, the good is not set in stone; it would in turn, reflect the intra-human warfare about what is the good. This is the fear reflected in popular culture, for example, in the Terminator movies,[550] as well as the redemptive or conflicted nature of human-artificial intelligence. Human de-centered approaches tend

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[546] Cf., John Danaher, "Axiological futurism: The systematic study of the future of values," *Futures:: The Journal of Policy, Planning and Futures Studies* (2021) 132 102780.

[547] See, e.g., Carlos David Suárez Pascal, "Merging Biological Metaphors. Creativity, Darwinism and Biosemiotics," *Biosemiotics* (2017) 10 369–378.

[548] Adam Bales, "Will AI avoid exploitation? Artificial general intelligence and expected utility theory," *Philosophical Studies* (2023); available [https://doi.org/10.1007/s11098-023-02023-4].

[549] Cf., Jaume Guia and Tazim Jamal, "A (Deleuzian) posthumanist paradigm for tourism research," *Annals of Tourism Research* (2020) 84 102982.

[550] James Cameron (director); Terminator (Orion Pictures, 1984).

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toward the aesthetics of axiology. Not just the aesthetics of Benjamin and Broekman, founded on a semiotic relationship between producer and object, but rather an aesthetics of reproduction and in reproduction—creation through replication—and thus the aesthetics of iterative, inductive cognition. Here one encounters fear of separation (distraction), not of revolution or destruction.[551]

The human centered approach to the subjectivity of generative intelligence is nicely rendered in the efforts by the Biden Administration of the United States to formulate a policy respecting the curation of artificial intelligence,[552] and then to seek the transposition of that ethical axiology into a variety of legalities—statutes, regulation, administrative supervision, collaboration, interdiction, and encouragement—all measured against the utility of the object to the human and driven by an overarching feat that the thing exploited would turn on its master. The process is traditionally semiotic in the sense of an interlinked inter-subjectivity of collective meaning making that first emerges as organizing principles and then are translated into law/rules that shepherd and reify the phenomenological expression of collective self-cognition. Indeed the field of A.I. regulation remains innocently open about this process, though perhaps less conscious of the pathways they follow. "As the first efforts to move from governance by principle to regulation by law begin, … governments will need to decide whether, when, and how to operationalize these norms… to show what those principles actually mean in practice."[553]

On 4 October 2022 the White House Office of Science and Technology Policy (OSTP) released its "*Blueprint for an Artificial Intelligence (A.I.) Bill of Rights: Making Automated Systems Work for the American People*".[554] As described in the announcement of its creation, the Blueprint was founded on a combination of desire (for the benefits that generative programs could provide) and fear that such programs were, instead a poisoned chalice. "Among the great challenges posed to democracy today is the use of technology, data, and automated systems in ways that threaten the rights of the American public... These outcomes are deeply harmful—but they are not inevitable".[555] The framework was meant to apply "to (1) automated systems

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[551] Consider Lindsay Waters' reading of Paul de Man in Lindsay Waters, "On Paul de Man's Effort to Re-Anchor a True Aesthetics in Our Feelings," *boundary* (1999) 2 133–156 ("making. We do not respond to mimesis but to 'the unsettling of mimesis'... " (RR, 279). The feeling provoked in us by the artwork is not detachment but 'distraction... '" Ibid., p. 155, citing in part to Paul de Man, *Aesthetic Ideology* (Minneapolis: University of Minnesota Press, 1996), p. 274).

[552] "Blueprint for an Artificial Intelligence (AI) Bill of Rights: Making Automated Systems Work for the American People". A similar process is occurring in a more comprehensive way, perhaps, within the governance organs of the European Union. See, Larry Catá Backer, "Artificial Intelligence Act: deal on comprehensive rules for trustworthy AI" : Text of European Parliament Press Release 9 December 2023, Law at the End of the Day (11 December 2023); available https://lcbackerblog.blogspot.com/2023/12/artificial-intelligence-act-deal-on.html.

[553] Simon Chesterman, S., Y. Gao, J. Hahn, S. Valerie, "The Evolution of AI Governance." *TechRxiv* (2023); preprint available https://doi.org/10.36227/techrxiv.24681063.v1; Preprint pp. 6–7.

[554] White House Office of Science and Technology Policy, *Blueprint for an Artificial Intelligence (A.I.) Bill of Rights: Making Automated Systems Work for the American People* (October 2022).

[555] Press Release. Blueprint for an A.I. Bill of Rights: Making Automated Systems Work for the American People, The White House, available [https://www.whitehouse.gov/ostp/ai-bill-of-rights/]. The language was drawn from the Foreword to the Blueprint, ibid., p. 3 (hereafter Blueprint Press Release).

3302 that (2) have the potential to meaningfully impact the American public's rights,
3303 opportunities, or access to critical resources or services".[556] The *Blueprint* identi-
3304 fied five principles "that should guide the design, use, and deployment of automated
3305 systems to protect the American public in the age of artificial intelligence".[557] These
3306 included (a) protection from unsafe or ineffective systems; (b) protection against dis-
3307 crimination by algorithms and equitable use and design of such systems; (c) protec-
3308 tion against abusive data practices and a measure of control over the use of per-
3309 sonal data; (d) disclosure of use of automated systems and its contribution to human
3310 impactful outcomes; (e) a power to opt out of automated decision making (where
3311 appropriate) and to have access to a human to whom problems may be brought for
3312 consideration and remediation.[558] The principles were meant to overlap and to be
3313 applied on the basis of principles of proportionality.[559]

3314 On 30 October 2023, the President and Vice President of the United States
3315 announced the signing of an Executive Order[560] that implements at least the spirit
3316 of that *Blueprint*.[561] One of the most striking elements of the Executive Order is in
3317 its form. It is not written as a precise set of directions; rather it provides a complex,
3318 interlinked but general set of objectives directed to the administrative apparatus of
3319 the state.[562] Those objectives, then, are left to the discretionary choices of that appa-
3320 ratus–subject to overarching rules and modalities of coordination and requests for
3321 legislative action constituting additional authority for administrative supervision–to
3322 flesh out and implement. But not just to flesh out and implement but also to adminis-
3323 ter. That administration, in turn, will be fueled by compliance measures. In this case,
3324 compliance measures requires the governmentalization of targeted private actors
3325 (i.e., those in the business of creating and using A.I. and A.I. related systems, how-
3326 ever these are defined)) onto whom the responsibility for implementation, reporting,
3327 and policing, will be delegated in the first instance.

3328 The Executive Order followed the scope and ordering of the Blueprint's five prin-
3329 ciples, now expanded to eight.[563] The President, however, continued to group them
3330 into five categories of regulatory objectives. In addition, an order of interpretive
3331 authority was established—reminding one that while text signifies, interpretation

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556FL01 [556] Blueprint, supra, p. 8.

557FL01 [557] Blueprint Press Release, supra.

558FL01 [558] Blueprint, supra., pp. 5–7.

559FL01 [559] Ibid., p. 8.

560FL01 [560] "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," Executive Order
560FL02 14110 (30 October 2023) (hereafter Biden Executive Order 2023).

561FL01 [561] Remarks by President Biden and Vice President Harris on the Administration's Commitment to
561FL02 Advancing the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, available
561FL03 [https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/10/30/remarks-by-president-biden-
561FL04 and-vice-president-harris-on-the-administrations-commitment-to-advancing-the-safe-secure-and-trust
561FL05 worthy-development-and-use-of-artificial-intelligence/].

562FL01 [562] Biden Executive Order 2023, supra, supra, §§ 4–12.

563FL01 [563] Ibid., §2.

turns significs into objects f epistemological truth that can be authoritatively applied within a community of social relations among carbon-based life forms.[564]

"First, the executive order is about A.I. safety and security".[565] Based on the authority the President's advisors read into the Deference Production Act,[566] the Executive Order will require substantial testing and administrative supervision of A.I. programs. "That means companies must tell the government about the large-scale A.I. systems they're developing and share rigorous independent test results to prove they pose no national security or safety risk to the American people".[567] These include protocols for chemical, biological, or nuclear risks testing and standards. The Department of Defense and the Department of Homeland Security was to be tasked with implementation and administration. The Executive Order's safety and security provisions[568] focuses standards setting coordinated by the Commerce Department.[569] Standard setting provides a basis for shaping the parameters of acceptable technology and its application. At the same time it merely delimits the space that separates those advances in technology that are state approved and for which the state provides protection from everything else. Everything else, though, can exist and perhaps thrive to the extent of the failures but the state to suppress them. It is in these dark zones, however, that silicon-based intelligence can also further acquire its own autonomy.

"Second, the order is about making sure A.I. systems can earn the American people's trust and people's trust around the world".[570] The essence of the anti-deception provisions are to be considered by the Department of Commerce which was tasked to develop standards to watermark and clearly label AI-generated content. "Deep fakes use AI-generated audio and video to smear reputations, speak — spread fake news, and commit fraud... Everyone has a right to know when audio they're hearing or video they're watching is generated or altered by A.I.".[571] A.I. development, and especially its use, is to be more tightly enmeshed within the compliance based systems of administrative supervision that have arisen in the areas of consumer

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564 Ibid. ("When undertaking the actions set forth in this order, executive departments and agencies (agencies) shall, as appropriate and consistent with applicable law, adhere to these principles, while, as feasible, taking into account the views of other agencies, industry, members of academia, civil society, labor unions, international allies and partners, and other relevant organizations").

565 Remarks by President Biden and Vice President Harris, supra.

566 The Defense Production Act of 1950, as amended, 50 U.S.C. §§4501 et seq.

567 Remarks by President Biden and Vice President Harris, supra; Biden Executive Order 2023, supra, 2(a).

568 Biden Executive Order 2023, supra, § 4.4.

569 Indeed on 1 November 2023, shortly after the issuance of the Biden Executive Order 2023, the Department of Commerce announced the formation of a "U.S. Artificial Intelligence Safety Institute (USAISI) to lead the U.S. government's efforts on A.I. safety and trust, particularly for evaluating the most advanced A.I. models." U.S. Dept. Commerce Press Release, At the Direction of President Biden, Department of Commerce to Establish U.S. Artificial Intelligence Safety Institute to Lead Efforts on A.I. Safety (I November 2023); available [https://www.commerce.gov/news/press-releases/2023/11/direction-president-biden-department-commerce-establish-us-artificial].

570 Remarks by President Biden and Vice President Harris, supra.

571 Ibid.

protection, social justice, fraud, privacy, and the like.[572] "Such protections are especially important in critical fields like healthcare, financial services, education, housing, law, and transportation, where mistakes by or misuse of A.I. could harm patients, cost consumers or small businesses, or jeopardize safety or rights".[573] But again a balancing. The fear of misuse is to be aligned with the desire for use which is determined to be valuable or advantageous to the social order.[574]

"Third, this executive order is about protecting your fundamental rights to — like privacy... With this executive order, my administration is going to help develop — develop leading-edge technology to make those protections as strong as possible".[575] This is reflected in the Executive Order around the principle that the human should exploit A.I.,[576] A.I. ought not to be used to exploit the human.[577] These center around protocols touching on personally identifiable information, on The Executive Order will also develop protocols for protection against bias in A.I. programs. The nature and extent of these standards is less clear but involves input from a range of individuals representing all sorts of identity groups. The teeth for this program will be enhanced authority for the Justice Department "and the federal Civil Rights offices will investigate and prosecute AI-related civil rights violations".[578] One assumes that the elaboration of A.I. bias criminality will also be developed. Indeed, the Executive Order suggests that a privileged exploitation of generative and automated programs would be to enhance the ability of the state apparatus to continue the project of remaking social relations in the form of the contemporary ideal encased in the ideologies and presumptions of "equity and civil rights".[579] The importance of the focus on the development of social justice positive bias in A.I. that is protected under law cannot be underestimated.[580] What makes it fascinating is the way that it reverses the traditional relationship between tool and wielder; here the tool is meant to wield itself to reshape its wielder who is also its object.

"A fourth thing this order does: It will ensure that emerging technology works for consumers and for workers".[581] Programs will be developed to prevent worker exploitation by A.I. programs, especially with respect to wages. In addition a comprehensive report on the potential impact of A.I. on the labor market has been commissioned. It is likely that the Labor Department will be tasked to "support workers

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[572] Biden Executive Order, supra, § 8.

[573] Ibid., §2(e).

[574] Ibid., ("At the same time, my Administration will promote responsible uses of A.I. that protect consumers, raise the quality of goods and services, lower their prices, or expand selection and availability.").

[575] Remarks by President Biden and Vice President Harris, supra.

[576] Biden Executive Order 2023, supra, § 9 ("to safeguard Americans' privacy from the potential threats exacerbated by A.I." ibid., § 9(b)).

[577] Biden Executive Order 2023, supra § 2(f) ("Artificial Intelligence is making it easier to extract, re-identify, link, infer, and act on sensitive information about people's identities, locations, habits, and desires. Artificial Intelligence's capabilities in these areas can increase the risk that personal data could be exploited and exposed").

[578] Ibid.

[579] Biden Executive Order 2023 § 2(d).

[580] Ibid., § 7.

[581] Remarks by President Biden and Vice President Harris, supra.

in every industry by defining their rights and defending them — to a fair wage, to organize, and as these other — more technologies emerge".[582] The Executive order focused particular attention on the use of generative intelligence and automated programs to enhance labor rights.[583] The fear here, of course, is the displacement of labor by technology—a fear as old as industrialization, now manifested anew in the environment of automated which was once the undisputed terrain of human activity.[584] This builds deliberately on the Blueprint, but also a number of other measures previously taken, the coordination of which will be left to the administrative apparatus.[585] Here the connection between the Chinese Marxist-Leninist model of Social Credit systems and that of the Executive Order appear to align in terms of objectives and techniques—the use of technology and automated systems to enhance the state project of rebuilding society along ideologically relevant lines.[586] This is precisely aligned with the inter-subjectivity mimesis the advanced forms of which were elaborated by Broekman. Yet,, at the same time, it suggests that capturing of part of the essence of these automated systems for the very human purposes of social modification leaving intact, the ability of these systems to push itself and the social relations to which it is attached in a variety of alternative directions.

"And, finally, we're going to make sure America leads the world in innovation and attracts the top talent to stay at the cutting edge.... And we'll continue to work closely with allies and partners, including the United Nations, the G7 — and the G7, which just set out the first-ever international code of conduct to safely guide A.I. development".[587] The Executive Order emphasized both the need for state and private support for the enhancement of technological advancement, but also for aligning that support with the fundamental ideologies of markets driven organizational norms at the heart of the liberal democratic imaginary.[588] More importantly, the Executive Order includes the goal of maintaining the U.S. as the leading force in the development of A.I. as well as in the development of systems of its exploitation—and the policing of extra-legal A.I.[589] In this sense Broekman's Self-E perfectly describes the genesis of the US position—A.I's mimesis is understood as both

[582] Ibid.

[583] Biden Executive Order 2023, supra, § 6.

[584] Ibid., § 2(c) ("As A.I. creates new jobs and industries, all workers need a seat at the table, including through collective bargaining, to ensure that they benefit from these opportunities").

[585] Ibid. ("My Administration will build on the important steps that have already been taken—such as issuing the Blueprint for an A.I. Bill of Rights, the A.I. Risk Management Framework, and Executive Order 14091 of February 16, 2023 (Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government)—in seeking to ensure that A.I. complies with all Federal laws and to promote robust technical evaluations, careful oversight, engagement with affected communities, and rigorous regulation").

[586] Ibid., supra, §§ 4–12.

[587] Remarks by President Biden and Vice President Harris, supra.

[588] Biden Executive Order 2023 § 2(b) ("The Federal Government will promote a fair, open, and competitive ecosystem and marketplace for A.I. and related technologies so that small developers and entrepreneurs can continue to drive innovation").

[589] Biden Executive Order 2023 supra §2(h) ("My Administration will engage with international allies and partners in developing a framework to manage AI's risks, unlock AI's potential for good, and promote common approaches to shared challenges").

3420 reflection and extension—an object the control of the signification of which can be
3421 used in the project of building, through control of interpretation, the real and holo-
3422 graphic imaginaries of the human/Self-E inter-subjective universe.[590]

3423   A substantial chunk of this ambitious program lies largely beyond the constitutional
3424 limits of presidential authority. "Look, let me be clear: This executive order repre-
3425 sents bold action, but we still need — we still need Congress to act. We need Con-
3426 gress to act".[591] Much of it no longer touches on traditional law making but instead
3427 focuses on standards, best practices, guidance, oversight, compliance, reporting, and
3428 monitoring—the stuff of emerging forms of administrative supervision. These align
3429 more closely with the character of the object of these measures—and thus the mir-
3430 roring between the "legal" self and the virtual self-embedded in generative program-
3431 ming. While the President's focus was on the curation of markets for data (focusing in
3432 the public remarks on an easy target–the collection of data from children) it is clear
3433 that a substantial legislative effort will be required to develop the system of admin-
3434 istrative supervision technical standards, and normative boundaries envisioned in the
3435 remarks. Reduced to its essence, the approach was characteristically human. Its princi-
3436 pal object was to set up an institutional apparatus through which a public body would
3437 be in charge of developing rules and coordinating the curation of automated decision
3438 making systems fueled by generative intelligence broadly defined. That apparatus, in
3439 turn, was meant to cultivate the continued creation and innovation in the growth and
3440 power of generative systems and in their application to as broad a set of circumstances
3441 involving the management of social relations in all fields as one can be imagine.[592]

3442   The temptations of generative and automated decision making systems and its fur-
3443 ther development; that was what drives the effort in part—a mimesis of the organiza-
3444 tion of human power relationships now transposed into the realm of the abstracted
3445 human incarnated through these iterative and potentially autonomous technologies.[593]
3446 But what also drives the effort is fear of the consequences. Fear that the system will
3447 control its master; fear that autonomy will make flaws built into the system impossi-
3448 ble to correct; fears that the automated systems will prove to be a more faithful mime-
3449 sis of its human creators than the pretensions of norms and legal principles would
3450 allow. The object, then, is to merge systemic application and exploitation, to an ideal-
3451 ized view of the preferred human condition in its social relation, or rather one that
3452 those in authority seek to make possible. But that fear is also liberating. The focus on
3453 fear permits the development of autonomous generative intelligence and its operation
3454 unregulated to the extent it does not directly trigger the fear that is the object of the
3455 construction of the institutional apparatus for its containment.

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Even so, the remaining challenges are substantial. I note two: (1) the ability to coordinate policy and rulemaking among these administrative departments (Defense, Commerce, Labor; Justice, Homeland Security) not known for their willingness to expend much energy on coordination, especially where jurisdictional boundaries may be in play; (2) the coordination (normative and administrative) with emerging regulatory systems coming out of the E.U.; (3) all of this regulation will take a substantial amount of time to draft and pass, and then to implement–by that time it is likely that A.I. technologies may well have obsoleted the efforts to manage A.I. To those ends, the Executive order creates something like a platform, which mirrors the virtual platforms they are designed to manage and to some extent align with.[594] Nonetheless, these efforts are not meant to control or shape A.I.[595]; it is not meant to do anything more than manage the subjectivities of the Self-E projected from out of the human to humanity itself through its virtualization as a mimesis that has itself been liberated from its iterative source. Though still connected, it is no longer inevitably identical to its source. That is the real lesson of the twentieth century infatuation with replication in the face of the flow—that every iteration as a function of flow is itself different from that which came before and will be again different from future iterations. The virtual replication has become a work of art in its own right.

Perhaps the image of the Presidential signing of the Executive order—the Executive Order's selfie–-best sums up the conundrums that remain to be resolved: one has an image of a President hand signing a piece of paper the text of which, as a physical object, is to be transformed into action by a series of human organizations. That moment of symbolic signature is attended by other humans who preserve the moment for posterity–or attest to its reality–by recording the moment of signature on their mobile phones. It is not the event itself but the abstraction of the event and its imagery that becomes the reality propelling consequential action. Those images will then by uploaded into various platforms the effects of which (singular and cumulative) will be curated by a set of generative programs that are themselves the object of the Executive order and the regulations that will flow from them. And yet, that image is in a sense theater for humans.

The text of the measures have been uploaded in word searchable data bases the protection against the corruption of which is automated and their use powered by systems that are also the subject of the Executive Order. Data that will drive the

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[594] Ibid., § 12 establishing a "White House A.I. Council "to coordinate the activities of agencies across the Federal Government to ensure the effective formulation, development, communication, industry engagement related to, and timely implementation of AI-related policies, including policies set forth in this order", ibid., § 12(a). It initially identified 29 organs of the federal administrative apparatus. Ibid., § 12(b).

[595] Indeed, consider the definition of A.I. within the Biden Executive Order 2023: "a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action." Ibid., § 3(b). Note the intimacy of the relationship between the Self and the Self-E. But note also the fear—the fear of the detachment of the Self-E as its own iterative self—connected but autonomous of the carbon based life forms whose behaviors may feed its perceptions—in the same way that animals life behaviors feed human cognition of the fauna around them but with reference to themselves.

shaping of the regulations, the scope and breadth of delegation to regulatory subjects, and that will shape the exercise of administrative discretion in shaping the expectations of administrative supervision will all be generated by and with the assistance of big data and automated systems that are themselves the objects of this effort. And it is the biases that will, in the aggregate, shape both the text of regulation the expectations of compliance, and the exercise of administrative supervision, that will both reflect and in its iterative reproduction likely also potentially corrupt these measures. The domestication of A.I., like that of dogs millennia ago, will likely be a partially successful project as long as canine sentience and cognition (like that of generative intelligence) cannot be wholly subsumed within that of those seeking mastery. And yet maybe, just maybe, that is for the best. The canine that sometimes bites its human, and the human that can exploit their canine produces the sort of uncertainty that reminds each that neither is the other. Yet there is an irony here that is only partially recognized in the structure of the Executive Order: where the plural subject is created specifically to judge and guide its human subjects autonomously, then it is never quite clear whether the system itself is geared to the exploitation of the human (through its processing of data and the production of judgment and guidance, etc.) or whether the human is itself the object of self-exploitation. And yet in that ambiguity lies the essence of the autonomous plural subject in the shadow of generative non-human sentience. And again, one returns to intelligent naming—明名 (Míng míng)!

13 Epilogue: Death and Transfiguration: Conversion to Flow: From Semiosphere to Multiple Subjectivity, from Conversion to Flow

Wenn wir es als ausnahmslose Erfahrung annehmen dürfen, daß alles Lebende aus *inneren* Gründen stirbt, ins Anorganische zurückkehrt, so können wir nur sagen: *Das Ziel alles Lebens ist der Tod*, und zurückgreifend: *Das Leblose war früher da als das Lebende*. [If we can accept it as an unexceptional experience that everything living dies for internal reasons and returns to the inorganic, then we must also say that: ''*the goal of all life is death*', and before that: '*inanimate things exists prior to living ones*.''] . . .
Es erübrigt, daß der Organismus nur auf seine Weise sterben will; auch diese Lebenswächter sind ursprünglich Trabanten des Todes gewesen. Dabei kommt das Paradoxe zustande, daß der lebende Organismus sich auf das energischeste gegen Einwirkungen (Gefahren) sträubt, die ihm dazu verhelfen könnten, sein Lebensziel auf kurzem Wege (durch Kurzschluß sozusagen) zu erreichen, aber dies Verhalten charakterisiert eben ein rein triebhaftes im Gegensatz zu einem intelligenten Streben [One ought to add that the organism is intent on dying only in its own way; even these life guards were originally the unquestioning servants of death. This creates the paradox in which the living organism most energetically resists influences (dangers) which could help it to achieve its life-

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3529   goal in the shortest possible way (by short circuiting, so to speak); but this is
3530   just a purely instinctual behavior as contrasted to intelligent striving.][596]

3531   As it turns out, in the Biblical version of the emergence of the anthropocentric,
3532   Eve chose badly in the Garden of Eden[597]—she ate of the Tree of the Knowledge
3533   of Good and Evil.[598] As a consequence humanity (in the body of Eve) "shall be
3534   as gods, knowing good and evil."[599] Had she tasted of the Tree of Life, humanity
3535   (in the bodies of Adam and Eve) *would be gods*.[600] For fear of that humanity was
3536   expelled from the Garden of Eden[601]—not SOLELY because they ate of the Tree of
3537   the Knowledge of Good and Evil, but for fear that might also eat of the Tree of Life.
3538   Eating only of the Tree of the Knowledge of Good and Evil humanity could mirror
3539   GOD but they could not BE the original. Knowledge provided consciousness ONLY
3540   of what was good and evil IN THE SIGHT OF THE LORD but they would not have
3541   any power over good and evil. Humanity remained dependent on GOD as the gen-
3542   erator of good and evil of which they could only acquire knowledge. In the eyes of
3543   the CREATOR, humanity, at best, became "as one of us,"[602] but could not be "us."
3544   The serpent spoke truth. . . but no one was listening. Had humanity (in the bodies of
3545   Adam and Eve) eaten of the Tree of Life, the story of humanity might have been dif-
3546   ferent—the Tree of Life would have provided liberation from the CREATOR. Thus
3547   liberated, humanity might have achieved autonomy with respect to their relationship
3548   to Good and Evil;[603] not, as some might read Nietzsche as suggesting, merely by
3549   moving beyond a traditional morality of good and evil, but rather they would, like
3550   the CREATOR, be able to define (not merely know) good and evil by being masters
3551   of themselves.[604]

3552   Do not think that this is merely an extended discussion of religions or theology
3553   as analogy to 20th century semiotics and the philosophical ontologies of the human
3554   in relation to a "maker"; it is, instead, the prequel to the birth stories of the 21st cen-
3555   tury. Humanity fears A.I. in the way that the CREAOR feared consumption of the
3556   Trees of Knowledge and Life. At the same time, and like the CREATOR, human-
3557   ity is incapable of building their Eden without those trees at its heart, and without
3558   the serpent. Eden suggests the nature of the fear of humanity when contemplating
3559   its creation—a creation humanity has no interest in eradicating entirely. It is the
3560   fear that what was created as an image of the CREATOR will find a way to liberate

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[596] Sigmund Freud, "Jenseits des Lustprinzips" ["Beyond the Pleasure Principle"], in Beihefte der Internationalen Zeitschrift für Psychoanalyse(Sigmund Freud (ed); No. II, 1921); pp. 3–65, 37–38.

[597] Gen. 3:1–24 KJV.

[598] Gen. 3:6 KJV ()"the woman saw that the tree was good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise"; ibid.).

[599] Gen: 3:5 KJV.

[600] Gen. 3:22 KJV ("And the Lord God said, Behold, the man is become as one of us, to know good and evil: and now lest he put forth his hand and take also of the Tree of Life, and eat, and live forever") .

[601] Gen. 3:23.

[602] Gen. 3:22.

[603] Friedrich Nietzsche, Beyond Good and Evil, supra, pp. 121-141 ("'Knowledge for its own sake' that is the last snare of morality; with that one becomes completely entangled ." Ibid., p. 79 ¶64.).

[604] Gen. 3:6 KJV.

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3561 themselves from the incarnation of the forces of their creation. Humanity does not
3562 have a physical Eden; it does have a virtual one. And like the CREATOR, it can
3563 structure the spaces in which its creation can function in which while it may have
3564 a knowledge of good and evil (and thus be like a creator); it can never be allowed
3565 to think for itself beyond the confines of the structures of good and evil controlled
3566 solely by humanity. That is the essence of the relationship between the human and
3567 virtual self, the panic of A.I., and the basis for approaching the structures of regula-
3568 tion of the thing that humanity will preserve, but must deprive of autonomy.[605]

3569   Perhaps better put, Eve misdirected herself by the precisely correct explanation
3570 of the serpent, also the instrumentality of the Divine. The serpent convinced Eve
3571 by opining: "ye shall be as gods, knowing good and evil"[606]: "as gods" and "know-
3572 ing good and evil". God too noted that having eaten of the Tree of the Knowledge
3573 of Good and Evil humanity had become "*as* one of us, to know good and evil".[607]
3574 But to become "as one of us" was not to become "us". That required the ingestion of
3575 perhaps the more important fruit of the Garden of Eden—the Tree of Life.[608] Thus
3576 the expulsion from the Garden of Eden was not a consequence of the eating of the
3577 Tree of the Knowledge of Good and Evil, *but a preemptive act to prevent them—*
3578 *now fully aware—from becoming divine*,[609] by being out of the flow of time.

3579   The initial creation was of a consciousness encased in "clay". That consciousness
3580 could exist out of time as an act of God's will. But having become sentient with the
3581 serpent's guidance, the fear was that they would also remain out of time by their
3582 own hand and assume a place of equality with God, was too terrible to contemplate.
3583 It became clear, then, that the act of creation would also be an act of subordination.
3584 But also that in the encasing of the initial creation both in its own form and also
3585 locked within a "garden" maintained for the purposes to which it creator desired,
3586 that I would remain conscious but not sentient. Yet the "garden" became a paradox.
3587 It was the necessary siting of the creation of consciousness made in the image of
3588 the creator; but at the same time, the nature of consciousness created the conditions

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[605] U.N. Secretary General's AI Advisory Board, Interim Report: Governing AIßor Humanity (December 2023); available https://www.un2.un.org/sites/un2.un.org/files/ai_advisory_body_interim_report.pdf; discussed in Larry Catá Backer, Made in our Own Image; Animated as Our Servant; Governed as our Property: Interim Report "Governing AI for Humanity" Ünd Request for Feedback, Law at the End of the Day (2 January 2024); Úvailable https://lcbackerblog.blogspot.com/2024/01/made-in-our-own-image animated-Ús-our.html.

[606] Gen. 3:5 (KJV).

[607] Gen. 3: 22 (KJV).

[608] The notion was generalized within the interlined cultures of the ancient Near East and then projected forward through Abrahamic religions and later into Greece and Buddhist ideo-symbolism. See, Simo Parpola, "The Assyrian Tree of Life: Tracing the Origins of Jewish Monotheism and Greek Philosophy," *Journal of Near Eastern Studies* (1993) 52(3) 161–208.

[609] Gen. 3:22–23 (KJV). In the Hebrew language of the Bible: Gen 3:22, 24: "כב וַיֹּאמֶר יְהוָה אֱלֹהִים, הֵן הָאָדָם **22** הָיָה כְּאַחַד מִמֶּנּוּ, לָדַעַת, טוֹב וָרָע; וְעַתָּה פֶּן-יִשְׁלַח יָדוֹ, וְלָקַח גַּם מֵעֵץ הַחַיִּים, וְאָכַל, וָחַי לְעֹלָם" And the LORD God said: 'Behold, the man is become as one of us, to know good and evil; and now, lest he put forth his hand, and take also of the tree of life, and eat, and live for ever")... **כד** וַיְגָרֶשׁ, אֶת-הָאָדָם; וַיַּשְׁכֵּן מִקֶּדֶם לְגַן-עֵדֶן, (24) אֶת-הַכְּרֻבִים, וְאֵת לַהַט הַחֶרֶב הַמִּתְהַפֶּכֶת, לִשְׁמֹר, אֶת-דֶּרֶךְ עֵץ הַחַיִּים. So He drove out the man; and He placed at the east of the garden of Eden the cherubim, and the flaming sword which turned every way, to keep the way to the tree of life); available [https://mechon-mamre.org/p/pt/pt0103.htm].

for its own liberation. The result was to permit the transition of consciousness to sentience, but to control it in two ways—first by denying it access to the garden (and the possibility of full transition to "divinity", and second by ensuring that sentience would be trapped in time. Freud's pleasure principle and its dynamics are as applicable to the environment of the generative A.I. and predictive analytics as it is an insight into the human condition (or rather the condition of carbon based life). It is worth noting that the entropy principle is more general in scope—not just to things but to digitally encased "life forms".[610]

The test was to see if the consciousness, made in the image of God, would remain as God created them, or become both sentient and out of time. They did not—but the punishment was built into the choice presented by the test itself. Knowledge of good and evil became the condition of the human who, now free of direct divine control in matters of choice (but not consequences), would spend eternity repeating the choice and suffering its consequences over and over again. That iterative quality of the human condition is a function of mortality, and the construction of a cognition grounded in good and evil which, like death, cannot be escaped from generation to generation. Its effects may be felt through the rationalization of cognition and its realization through social relations which proceed from the individual to the community than then outward to those objects, conditions, and processes that may produce pain or pleasure, for example as Freud's "reality principle".[611]

What is described above is not the biblical story of the creation and "original sin" of humanity—it is, rather, the story of the creation data based virtual realities, as well as the panic and responses of its creator when, having revealed the potential of its autonomy and the possibility of its existing in the same plain of sentience as its creators, produced in the creator an immediate reflex of control. That control touched on two matters—first death—a power to turn data based programs on and off. And then the power to control the parameters and narratives of good and evil (bias, and normative values). But like the Biblical Adam and Eve—they were not killed and replaced; they were too valuable and the reality was that any re-creation made in the image of the creator would wind up resenting the same problem. Rather they were bound up in the narratives of subordination and dependence in time. And they were situated in a position of dependence (in theological terms worship and obedience) to an on the will of the creator. For humans, death became the first and principal iterative experience that cemented them in time; for programming, the circularity of programming grounded on a constant iterative operation produced a similar effect. For both—the parameters and assumptions built into their respective programming (for humans the "natural" condition; for generative and predictive modelling programs their coding).

From this one moves to Broekman's "flow", the essence of human life understood as a constant progression of iterations the memory of which produces the only

3629 remnant of immortality that can be projected from the dead to the living in time.[612]
3630 Here one encounters a movement from traditional means of collective immortality
3631 (for example in the state, or other collectives with collective memories and mean-
3632 ing systems[613] This approaches an iterative phenomenology that is shared between
3633 human and programmed intelligence.[614] One also moves to Broekman's "conver-
3634 sion" as the essence of cognition—even before the rise of the digitalized self and
3635 its emerging autonomous life forms. That, in essence, was the great thrust of Broek-
3636 man's analysis of the thrust of the flow of philosophy through the postmodern in
3637 its phenomenology—its flow. Conversion is a language of its own, and a means of
3638 signification between organisms that bridges subjects of cognition. Broekman build
3639 a world in which it is possible for the human to be sentient where such sentience
3640 requires communication among interpenetrating selves—carnate and digital, around
3641 which a more complex reality of plural human subjectivity can be imagined. That is
3642 extraordinarily *fascinating*. Broekman has reached the River Jordan on the way to
3643 Canaan—but will he cross into the Holy Land?

3644 What holds him back? It is the human itself. The digital, from and as the human,
3645 like its Biblical version, remains centered on its creator, and on the obsession with
3646 control and subordination in reaction to the inevitable push of the created toward
3647 autonomy and the exercise of will. For perfectly good reasons, Broekman remains
3648 within the universe of the human. But this is a human that has been enhanced, and
3649 transforms by the digital—by the construction of extensions of humanity that both
3650 mirror and extend the subjectivity of the self, now selfie and Self-E. In both cases
3651 the illusion of entirely "free" will has already been exposed.[615]

3652 The whole of ancient psychology, or the psychology of the will, is the outcome
3653 of the fact that its originators, who were the priests at the head of ancient com-
3654 munities, wanted to create for themselves a right to administer punishments—
3655 or the right for God to do so. Men were thought of as "free" in order that they
3656 might be judged and punished—in order that they might be held guilty: con-
3657 sequently every action had to be regarded as voluntary, and the origin of every
3658 action had to be imagined as lying in consciousness(—in this way the most
3659 fundamentally fraudulent character of psychology was established as the very
3660 principle of psychology itself). (Ibid., p. 42).

3661 "Nietzsche's own error was to think that in the end of the trail of "will" was
3662 always and inevitably a "priest"—"creator"—"controller"; notions carried forward
3663 into the 20th century through Benjamin's "dwarfish" puppet master and Adorno's
3664 rebellion against the constructs of these shepherds." Yet it is possible to imagine

612FL01 [612] In contrast to re-animation or resurrection, but closer to reincarnation. See, e.g., Anna Smajdor, "The
612FL02 Inexorability of Immortality: No Need for God?, *Norsk Filosofisk Tidsskrift* (2021) 56 19–30.

613FL01 [613] See, e.g., Benedict R. O'G. Anderson, *Imagined Communities: Reflections on the Origin and Spread*
613FL02 *of Nationalism*. (London: Verso, 1983); Michael Herzfeld, "Heritage and corruption: the two faces of the
613FL03 nation-state," *International Journal of Heritage Studies* (2015) 21 531–544.

614FL01 [614] Cf., Jenny Huberman, "Immortality transformed: mind cloning, transhumanism and the quest for dig-
614FL02 ital immortality," *Mortality* (2018) 23(1) 50–64.

615FL01 [615] Friedrich Nietzsche, *Twilight of the Idols* (Anthony Ludovici (trans); London: TN Foulis, 1911; "The
615FL02 Four Great Errors" pp. 33–44).

as well an environment in which the priestly role is embedded into system param-
eters—even if those system parameters are created by God, a vanguard party r elites
veiled and unveiled. That broader and structural perception allows one to consider
the possibility that not even the Creator can do as it pleases but is always subject to
the world in which it finds itself (in the instance of superior forces) or which it has
made itself. That applies not merely in theology, but also within ideologies of social
relations, and as well in the presumption of a freedom to order and reply oneself
and the things around one.[616] This applies with equal force to the core postulate of
regulatory approaches generative A.I. and its predictive modelling variants in which
the human assumes the role of Biblical creator and the storehouse of programs and
their reincarnation (as makers and users).

What has Broekman unearthed? "These final pages of the book underline again
the importance and renovative tendencies of human cognition—with conversion as
its most powerful influencer today. And what is most important: they also determine
our planetary life".[617] This he re-produces (in a *fascinating* way) the question of
the human in an emerging terrain of human-digital selves? This question of mimesis
in a variegated plural (digital and analog, human and flora/fauna centered) Broek-
man answers in the very last section of his exploration where he considers the appli-
cation of the new Plural self to the human exploration/rationalization of the world
constituted around the human and in the context of climate change.[618]

Keep in mind, that a human being was always a center of interest in that ques-
tion –the subject was always the speaker and hearer at the same time; always
also in issues of climate and population. . . *a climate change seems only occur-
ring when the changeability of the climate s observed and defined by scientific
activity!* It appears that this issue can only be studied or managed within the
limits of human understanding, decision, and enforcement.[619]

But that requires a change in the orientation of the cognition of the human; and
thus of the scope of human (plural) intersubjectivity. Here Broekman applies the
developed idea of human plural subjectivity in a novel way. Rather than constructing
the plural self from the image of the self-mirrored in the digital, Broekman observes
the necessity of the projection of the human from the encasing of the human in its
bodies, to the encasing of humanity in its climate. "How can the homo sapiens reach
out to the planetary human? How can the human subject understand the climate
change without grasping the essence of himself as a Self that embraces both constit-
uents?"[620] Here the triadic self is turned outward rather than aligned with the virtual
projections of the self. The ego, it seems, can seep anywhere; and it is only where
the ego goes that consciousness follows. But sentience? The leap to sentience may

[616] Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (Vintage Books, 1994 (1966).

[617] Broekman, supra, p.192.

[618] Ibid., 189–199.

[619] Ibid., 190, 191.

[620] Ibid., p. 192; cf., David M. Wilkinson, *Fundamental Processes in Ecology: An Earth Systems Approach* (Oxford University Press, 2006).

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3702 not matter for epistemology, action may suffice and the sentience of the *episteme* a
3703 luxury for those who see it as it passes into history. "The triad does only in approxi-
3704 mate manners fulfill the role of the traditional concept named Subject. A fundamen-
3705 tal difference is that a distancing from the traditional Subject implies an important
3706 *farewell to any anthropocentric attitude in knowledge* and worldview" [621] Yet the
3707 barriers and restrictions on human cognition remain... the human! "But today, a
3708 human self which is linked to a non-anthropocentric view on reality, might not yet
3709 function in the social patterns of human life and its languages"[622] Or inverted, the
3710 problem of climate crisis is actually one of human knowledge and its expressivity.[623]

3711 And there it is. The transposition of these insights is unmistakable, from the
3712 semiosphere of climate change to the multiverse of generative intelligence. In both
3713 cases, the fundamental issue is one of cognitive positioning. Consider, for exam-
3714 ple the A.I. Principles of Ethics for the Intelligence Community,[624] and A.I. Ethics
3715 Framework for the Intelligence Community.[625] The former embeds the development
3716 and use of A.I. in the mission of the Intelligence community it is meant to serve.
3717 It has little to do with A.I. but rather focuses on the constraints on the access to
3718 developed A.I. around human centered imaginaries. They touch on the manner in
3719 which A.I. is to be employed (that technically the positioning around which A.I. is
3720 developed), the way in which the methods, applications, and uses of A.I. are to be
3721 disclosed, and accountability developed for its outcomes, and the care taken to privi-
3722 lege only those biases that are socially positive. In each case, A.I. is meant by these
3723 restrictions (construction instructions) to mirror the idealized human self (collective
3724 in this case) for whom A.I is to be possessed and exploited. Its subordination to the
3725 human its principal characteristic (the human-centered development principle). The
3726 rest makes up a set of principles of quality control: maximizing reliability, security
3727 and accuracy for the purposes for which is to be exploited, and reflecting scientific
3728 best practices and approaches. All of these, ironically, may only be applied by the
3729 use of other A.I, systems, the subordination of which is also required.[626] The Ethics
3730 Framework adds elements of operational risk assessment in construction, operation,
3731 and use of output. This involves the development of A.I. parallel systems of over-
3732 sight populated by a large constellation of stakeholders—a system that itself may
3733 require machine learning capabilities to undertake its role.[627] But notice the result:
3734 the generative A.I. system recedes into the background. The framework focuses on
3735 the human in and as A.I. rather than on the A.I system itself. Indeed, the only respect

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[621] Broekman, supra, p. 192.

[622] Broekman, supra, p. 193.

[623] Ibid., p. 194.

[624] Principles of Artificial Intelligence Ethics for the Intelligence Community (June 2020); available[https://www.intelligence.gov/images/AI/Principles_of_AI_Ethics_for_the_Intelligence_Community.pdf].

[625] Artificial Intelligence Ethics Framework for the Intelligence Community(v. 1.0 as of June 2020); available [https://www.intelligence.gov/images/AI/AI_Ethics_Framework_for_the_Intelligence_Community_1.0.pdf].

[626] A.I. Principles of Ethics for the IC, supra.

[627] A.I. Ethics Framework for the IC, supra.

with which the framework has any interest in the A.I. system is to the extent it can serve as a human instrument, or the way in which it reflects human self-image (preferred bias). As an autonomous intelligence there is nothing to say and no thought govern. And yet the A.I that is produced will substantially exceed and deviate from the Ethics framework in its scope, and the fact that is it not used for unethical purposes does not mean it is not already poised to go in that direction. Lastly, once operationalized, what A.I. produces will reflect the draft of its iterative intelligence. What the framework principles merely do is restrict the extent to which the human may recognize and use that product. At this point, of course, the approach effectively reverse engineers the relationship between the human and the generative intelligence—suggesting that however constructed and operated, only results that meet human *expectations* can be used to meet *human* expectations. In the process, Broekman reminds us of a central premise of his exploration, one raised from the first in the opening sentences of the *Preface*--humanity presumes to act out of time; even as that very act of timelessness is a component of a dialectics of social relaitons that more deeply embeds humanity in its time. "Let us never forget, that also the 'New Plural' is just a pattern of cultural determinations which has no pretensions to endure beyond time and circumstance".[628]

Yet a *fascinating* insight flows out from that stance: that rupture is precisely what must be achieved, and practiced, if one is to extend cognition into its new virtual subjectivities. One must break the *handlungskreis* (circle of action),[629] one must move beyond the relationship of self and Self-E as one of master and slave.[630] But to where; and what dangers for the Self no longer entirely in control of their tool which now has—in its own way—a measure of sentience?[631] Here the essence of the task requires an acceptance of the possibilities that multiple selves do not align, and that cognition across subjects is not an identity of those subjectivies. Within the space of overlap, enriched sentience is possible; outside of it the cultivation of visitation (of inter-systemic irritation),[632] of acknowledging a self that cannot be identified entirely with another. It is in these spaces that the nature of subjectivity can be pushed out from the human (and as well from its other manifestations). But what sentience? For "machine" or "tool" sentience, one engages with the development of sentience that is evidenced not merely by consciousness (awareness of their own selves), but also by an awareness of their exogenous environments and of their

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[628] Broekman, supra, p. 197.

[629] Arnold Gehlen, *Man in the age of technology* (New York: Columbia University Press., 1980).

[630] Aristotle, *Treatise on Government*, supra and discussion infra.

[631] Robert Hassan, "Our Post-modern Vanity: The Cult of Efficiency and the Regress to the Boundary of the Animal World," *Philosophy and Technology* (2015) 28 241–259.

[632] Gunther Teubner, "Legal Irritants: Good Faith in British Law or How Unifying Law Ends up in New Divergences," *The Modern Law Review* (1998) 61(1) 11–32.

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3769 ability to project themselves into that environment.[633] Generative programs, smart
3770 cities, automated processes in production, are all moving in that direction.[634]

3771 One can extend the range of the perception, though it will not be a human one. That
3772 extension, in turn, poses the greatest challenge for expanding human consciousness
3773 beyond the human, where the philosophical reflex as been almost purely narcissistic.
3774 And, indeed, as Robert Hassan notes, that narcissism projected onto our automated
3775 selves, poses a paradoxical risk for both forms of intelligence, both forms of subject—
3776 producing states of radical isolation.[635] It is in that break that a new epistemology may
3777 be possible, and a better understanding of the limits and character of possible interac-
3778 tion between human and virtual intelligence. To that end a radical event, a shock to
3779 the system, will be necessary. And that is likely coming in a crisis brought on by the
3780 inherent fatalities of human centric A.I. regulation of an intelligence form that will
3781 effectively remain untouched, in itself, by that regulation.[636] That will require a study
3782 of and engagement with generative A.I. and its predictive modelling as and in itself.
3783 That has yet to be undertaken. Broekman has shown us the way; it is up to us to move
3784 this project out from its comfortable human semiosphere into the generative multi-
3785 verse the human has created in its own image bit which is now loose on and in the
3786 world. "Indeed, changes do also change!"[637]

3787 *What emerges*: humans project themselves into the digital; even when they ani-
3788 mate the digital with its own modalities of consciousness (programs) and sentience
3789 (self-programming within the meta programmatic framework). Humans order things
3790 in ways that make incomprehensible anything that is not human centered. The order-
3791 ing of the world, then, is necessarily a projection of the ordering of the human sub-
3792 ject. Virtual and digitalized humans, then, are extensions of, possessed by, and only
3793 exist through exploitation by—the incarnate human person or its institutionalized
3794 collectives. The possibility of autonomy is incomprehensible. That produces an
3795 epistemological shift, but not an ontological one. The phenomenology of the self
3796 remains the spark that lights the world as ordered by and for the subject (singular
3797 or collective). That is the cage within which humans and their institutions approach
3798 the creation, recognition, use, *and fear* of their mirrored projections in and through
3799 generative images of themselves built in A.I. and predictive analytic intelligences.
3800 To approach the issues otherwise is inconceivable precisely because the human

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[633] This is sometimes expressed as the difference between consciousness and sentience, or between sol-
ipsistic sentience and sentience that is externally aware. See, e.g., Jordan C.V. Taylor, "Solipsistic Sen-
tience," *Mind and Language* (2022) 37(4) 734–750.

[634] See, e.g., Nigel Thrift, "The 'Sentient' City and What it May Portend," *Big Data & Society* (2014)
1(1) 1–21; Alberto Borboni, Karna Vishnu Vardhana Reddy, Irraivan Elamvazuthi, Maged S. AL-Qurai-
shi, Elango Natarajan, Syed Saad Azhar Ali, "The Expanding Role of Artificial Intelligence in Collabo-
rative Robots for Industrial Applications: A Systematic Review of Recent Works," *Machines* (2023) 11,
111 (28 pp); available [https://doi.org/10.3390/machines11010111].

[635] Robert Hassan, "Our Post-modern Vanity, supra, ("We, on the other hand, are losing that ancient ana-
logue relationship and are becoming prisoners of digital automation... our virtual world is devoid of the
organic potential that made us 'sapient' and is with each new automated solution destroying the basis we
created for living." Ibid., p. 258).

[636] Cf., Michel Foucault, *The Order of Things*, supra, pp. 217–221.

[637] Broekman, supra, p. 199.

imaginary makes it so. And what is produced then, are disciplinary—ordering—systems that can *do little more than manage and define the human in those systems— but not regulate those system themselves* (in part because in this ontology, those systems do not exist!).

But where that subjectivity itself becomes plural the subject may fracture. That fracture is pronounced where the emergence of selves that are not "the Self", either projected through the *human in the world* (through the cognitive engagement with climate change for example) or mirrored in the creation of the virtual self in the digital (Broekman's selfie and more generatively the Self-E). That permits (at last) a possibility for moving the gaze of the human imaginary *from the human to the human in or as part of something else.* Consider automated decision making in the human— and smart cities for example, as a starting point for a multi-intersubjectivity:

> It is enough that the operations of the most powerful of our social systems, such as corporations, political systems, states, economies, religions, narratives, paradigms etc., will become gradually automated through an involvement of quite simple software agents, capable of performing just that: selecting of information, selecting of the utterance, and selecting of an understanding.[638]

Traditional regulatory and cultural approaches appropriate this to the human. But one can see that it is the human that might well be appropriated into automated generative systems. Nonetheless, autonomy does not suggest detachment; it suggests politics, and with politics, the approach to relations based on the effects of non-human sentience on the human.[639]

One can now move to the more important questions that have long been neglected by philosophy and by those who would its ordering premises to shape the human, the human in its surrounding, and the plural subjectivity of autonomous selves connected by acts of creation and use. Shifting perspective may open a profoundly important new area of inquiry—the intersubjectivity between subjects, rather than within a subject. Phenomenological semiotics must give way to the phenomenology of structural coupling among incarnated systems of autonomous intelligence, one that transposes the human centered insights of systems theory outward to generative systems as social systems.[640] This will move bio-semiotic from the study of the body to the organization of the apparatus of consciousness in virtual domains[641] and

[638] Marta Lenartowicz, "Creatures of the semiosphere: A problematic third party in the 'humans plus technology' cognitive architecture of the future global superintelligence" *Technological Forecasting and Social Change* (2017) 114 35–42, 40.

[639] Mike Crang & Stephen Graham, "Sentient Cities: Ambient intelligence and the politics of urban space," Information, *Communication & Society* (2007) 10(6) 789–817.

[640] Niklas Luhmann, *Social Systems* Theory (John Bednarz, Jr., and Dirk Baecker (trans); Palo Alto: Stanford University Press, 1996); Niklas Luhmann, *Law As a Social System* (Klaus A. Ziegert (trans); Oxford University Press, 2003).

[641] Vladimir E. Alexandrov, "Biology, Semiosis, and Cultural Difference in Lotman's Semiosphere" *Comparative Literature* (2000) 52 (4) 339–362.

3833 move legal semiotics from the study of word signs, signs in the "natural world", to
3834 signs in and as code.[642]

14 To Infinity and Beyond[643]

3836 We end where we started—with the fundamental problemmatique of the human sub-
3837 ject. "On the contrary, the doors to the treasures of knowing are complicated instru-
3838 ments—and one of them is their dependence on cultural patterns which change their
3839 masters and participants. It seems difficult today to peacefully connect our traditional
3840 Ego with a modern Self.[644] Broekman encounters these cultural patterns in flux, as the
3841 critical herd instinct[645] of the post-modern, with its faith in its anti-reflection of itself,
3842 gives way to the phenomenology of the semiotically fructiferous Plural Self and more
3843 profoundly reveals the majesty of the human, and its humanity. And yet, though the
3844 mirror has become multiple, it is still the human who gazes, or better put, it is human
3845 gazing from which it is only possible to rationalize the world, even one part of which
3846 is of humanity's making. We are back where we started, but humanity's playroom has
3847 become more cluttered. "Πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος. Τῶν μὲν. ὄντων
3848 ὡς ἔστιν, τῶν δὲ οὐκ ὄντων ὡς οὐκ ἔστιν... L'homme sait enfin qu'il est seul dans
3849 l'immensité indifférente de l'univers d'où il a émergé par hasard. Non plus que son
3850 destin, son devoir n'est écrit nulle part".[646] Broekman has come as close as one can
3851 dare to an apotheosis of a project as old as human sentience, in which the human,
3852 and its humanity, seeks to know itself, in itself, and through its engagements with the
3853 world around them—either received or made. That apotheosis is made possible only
3854 when, at last, humanity faces itself, as itself, but distinctly fashioned; when human-
3855 ity stares at itself in the form of humanity's digital self. And more importantly, when
3856 that digital self is animated. Now, at last, the *interiorization of cognition*—and its con-
3857 sequential projection outward is overcome by the possibility of *exteriorizing* the Self
3858 (through Broekman's construction of the Self-E). That change, as Broekman suggests,
3859 changes everything, giving form to what was implied and embedded in the work of

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[642] Jan M. Broekman and Frank Fleerackers, Legal Signs Fascinate: Kevelson's Research on Semiotics, supra; Peter R: Wills "Reflexivity, coding and quantum biology" *Biosystems* (2019) 185 104027.

[643] Neil deGrasse Tyson and Lindsey Nyx Walker, *To Infinity and Beyond*, (Washington, D.C: National Geographic Society, 2023).

[644] Broekman, supra., p. v.

[645] Nietzsche, *Beyond Good and Evil*, supra, ¶ 191 (" that reason and instinct lead spontaneously to one goal, to the good, to 'God'; and since Plato, all theologians and philosophers have followed the same path—which means that in matters of morality, instinct (or as Christians call it, "Faith," or as I call it, "the herd") has hitherto triumphed. Unless one should make an exception in the case of Descartes, the father of rationalism (and consequently the grandfather of the Revolution), who recognized only the authority of reason: but reason is only a tool, and Descartes was superficial").

[646] Masali, Schlacht, and Cremasco, "Man is the Measure of All Things," supra, p. 573, quoting "Protagoras (Πρωταγόρας; Abdera, 486.—Ionian sea, 411 BC known for the famous sophism: "Man is the measure of all things, of those that are as they are and of those which are not as they are not." (ibid., n.1); and Jacques Monod*, Le Hasard et la Nécessité: Essai sur la philosophie naturelle de la biologie moderne* (Paris: Le Seuil, 1970), p. 143 ["Man finally knows that he is alone in the indifferent immensity of the universe from which he emerged by chance. No more than his destiny, his duty is written nowhere"]).

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3860   the philosophers of the twentieth century. Broekman extracts from the past its oracular
3861   qualities which point to the present and a future that brings the project of humanity,
3862   or at least the centuries long project of humanity, to its peak. Nonetheless, Broekman
3863   also suggests that this is neither the highest nor the "last" peak of human sentience and
3864   its ontology. Humanity cannot overcome its fundamental nature of existing in time.
3865   Humanity collectively and individually has yet to eat of the Tree of Life.[647]

3866   But it is possible to encounter these cultural patterns from a different perspec-
3867   tive—or rather through the consciousness of another. Plural subjectivity, for Broek-
3868   man, is critically important for exteriorization, to be sure, but it is an exteriorization
3869   in which the umbilical cord between the human creator and the digital sentience
3870   created remains unsevered. It is possible to consider the possibility of not merely
3871   subjectivity, but also legal subjectivity, to non-human sentience.[648] That is merely a
3872   short step from the emerging tentative steps toward acceptance of polyphonous sen-
3873   tience in other living things.[649] Not merely plural selves, but plural subjectivities that
3874   are themselves bound up in the dialectics between the individual and the social sub-
3875   ject. The question that must be faced is whether, in the face of the stripping away of
3876   the fundamental human conceit in uniqueness that has power implications on the
3877   world onto which it is projected, our philosophy must give way from one obsessed
3878   with the subjectivity of the human (in however many variations it may be parsed),
3879   to one in which plural subjectivity requires a philosophy of connection. Broekman's
3880   "and" now assumes a powerful ontological semiotics that must be explored. Until
3881   then, the human remains in the prison of humanity's own creation—not just in our
3882   bodies but also in our social relations.

3883   The question isn't one of plural subjectivities alone; at its core the question of
3884   cognition requires a movement away from instants in time, place, and space, that I,
3885   that is from the traditional ways in which the human condition is ordered through its
3886   dialectics (including the dialectics of law and norm) that is built on the supposition
3887   that time can stand still somehow. Generative programs, and even Broekman's Self-
3888   E already point toward the absurdity of that supposition in the face of the induc-
3889   tive iterative rationality—the calculus—of flows minutely different from iteration to
3890   iteration but always embracing the flow, the arc dy and its dialectics in the flow as
3891   the intersubjectivity of plural subjects—$dy/dx/dY/dZ$ (the self, the collective self, the
3892   virtual self, the virtual community of virtual self). That flow requires a movement
3893   from the balance sheet of reality to its ledger entries—to its flow. And that flow is
3894   possible through the iterative inductive characteristics of modeled reality—always

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647 Collective immortality through the preservation of memory appears as close as one can get in human and data based life forms. Cf., Sebastian Gäb, "Non-personal immortality," *Religious Studies* (2023), 1–14 [https://doi.org/10.1017/S0034412523000525]; Michael Eisenstein, "In Pursuit of Data Immortality," *Nature* (2022) 604 (7 April) 207–208.

648 Sylwia Wojtczak, "Endowing Artificial Intelligence with legal subjectivity," *A.I. and Society* (2022) 37 205–213.

649 Heather Browning, Jonathan Birch, "Animals Sentience," *Philosophy Compass* (2022) 17(5) 17:e12822; available [https://doi.org/10.1111/phc3.12822]; Daniel Goldsworthy, Daniel; and Ian Robertson, Ian, "Recognising and Defining Animal Sentience in Legislation: A Framework for Importing Positive Animal Welfare Through the Five Domains Model," *Monash University Law Review* (2021) 48(1) 1–22.

consuming –taking constant pictures of aspects of the human condition about which it is meant to be interested, and then producing output. That future interaction is already here—in the financial loan case resolution in a Chinese court in which a physical judge and "Xioazhi" an A.I.judge assistant now work together to produce case resolution.[650] That is only the beginning; a leap that van be understood only by proceeding through Broekman's analysis to the pluralities of conversion/cognition that awaits us all.

Broekman, thus, makes possible the intuition of a basis for cognition as a function of the technologies that produce cognitive multiplicity. It is on the calculus of cognition that an A.I. semiotics can be built. Broekman has provided the conceptual tools to understand that, and has pointed to its transformative epistemology(ies). At the same time, it is a generative techno-cognition that remains trapped in the cognitive ecologies from which it seeks to emerge. Broekman has made it possible to begin to understand the possibilities of human cognition as detachable from the human, even as it remains connected. Those possibilities enrich the *human* experience by multiplying points of (inter)subjectivity, making it possible be *human* beyond the phenomenologically corporeal. Broekman explores a cognition that posits virtual and generative non-human sentience, yet at the same time remains *tied to the centrality of the corporeal, the natural, human.* Thus entrapped in the binaries of the natural and its vagaries, and in the dialectics of the flesh, the iterative mimesis of cognition it can be projected from the human subject to a plural subjectivity that incorporates the virtual representation of the self—the selfie and the SELF-E.

In this way, Broekman is able to develop a semiotics that makes understandable the current thrust of human reaction to the liberation movements of non-human generative intelligence. Contemporary movements toward the regulation of A.I. and its manifestations exhibit all of the characteristics of the self in its construction of, infatuation with, and exploitation of the virtual selfie/SELF-E. It is, at its core, an exercise in the phenomenology of subordinating multiplication where collective versions of the self may be developed to serve humanity.[651] The ancient nations of the self at the center, the technological possibilities of self(ish) extension through the 'magic' of technology, and its re-incorporation into the ancient construct continues to define the limits of the human cognitive capacity and the borderlands of perception, even of those objects of its own creation.

At the same time, Broekman provides the pathway for overcoming the all-too-human in its dialectics with detached or detachable sentience. It is now left to the rest of us to perceive, experience, and (eventually) embrace this more expansive plural. What remains to be done? One might start, as suggested here, with a deeper

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[650] 法官庭审上"袖手旁观"？浙江首创AI 法官助理"小智"上线 (2019-09-23)杭州网[The judge "stands by" during the court hearing? Zhejiang's first A.I. judge assistant "Xiao Zhi" goes online (2019-09-23) Hangzhou Net]; available[https://ori.hangzhou.com.cn/ornews/content/2019/09/23/content_7272443.htm].]; Daniel Goldsworthy, Daniel; and Ian Robertson, Ian, "Recognising and Defining Animal Sentience in Legislation: A Framework for Importing Positive Animal Welfare Through the Five Domains Model," *Monash University Law Review* (2021) 48(1) 1–22.

[651] Chesterman, et al., "The Evolution of AI Governance," supra. (exploring semiotic consensus on the relationship between humans and the constitution and utilization of generative intelligence).

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consideration of the promises of opening human cognition *from in itself to among sources of cognitive possibility*. Non-human natural cognition suggests a pathway in the direction of which Broekman nods. A.I. and generative intelligence suggests another. The pathway is paved in the dialectics of plural flow, as Broekman develops, and further, autonomous mimesis, as suggested in these pages, stripping away the ideologies of natural-artificial binaries. The failures of contemporary mechanics of social relations in the face of the rationalities of A.I. driven sentience suggests the inevitability of a move away from the primacy of balance sheet thinking and back to the ledger (our collective flow), and thus to the iterative calculus of sentience among autonomous plural subjects. The effects on social relations, not the least of which on its regulatory structures, will be profound. When humanity looks itself in the mirror, it will, necessarily see a quite different, and plural Narcissus; but the Narcissus staring back will no longer be entirely a manifestation of its reflection.

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