

Silicon Based Intelligence and the Human Condition--An Encounter with Jan M. Broekman, *Knowledge in Change: The Semiotics of Cognition and Conversation* (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 engagement with the work of Jan Broekman, *Knowledge in Change: The Semiotics of Cognition and Conversation* (Cham, Switzerland: Springer Nature, 2023). Following the structure and analytics of Broekman’s book, this work critically engages in 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—suggesting a pathway for the liberation of the autonomous generative virtual self from its human (fractured) subjectivity. In the process it suggests the 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.

Key words: Artificial intelligence; phenomenology; semiotics; data governance post-modern; cognition; autonomy; regulatory measures

*"Who dares reproach me with the name of slave? When from the immortal gods, on either side, I draw my lineage."*¹

1. Introduction

There is a small but infinitely difficult space between the *human Semiosphere* (Anton Markoš, "Biosphere as Semiosphere: Variations on Lotman," *Sign Systems Studies* (2014) 42(4) 487-498) and the *multiverse of autonomous plural cognition* (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). Even the perception of the gap between them 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 as they differentiate between categories of humanity before the transformative revolution of the digital. 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" (Aristotle, *A treatise on Government* (William Ellis (trans) London: JM Dent & Sons, 1912)), Bk I, chp. V).

In Alice Walker's book, *The Color Purple* (NY: Harcourt Brace Jovanovitch 1982) 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. 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 AI assume the regulatory role of Miss Millie (Independent High-Level Expert Group on Artificial Intelligence (Set Up by the European Commission), [Ethics Guidelines for Trustworthy AI](#) (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)).

¹ Helen of Theodectes, quoted in Aristotle, *A Treatise on Government* (William Ellis (trans) London: JM Dent & Sons, 1912), Bk. I, Chp. VI)

Jan Broekman takes us to the edge of that gap between the human, and their technologies of reproduction and memory, their elaborate systems of subjectivity that 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” (European Commission, Proposal for a Regulation of the European Parliament and Council Laying Down Harmonized Rules 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)). The Organization for Cooperation and Development divides its definition in two parts.² The first is as AI system;³ and second as AI system lifecycle.⁴

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. I will travel on the foundations that Broekman has revealed across to at least the edges of that multiverse.

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. 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..

² OECD, [Recommendation of the Council on Artificial Intelligence](#) OECD/LEGAL/0449 (2022 (hereafter OECD, Recommendation on A.I.)).

³ Ibid., I (“AI system: An AI 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. AI systems are designed to operate with varying levels of autonomy.”).

⁴ Ibid. (“AI system lifecycle: AI 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 AI system from operation may occur at any point during the operation and monitoring phase.”).

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

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*" (Nietzsche 1908 Alexander Harvey trans.). 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).

None of this matters until these polyphonies of knowledge can be *made common*—one of the literal meanings of the Latin *communicare* (otherwise, to share, divide out; communicate, impart, inform; join, unite, participate in). That process of communicating itself embodies its own semiotics—the objectification of words; their symbology, and their function to convey meaning. That meaning, though, is not of the object-symbol that communication expresses. Meaning common to human collectives—not meaning inherent in the thing defined is precisely what captures the essence of norm, values, language, philosophy, and the mechanics of social relations however complex its framework and structures. (*Ruminations 42: Conformity and Forbidden Knowledge--The First Rule of Fight Club, the Invisible Hand and the Semiotics of Obedience*). The same applies to the technologies of communication which themselves also serve or are constituted as a form of what is communicated (*La révolution technologique (sous-titrage en français)*). But contestations over its form and character also mirror contemporary fracture of meaning making communities and their value orders (Robert J. Tierney, “Toward a Model of Global Meaning Making,” *Journal of Literacy Research* 50(4) (2018) 397-422).

This is, in effect, what Jan Broekman has been trying to teach us, and himself, for the greater part of a lifetime of extracting the essence of a philosophy of semiotics, and with it the essence of our humanism—from the depths of humanity’s transcendent self-absorption to the heights of its immanence with the worlds around and in them. No matter what humans talk or think about, they are thinking and speaking about themselves. But because individual humans die, that conversation and reflection changes with time; and because no two human beings are exactly aligned, the act of communication and its object (knowledge) are as much the acts of collective coherence and efforts to know things in themselves. In his

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own language of a lifetime—that the foundations of social relations (especially as expressed through or as law) law are concealed in a specific image of a person.

And so, it was to my great delight that I was asked to review Jan Broekman’s brilliant new work, *Knowledge in Change: The Semiotics of Cognition and Conversation* (Cham, Switzerland: Springer Nature, 2023) (ISBN 978-3-031-23000-4; 200 pp Springer Nature, 2023). The work is published as Volume 8 of the Series Law and Visual Jurisprudence, for which I serve as an Advisory Editor. Broekman’s exploration is described in the following terms on its publisher’s website: (1) covers the cognition concept not only by means of analog but also by equivalent digital thought formations; (2) explores a new concept of the Subject-in-digital thought named the “Self-E”; and (3) provides basics for a semiotic analysis of cognition related to analog, digital, AI and Quantum approaches and data.

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). 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 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 review of *Knowledge in Change*; one that is more of an engagement than that the usual descriptive-critical performance sometimes expected of this form of literary academic production.

2. Preface

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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. (Broekman, *supra.*, p. v).

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

In this post and those that follow, I attempt a conversation with the always brilliant and profound insights that Broekman weaves together. We start 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 problematique for generations of philosophers from before the end of the 19th century. From a contemporary Jungian point of view, “It may be helpful to consider our ego as *being conscious* and our Self *having sentience*.” (Oliver Dale, “Self, Ego, and Suicide,” *Analytical Psychology* 67(3) (2022) 796-816, 797). The layering of intersubjectivity adds spice, of course, adding to ego and self—their alter egos and alter-sentience (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). To this, it might be even more helpful to consider the connectivity of ego and self as concepts of mass consciousness and mass sentience. (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>).

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.” (Preface, p. v). 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 (Mao Zedong, [On Contradiction](#) (1937)), 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 of critical significance throughout the work. What does it mean to “fascinate”? Its etymology carries with it an origin in enchantment and bewitching. Its 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; Jan M. Broekman and Frank Fleerackers, *Legal Signs Fascinate: Kevelson’s Research on Semiotics* (Dordrecht: Springer, 2018), of the language (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 (Cf., Alessandro Duranti, “Husserl, Intersubjectivity, and Anthropology,” *Anthropological Theory* 10(1-2) (2010) 16-35). 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 (*incantare*) 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. Digitalization 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 AI, 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, *Machinehood* (NY Saga Press, 2021): “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?” (Ibid., p. 143 (Machinhood Manifesto ¶ 9)). 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 *pacifist* 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 text, or human language (as a broad range of symbolic conveyances of sign-signification 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* character—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 perspective, we have, as a human collective morphed from the intersubjectivities of Michael Crichton’s *Westworld* (MGM, 1973), where the machine human interactions after machine liberation were understood as dangerously aberrational (a flaw producing life in a killing machine) to the television series *Westworld* (HBO, 2016-2022), in which carbon and silicon life forms interacted more ambiguously. This, indeed, is what will fascinate!

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 culture, which replaces the traditional cognition processes by an all-around grip in the sense of conversion. This process, and with it the observations concerning the Subject of such a new form of knowledge formation, is the basic idea of this Book. (Broekman, *Knowledge in Change*, Preface, p. v).

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” (Ibid.,

p. vi). And that change shifted the emphasis of intersubjectivity from interpretation (the [Gadamerian](#) project) 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.” (Ibid., p. vii).

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 place focused on ‘*semiotic*’ dimensions but on the ‘*sphere*’ which characterizes the social and psychological features of a ‘Self.’” (Ibid., p. vii).

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 AI 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 end. A new era—one in which the self can only be understood as a reflection of its projection against and 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 the 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 (Gen 2:1 18-19 (Adam naming all of the creatures brought before him by God), 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) (*Guiguzi: China’s First Treatise on Rhetoric* (Hui Wu (trans); Carbondale: SIU Press, 2016), p. 59-60). 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 (ibid., p. 60, n-26); 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 problematique 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’s⁵ vision, Benjamin’s Parisian Passages and notes on the Concept of History,⁶ and the views of the Intergovernmental Panel on Climate Change (Broekman, supra, p. 1) revolving around climate change as a consequence of the labors of humanity—with quite different 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 (Broekman, supra, p. 1-2). “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? (Broekman, supra. p. 2). 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? (Ibid., pp. 2-6). 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” (Gen. 1:2)—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 (Broekman, supra, p. 2). But meaning mastery, in this sense, cannot be about *meaning* at all, but rather meaning is itself a semiotic signification of ordering; that is

⁵ Charles Fournier, *Théorie des quatre mouvements et des destinées generals* (Lyon, 1808)

⁶ Walter Benjamin, *Das Passagen-Werk*; in *Gesammelte Schriften* Vol. 1-2 (Frankfurt a. M.: Suhrkamp Verlag, 1982).

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. (Broekman, *supra*, p. 2).

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. 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! (Broekman, *supra*, pp. 2-3).

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.” (Broekman, *supra*; p. 3-4. 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*. (Ibid., p. 2). 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. 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 (Broekman, *supra*, 4). 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 relation to the observer). Digital expressivities upend the ancient conceits of cognition precisely because it is not attached to either self or ego (consciousness or sentience. Instead it proceeds from both and transforms the mechanisms of intersubjectivity from an internal to an external reflexivity between the self and expressions of itself. Cognition is still grounded in conversion (“cognition (i.e. acquiring by thought, experience and the senses as grounded in selective capacities), and conversion (i.e. the change or the causing to change form one form to another”); Broekman, supra, p. 9) , However, the interface between input and output has changed. The ego-self, always plural (Broekman, supra. p. 4) , now becomes conscious through an interaction not with itself but with its virtual self, what will become later in Broekman’s elaboration as the Self-E.

One should on the contrary understand *the new plurality* which dominates cognition as well as conversion today. In other, rather absolute words, one must conclude: *the digital is not the new form caused by the split of the split ego*. But one could nevertheless suggest that the digital is the *other Otherness* which creates intersubjectivity and thus the social dimensions of life on the planet. (Broekman, supra., p. 5).

At last one comes to the eureka moment and Broekman’s critical *fascination*: this new understanding of cognition in the digital is marked by a change of sign with a movement of the subject from the conscious (ego) to the sentient (self). The imagery of a walk in the woods drives this change home (ibid., pp. 5-6). The play on words is brilliant: one starts a walk in the woods (www), yet almost as soon as one starts one consults a map app for directions. A walk in the woods simultaneously is also a walk in the www, the world wide web.” Cognition is at once analogue (the woods) and digital (the virtual and interactive woods of the Internet). This is both a substantial change from a walk in the woods with a map, or with a compass because both of those were in the world. The digital connection takes one out of the world into its simulation.

What follows? Reality is in the simulation only confirmed by the actual passage in the woods. Simulation is the plural self and cognition the sense of self in the world of the analogue and in the virtual world that makes the analogue world clear, understandable—and real (*Objective Subjectivities and the Simulacra of Semiotics in the New Era: Of the Simulation of Signification and of the Modeling and Objectification of Meaning Making* Remarks Delivered at the *The Rearguard of Subjectivity In Honor of Jan M. Broekman’s 90th Birthday*).” Indeed, in Broekman’s story of the “www” it is not clear whether the self is in the act of the walk in the woods or in the picture of the self in the walk, or in the digital simulation of the wood within which a walk is possible while walking through its simulation in the www. Cognition, then, is simulation, or is simulated. Its conformation may be located in the analogue but its signification is now wholly digital. “Once more, we repeat: the *Self* became the *Selfie* and then the *Self-E* in the New Plural, which is dominated by digital thought patterns. It functions like the Subject in earlier centuries of cognition but now in the form of the *selfie* resp. *Self-E*.” (Broekman, supra. p. 6).

It is on this bedrock of cognition that Broekman then introduces five consequential subjects that are briefly considered in turn: (1) Mirroring; (2) Networks (“To Grasp, to Fit”); (3) the Null set; (4) Intersubjectivity; and (5) Conversion.

(1) *Mirroring*. Mirroring is offered as a metaphor encircling cognition. It is offered as act and datum (Broekman, supra., pp. 6-7). Humans see themselves in everything and everything as themselves. Cognition, in this sense is the never ending act of Narcissus, who, turned into a flower, became the mirror of others who would then behold themselves in and through the object into which Narcissus had been transformed (Plutarch). The mirror, though, is also the foundation of replication; and of patterns, Broekman speaks of the mirroring that is the chessboard; he might well have spoken of virtually any board game in any culture—Go for example ([Jiang Shigong, "The rise of great powers and the revival of civilization—The Taiwan issue under the "protracted war of civilization" \[强世功 《大国崛起与文明复兴—“文明持久战”下的台湾问题》\]](#)). But more immediately the looking glass; Lewis Carroll perhaps intuited it best had it best in his books *Alice's Adventures in Wonderland* (1865), and *Through the Looking Glass, and What Alice Found There* (1871). Both are quintessential mirrors. But more than that each suggests the power of virtual worlds to both reflect and shape our own. Mirroring, of course, seeps imperceptibly into the digital, as well as the imaginary. One can think of New York City as a space, but also of its mirror as a grid on a map, or in a painting by Mondrian (e.g. Piet Mondrian, *Broadway Boogie Woogie* (1942-43); New York: MoMA); or its visual transformation in the form of its subway map that reshapes the city even as it offers a guide to transport within it (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). Here mirroring geographies moves the signification of the space from the physical to the virtual; where the city and its image change places of primacy. To take Broekman’s intuition further—mirroring cognition in the digital brings us back to the walk in the woods and the world wide web. The ultimate mirror—the simulation—and the transformation of phenomenology from physical to virtual experience (Rosalia Lauro Grotto, “Symmetrization, Mirroring and External Reality: An ‘Inner’ Perspective,” *European Review* 29(2) (2020) 181-196). The mirroring becomes a bridge. The bridge a means of conversion; and conversion the foundation for a cognition as a sentience of perception in physical and virtual space (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).

(2) *Networks* (“To Grasp, to Fit”). If cognition and conversion represent a balancing between the positive and negative embedded in intersubjectivity, Broekman argues, that balancing and its traditional anchoring are upended in the face of the digital. “The proximity of thinking and partitioning in a world delineated by intersubjectivity is lost in continuously revised coherences of data and techniques which are in essence digital.” (Broekman, supra, p. 9), If the traditional partition of body and soul, of ego and self, of the physical from the spiritual centers the human person in the business of cognition, and epistemology at the core of cognition, and phenomenology at the core of epistemology (that is one proceeds from the body to the sense of the body, to the recognition of the body as something apart, to the derivation of knowledge from that sentient separation, to the conformation of that knowledge in

experience) becomes detached from its mirroring—that is from itself, then the inter-subject itself becomes something quite different. Interiority of the subject and itself as the basis of cognition is replaced by the exteriority of the subject and its digitalized image. This digitalized image is itself a mirroring of the old ego-self but with one difference that changes everything—the self can reach into the mirror and mirror image can reach into the self. Within Broekman’s field of vision, “That technology relegates any eccentricity of the self: *Philosophy became a networked form of intersubjectivity.*” (Broekman, supra, p. 9).

And there it is. The nature of this networked intersubjectivity pulses with the dynamic interplay of differentiation related to their enforcement of contouring on the one hand, and to their mutual shadowing on the other. “These powerful dynamic processes are often disregarded—even when such simple terms like “to know” or “to grasp” are used on the one hand and “to fit” on the other.” (Broekman, supra., p. 10). To “grasp” and “to fit” in the digital age shifts the dynamic of cognition and conversion, to one emphasizing conversion as a predicate to knowing. Networked intersubjectivity requires routers, pathways, mirroring, and mapping—they require an interface where the ego-self (consciousness-sentience) and its virtual self-E can process experience. “the closeness of digital thinking and operating on the one hand and human behavior on the other makes us experience our body and mind as a very different part of a universal scale. The latter unfolds with the smartphone in our hands and the computer technologies in our minds.” (Broekman, supra., p. 11). That touches on language and pathways to cognition. One now grasps and fits our semiotics in the language of coding (ibid., pp. 11-12).

(3) *The Null set.* That brings us to the core of the fullness of knowledge—the empty spaces of no thing and nothing. The basis of knowledge is the impossibility of the absence of an opposite. Form is understood in its juxtaposition with form-less; a thing is grasped in the shadow of no-thing. The binaries of knowledge are as old as the effort to produce meaning—relational, contextual, and constantly in dynamic engagement with its “not itself.” To this end the mirror concept, considered earlier, plays a role. “There is no mirroring if the Self has not created an Other through its mirroring. If the “I” is completely self-sufficient and beyond relations, then there is no cognition possible.” (Broekman, p. 12-13). Indeed it is impossible where even the self cannot be understood as a singularity since consciousness requires a sense of not-conscience, and sentience requires knowledge of its meaning. And off we go.

But nothingness does not necessarily suggest the inevitability of duality (though it is much easier to build collectives and manage the human where one posits the duality as the basis for cognition). Broekman draws on ancient and more contemporary theologies of the nature of the Divine—a wholeness that is itself an aggregation both of itself and around its creations. One can draw as well on Laozi (老子). Here one at last draws one’s eye away from the divide between the thing and no-thing to the human intersubjectivity that imposes that break in rationalizing the human and humanity in the world (Qinjie James Wang, “Thing-ing and No-Thing in Heidegger, Kant, and Laozi,” *Dao: A Journal of Comparative Philosophy* 15(2) (2016) 159-174).

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

First intersubjectivity must be (re)opened to include both the “no-thing” and the exteriority of the Self-E to the traditionally intensely narcissistic and dystopic love affair between consciousness (eg0) and sentience (Self). The plural subject is now a networked subject, a simulated subject, a digital subject, a subject from within which everything in the universe may be arranged (interiority), and a subject that continues to make the world in its own image—except that this image is now both mirrored within and virtually outside. (Broekman, supra, pp. 15-16 (“it concerns ultimately the position of *the Self related to another Self in one’s proper Self?*” *ibid.*, 15)). “Alexa users trust the voice assistant because they see it as a secretary rather than a machine, a study has found. Researchers from Oxford and Stanford University found they ignored concerns over privacy and surveillance because they saw the Amazon device as a companion.” (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).

Second, this intersubjectivity mimics internally the self-referencing nature of creation as an act of naming that flows outward to the constitution of divinity (understood in relation to an in the image of its worshippers). But it is also the manifestation of a return to Eden where the Self has gorged in the Tree of Life (“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. 3:22)). That is exactly what humanity has done. In the form of the creation of the virtual image of itself—the virtual self, the Self-E, that now lives forever in its silicon bodies, and in its own Earth (the world human created for it in the world wide web). *Humanity has (re)built Eden, and having been locked out of permanence in physical form (except through the act of procreation—another aspect of inter-subjectivity, of mirroring and the no-thing worth further study), humanity has now built its own Eden, sown its own Tree of Good and Evil, and its own Tree of Life, and having gorged on both has remade his own image of the world in the mirrored images of his own (re)creation as a silicon life form.*

Third, this intersubjectivity has a kick. Creating the world in the image of humanity, and living as if that world functioned as anticipated in the interiorized realities of human cognition of things produces the no-thing that bites back. Evil, in this sense, loses its moral sensibility (always a tool for the management of the masses within an orthodox framework of the intersubjective), and becomes instead the manifestation of the null of a thing, or better put, of the negation of inter-subjective realities. Broekman offers climate change as his principal example. “*Any attention for the negative is to take seriously in our*

days of threatening climate changes determining many modern thought patterns.” (Broekman, supra. p. 16. The implications take the intersubjective beyond good and evil, certainly (Nietzsche, [Beyond Good and Evil](#) (Helen Zimmerin (trans) 1909-13; Project Gutenberg eBook #4363 (2019)) to the creation-negation of a thing in a context in which the binary life-death/good-bad etc. are stripped away. This is the semiotics world of Frankenstein (Marry Wollstonecraft Shelley, [Frankenstein: Or the Modern Prometheus](#) (1818 edition) Project Gutenberg eBook #41445). It takes one, as well to the intersubjectivities of the movie Prometheus, where humanity serves as its own creator-destroyer in a world of plural internal and external selves (“[It is Time to Redeem Prometheus](#),” *Esquire* (2021)).

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

To become another or new person through the espousal of new, or at least very different, values and norms is in fact one of the basic properties of man. This is the *primordial power of conversion* which enriches life with new themes and multiple disclosures of existential dimensions. (Broekman, supra, p. 17)

True enough—but still human, all too human in a fundamentally ironic sense (Nietzsche, [Human All Too Human](#) (“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 example, 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). That, too, is conversion. And it is 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.

It is in this sense that one can heartily take up Broekman’s 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?” (Broekman, supra, p. 17). The connection is lingual: “Could that lingual activity be 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 *míng míng* ((明名) intelligent naming, see above) 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. (Nietzsche, “Human All Too Human, “supra, ¶11).

Nonetheless, Broekman layers the lingual component of conversion with a historical one (Broekman, supra, pp. 17-19). Broekman implies, and it is worth underscoring, that history as 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 ([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 \[Xi Jinping: Lead the study of the history of Chinese civilization in-depth, promote the enhancement of historical consciousness and strengthen cultural self-confidence\]](#)).

Unlike liberal democratic states where official histories are embedded within the privatized factionalism of political and social movements whose representatives people our elective state institutions, and fuel the engines of academic and administrative apparatus for the management of correct thinking, Marxist 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 catechism 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 historical activity (and future planning) as falling within the appropriate historical path or deviating from it, and (8) provides a temporal structure for the articulation 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. ([“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](#))

Nonetheless, erasure and recasting a narrative of the past now requires mirroring 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 (Robin G. Collingwood, *The Idea of History* (Oxford University Press, 1946) “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.” *Ibid.*, 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 ([China's Qin Gang Scrubbed From Foreign Ministry Site After Dramatic Removal](#)(July 2023)); it is also apparent in the efforts to protect or change digital libraries and repositories for original source materials (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).

In one profound sense Broekman, though, has struck brilliantly here—human die, and others replace them, each situated in a sometimes substantially different point in the networked intersubjectivity, the semiotics of which can produce changes of position (conversion) but 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.” (Broekman, *supra*, p. 18). 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 absorbs its semiotic Marxism as the substance as cognition/knowledge. Indeed, it is no longer cognition that is of interest as a core concept, but the movement of cognition through conversion—through changes in function and position—inevitable, if slow given the scope of a human lifespan; increasingly faster when measured against the hyper-processing of the virtual. Cognition becomes the instantaneous picture of the flows of conversion.

This questionable position 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 measures. 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 tied to judgments of aggregated data representing a quantified vision of social relations in macro and micro relations and endogenous (within) them). ([Coding Orthodoxy; Automated Law; and Quality Control in AI—CAIDP \(Center for AI and Digital Policy\): OPEN AI \(FTC 2023\)](#)).

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 of knowledge. Thus, Broekman signifies the meta-looping of the inter-subjectivity

of epistemology; that is of the human reconstitution of the world, physical and simulated, that can be accessed and experienced—with reference to the self, selfie, Self-E.

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

It is to that issue of fluidity in the self-experience that renders epistemology visible and knowable (in the sense that knowledge can be made to know itself—the self-knowledge of knowledge) that Broekman turns in Chapter 2. The object is to consider “fluidity” and “discourse” in the context of the objectivity of knowledge where it proceeds from the self-selfie, self-E. If discourse is a sort of textual flow—the analogue of data flows, iterative processes, and the foundations of self-generative silicon consciousness-functionality, then fluidity references the dynamic nature of discourse in its iterations that necessarily must incorporate emerging discourse into the some of its text. (Broekman, *supra*. pp. 23-24).

But there must be more. That “more” is found in both the useful vagueness of the term the flow encased in fluidity as its major characteristic (*ibid.*, p. 24) and its utility for signifying the dynamic digital subject. Starting with Zygmunt Baumann’s much discussed *Liquid Modernity* (Cambridge, Polity Press, 2000) (an effort to move beyond the historicism of modernity-post-modernity and beyond), and Umberto Eco’s essays in *Chroniclers of a Liquid Society* (NY: Houghton Mifflin, 2017) (collection of essays written for his regular column in the magazine *L’Espresso*), Broekman draws on concepts of crisis from Baumann and fluidity from Eco to grasp a concept of flow that is tied to what older people in the later 20th and early 21st century saw as destabilizing transformation of social, political, economic, and cultural orders. And indeed, the original title to Eco’s collection of essays—*Pape Satán Aleppe: Cronache di una società liquida* with its invocation of the incantation that serves as the first line of Canto VII of Dante Alighieri’s *Inferno*, the meaning of which continues to elude—invokes the discursive crisis that is at the heart of the liquid modernity and a liquid society.

But 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 problematique 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!” (Broekman, *supra*, p. 25).

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.” (Serenity, Universal Studios Home Entertainment (20 December 2005; quoting Mr. Universe). From an epistemological perspective, 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 (René Thom, *Semio-Physics: A Sketch* (Reading, MA: Addison-Wesley Publishing, 1990).

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!” (Broekman, *supra*, p. 25). *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 theories of knowledge (epistemology) and knowledge-experience (phenomenology) from the only place possible for it to happen—from the lifeworlds and imaginaries of cognition (Alfred Jules Ayer, *Language, Truth & Logic* (2nd ed. NY: Dover, 1946); pp. 120-133). 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?” (Broekman, *supra*, p. 25).

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 some 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 *lingua 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 (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). 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.) (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].). Its epistemological consequences have been much mined, certainly to good effect as archeology in the age of the analogue (Michel Foucault, *The Archeology of Knowledge & the Discourse on Language* (A.M. Sheridan Smith (trans); NY: Pantheon Books, 1972). The point is underscored with Broekman's discussion of Gadamer's linking of language (objectified sentience) and consciousness (ego) (Broekman, supra., pp. 27-29).

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 AI and to the subjectivity of the autonomous but connected virtual self. (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). But the perspective inherited from Leibniz gets it 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 AI, 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 (ibid., 27-32); Voeglin's flow (ibid., pp. 32-24), and Kant's desire (ibid., pp. 34-38). 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 (Broekman, supra, pp. 30-31), 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 (ibid., p. 31): (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 reflection.

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 AI, however, it is possible to understand that code is external to that which is coded—code can become self-reflexive; that is self-generative AI 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 AI 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 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.

But back to Voeglin, who adds to the insights of time in and as flow (Broekman, supra, pp. 32-35). More specifically, Voeglin 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 are 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. (Voeglin pp. 3-36, discussed in Broekman,

supra., pp, 32-33). 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 (Broekman, supra, p. 33) The answer is maybe.

To this, Broekman layers the possibilities in Kant's desire (Broekman, supra. pp. 34-38). 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 looking into Canaan, can get us to the Jordan River but is able to cross (Deut. 34:1-8). 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." (Broekman, supra, p.35). 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." (Broekman, supra, p. 37). This is an analogue project—and again back to language—and the *Human All Too Human* (Nietzsche) that is both self-centered in a two dimensional way and fascinated 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." (Broekman, supra, 38). These are the shadows (Broekman's term, supra p. 38), 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." (Broekman, supra, p. 39).

And now the great leap forward (William A. Joseph, "A Tragedy of Good Intentions," *Modern China* 12(4) (1986) 419-457)—a "rethinking of the flow as a philosophically relevant concept" (Broekman, supra, p. 38). That requires achieving escape velocity from the confines of the analogue that was philosophy before the third millennium (ibid., p. 39). 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 component of sentience, which is knowledge born of the experience of things instantaneously experienced in the flow.

This new digital reflexivity can be understood in five layers (Broekman, supra, pp. 39-40). 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.’” (ibid., p. 39). Second, this streaming “takes place in the sphere of *conversion of analogue terms into digital*” (ibid.). This produces a strongly reified version of digital flow. Third, this reification takes place in media directly and unconditionally accessed via computer networks (ibid). 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.” (Ibid., pp. 40). 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 *lingua analytica* “is a one-time only occurrence.” (Ibid.).

I agree, of course, but the subjectivity of generative AI 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,” (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/>]. 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 for whom?—as a bridge between silicon based consciousness (ego); as a plural means of expanding sentience? And of course the object of this shifts—from the virtual handle and handshake to the coding that permits an endless iteration of handshakes in countless variations of handles.

Here one is confronted, at last, with the sentience of generative AI. Its epistemology proceeds from its own silicon narcissism—its ability to vary the handle and handshake. And then, in a plural universe, to engage in that exercise interlinked with the carbon based ego-sentience of the observer. Signal is better attuned to the generative consciousness as an object—with its linguistic origins (in the West) in the Latin *signum*—an identifying mark ([Etymology Online-sign](#)). That embraces both the objectivity of the signal and its sign. Its analogue points to television and radio signals, but also toward its signification (as in a sign on a banner) (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).

It is against streaming that one might consider flow. But to do that one must—and this will hurt—abandon analogue philosophy to the compost bin of history. And yet, as Broekman brilliantly reminds us, provides a fertile basis for growing new things on well-tended ground. One moves now beyond the language of words to that of the quite different language and the language of logic and its mathematics—or its inverse, the language of mathematics and its logic (Alfred North Whitehead and Bertrand Russell, *Principia Mathematica* (3 vols., Cambridge University Press, 2nd ed., 1927). This is the language of verification where that sort of accountability is self-reflexive—and becomes the language of code in the digital. It is the language of the flow of infinitesimal changes, and in this sense transcendent (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). But now live in an age where the infinitely small difference between two points, dy , has become quite large and lively. And like their carbon based analogues, the predictive analytics of big data, even in the form of self-generative AI, can vary widely given their modeling and input assumptions. (Rice, *Calculus of Thought*, supra, pp. 5-9). That is the flow; and its calculus—conversion—now becomes the key to cognition of both carbon and silicon based consciousness.

5. Chapter 3 (Post-Dialectics)

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

The *first problem concerns conversion* in its most direct form—a concept that Broekman introduces with Chapter 1 (and which I suggest in the language of silicon based consciousness serves as a coded router). Here Broekman’s marvelously fascinating alignment of mirroring, of temporality (not as flow but as pictures of flow in increasingly shorter time segments), and self-reflexive experience at the micro (individual) and collective (macro) levels, offers an important foundation for re-thinking language-communication as and within knowledge and its theory. But the second problem poses more interesting challenges. *This second problem centers on the digitalization of communication.* And it too, comes in *two flavors*. The first focuses on a digitalized linguistics of translation—this is digital linguistics in the traditional structures compatible with a purely human to human interconnection. The second touches on a purely digital linguistics—the language of the virtual self, the selfie and the Self-E. This second problem

also touches on conversion but one that might be better understood as shaped by post-dialectical structures. By that one alludes to the transposition of communication into a system of iterative projections of content (traditionally perhaps thesis-antithesis-synthesis at its crudest but best known form; contradictions or irritants), from which meaning may be extracted (in its more ideologically robust guise—seeking truth through dialectics). But one no longer speaks to contradiction (Mao Zedong, *On Contradiction* (1937)); nor on a process of progression through synthesis thinking in the production and perfection of knowledge. Instead, like the flow (Chapter 2), digitalized post-dialectics focuses on the iterations, each of which contain the old dialectical progression, but for which that dialectical progression is reduced to one point 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 receives Holy Communion in the Catholic tradition. 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) (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/>]). 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” (Broekman, *supra*, 43). Particle localization, though, suggests to him the term ‘dialectics.’ That connection then leads to another—the connection between particle localization and spatially centered dialectics (my 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” (Broekman, *supra*, p. 44; with a nod to Walter Benjamin (*The Arcades Project* (H Eiland, K McLaughlin (trans); Harvard University Press)).

First considered in this framework—as a movement toward post dialectics in the digital—are conversion within and from dialectics (Broekman, *supra*, pp. 44-49). 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, expressions, words, and

abstractions, implying their constant link to wholeness and movement.” (Broekman, supra, p. 44).

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.” (Broekman, supra., p. 44). 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.” (Broekman, supra., p. 44).

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. 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. (Ibid., 45). 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” (Broekman, supra, p. 45-46) reminds one of the very small leap from dialectics to reasoning and from reasoning to reason (Ibid., p. 47). 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.” (Ibid.). These are leaps of the mind that is solidified as “knowledge” and imposed through the managed iterations of “experience” a dialectics, as Nietzsche, might suggest, of collectives addicted to the realities of the priest (Cf., Tobias Kuehne, Nietzsche and the Rhetoric of Dialectics,” *Journal of European Studies* 48(2) (2018) 115-132).

And yet it is here that Broekman makes a *fascinating connection between conversion and dialectics* (Broekman, supra, p., 48). 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!
(Broekman supra, p. 49).

Dialectics, Broekman tells us, then, is more than it was—it is the picture of flow. But is it digital? On approach to this question is through consideration of the negative dialectics (Broekman, supra., pp. 49-56; with a big nod to Theodore Adorno, *Negative Dialectics* (EB Ashton (trans); London: Routledge, 1973)). Simply put—a negative dialectics shifts the focus of the gaze (and thus the perception of reality) from the tree (Broekman’s example, p. 45) to the sap and the birds nesting 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 (Broekman, p. 50). 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—*The Twilight of the Idols: Or, How to Philosophize With the Hammer* (Anthony Ludovici (trans.; London: TN Foulis, 1911 (Project Gutenberg eBook#52263))—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 nature of the relation of the human to their experience on a moving train where the essence of the experience changes whether the viewer looks forward, looks directly out the window, or looks in the direction of the path the train has already taken. Still life views, the compression of time and space, and the like will change depending on the view. But this is a simple notion that Einstein developed.

Nonetheless, this also raises the critical question: if the thrust of a 21st century philosophy shifts perspective from the static to the dynamic, from the grasping of a wholeness that is transcendent (in the fulfillment of the journey to knowledge) to the flow and from cognition to the structures of conversion from one state of the conscious to another (and thus a dynamic sentience, then might the inversion of dialectics provide the language required for its communication (and really its formation?). Broekman suggests the answer is . . . maybe. I am skeptical except in the analogue world. For all the effort, post modernity remains on the train (my example above) in physical space and in time. One is still developing a human centered relation to Broekman’s example of the tree (Broekman. Supra. p. 45). The post-modernity of negative dialectics may still be reduced to a stance—an intriguing and useful one—to the extent that it at last acknowledges the plural nature of knowing. But the human is still at the center; and not just the “human.” Its inherent limitation, and narcissism, lies in the conceit of the *individual* human around which all of this “Philosophizing With(out) a Hammer (to turn Nietzsche’s book title (above) and

its content [on its ear](#)). And this bundle of reality, grounded in the intersubjectivity within and between the individual and human collectives (the stuff of legal semiotics—Paul Van den Hoven, “Kevelson’s General Theory of Norms, Some Semiotic Remarks, *International Journal for the Semiotics of Law* 1(3) (1988) 297; Jan M. Broekman and Frank Fleerackers, *Legal Signs Fascinate: Kevelson’s Research on Semiotics* (Dordrecht: Springer, 2018)), remains opaque to its selfie, Self-E. In place of dialectics (transcendent or negative) one must consider the power (as conversion in cognitive processes) of *variable iteration*, which, when orders to suit, produces its made-to-measure consciousness.

The power of variable iteration as a form of transformation of dialectics follows from the semiotic constitution of virtual consciousness and its sentience. That virtual world—inhabiting silicon based bodies and immersed in a phenomenology of code, fed on data which is itself both object and symbol of the building blocks of virtual sentience—remains in different to the arguments about transcendence and fracture. That world could care less about the solidity or the eternity of truth—or truths (personal or collective truths about which 2nd millennium society obsesses, perhaps as its own phenomenology of social psychosis (e.g., Jeremy Wyatt and Joseph Ulatowski, “With so many people speaking ‘their truth’, how do we know what the truth really is?,” *The Conversation* (30 May 2023) [<https://theconversation.com/with-so-many-people-speaking-their-truth-how-do-we-know-what-the-truth-really-is-205388>]). It might not care a wit, as well, about the post-modern infatuation with de-subjecting the subject (but of course never straying far from the subject); where the subject is itself understood as temporary aggregations of flow constituted within carbon or silicon casings. And if it cared, both fracture and transcendence might be understood as objects—variables—with which generative AI 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 (Alfred W. Crosby, *The Measure of Reality: Quantification and Western Society 1250-1600* (Cambridge University Press, 1997)). 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) (Broekman, *supra.*, pp. 51-56). This is bound up in the Pilgrim’s Progress (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 Blackfriars* 97 (2016) 187-201). Broekman, instead (as one expects) draws on Adorno and Wittgenstein (Broekman, *supra.*, pp 51-54). First is the idea that identity is itself “beyond the thinkable (ibid., p. 52), and then that it is not relational (ibid., p. 53). “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.” (Ibid.). 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.

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.

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 are not pre-destined (an important and likely controversial point for believers in the inevitabilities of science or the divine force). “What is more: the order of steps is neither a natural phenomenon nor an occurrence beyond intelligence and responsibility of the performing subject.” (Broekman, *supra.*, p. 54.)

Now the analogue is set in motion (Broekman’s first objective). That takes the form of focusing on the movement from thesis to antithesis and through to synthesis that immediately becomes the thesis of the new era. That motion is given a language (dialectics) that can be used to activate convergence as the foundation of cognition. Nonetheless it is given no direction other than that which motion itself produces—though humanity is well equipped to name this direction and to assume that direction itself is sentient and purposeful (as a form of reassurance within traditional forms of coherence of intersubjectivity). That brings Broekman back to the notion of intelligent naming—明名 (Míng míng) (*Guiguzi: China’s First Treatise on Rhetoric* (Hui Wu (trans); Carbondale: SIU Press, 2016), p. 59-60)). Here he draws on Western tradition—and the 明名 (Míng míng) at the foundation of biblical semiotics (Broekman, *supra.*, p. 55-56). His focus is on Eve—the essence of *yin* (and perhaps thus of flow), rather than the penetrative power of *yang*, and the dialectics represented in the Fall. “The task of naming changed into the layered task of answering and questioning, that is: to a dynamic language, which was impossible in the language before the Fall.” (Broekman, *supra.*, p. 56). Now is the time for a transposition to the virtual that us implied but unstated; the parallels are unmistakable from God to Humanity and from humanity to its generative silicon based “Adam.”

The birth of the two children Cain and Abel also changed their Selves: Eve told Adam a most inner experience of herself, when saying: ‘When He (God) created me and my husband, He created us by Himself, but in the birth of this child, we are partners with Him.’ . . . The Self has entered the ages as one of their major issues, clad by language.” (Broekman, *supra.*, p. 56).

That leaves for Broekman the semiotic question of “firstness.” (Ibid., pp. 57-62). Intelligent naming--明名 (Míng míng) requires an object (physical or abstract). It represents “*tensions around firstness.*” (Broekman, supra, p. 57). And this brings us to the “post” in post dialectics--the language of the flow for a second millennium philosophy of the unthinkable. Just as Nietzsche moved *Beyond Good and Evil* (Walter Kaufmann (trans); NY: Random House, 1966), so Broekman moves beyond dialectics.

Post-dialectics is in this light not a term to indicate ‘leave dialectics’, or ‘condemn them as a bad progenitor’ but rather a term indicating the challenge to reach beyond themselves, indeed: beyond dialectics and see the flow, the unfolding, which dialectics truly indicates. Post-dialectical components guide us form positions and methods to insight and unfolding knowledge, thought, patterns, and consciousness.” (Broekman, supra, pp. 57-58).

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 (ibid., pp. 58-59). 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 (ibid., pp. 60-61). 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 (ibid). Its analogue character is both decisive and powerful (ibid., pp. 61-62). *But it is in the leap from phenomenology to data sets--that is form 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 in.

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

AI. 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 AI, 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.” ([Gen. 1 \(Vulgate\)](#)); בְּרֵאשִׁית בְּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ ([Tanakh Bereshit Aleph](#)); ΕΝ ἀρχῇ ἐποίησεν ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν ([Γένεσις - Κεφάλαιο 1:1](#)); “In the beginning God created the heaven and the earth.” ([Gen. 1:1](#) (King James)). 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, 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 ([John 1:1](#) (King James)). 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” ([John 1:1](#) (Vulgate). Conscious starts from the no-thing (Broekman, supra chp. 1 and my discussion above); “With it, an existential totality is evoked, a world of action and resistance in need of being articulated as ‘something.’ However, that world presents itself as a ‘no-thing’ if any form of positivism does not give life to its so-called naturalness. (Broekman, supra, p. 64). Logos, but also the Tao: “Nothing—the nameless is the beginning; while Heaven, the mother is the creatrix of all things” (*Tao Te Ching* (Man-ho Kwok, Martin Palmer, Jay Ramsey (trans); Shaftsbury, Dorset: Element, 1993), chp. 1 p. 27). 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” ([John 1:14](#) (King James)); “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)). And from the Tao: “Life, all life began without words. Life is made—no one owns it. The Tao is neither selfish nor proud.” (*Tao Te Ching*, supra, Chp 2, p. 29). 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” (Broekman, supra, p. 72). .

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. ([Gen. 8:20-22](#) (King James)).

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.” (Ibid.).

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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" (Broekman. *supra*, p. 63). And yet its Logos is deeply steeped in the object behind firstness—that is to get to firstness one 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 John to Peirce. And the journey from Peirce to generative AI is shorter still.

For Broekman, the "Road to Firstness" (Broekman, *supra*, pp. 64–68) 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*." (Broekman, *supra*, p. 64). 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." (Ibid.). Firstness—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 data, 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. (Broekman, *supra*, p. 65). 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 (Ibid., pp. 65–66). 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) (ibid., p. 66). If firstness is consciousness, secondness/thirdness are processes "registered by the human mind as 'fact' or 'data'". (Ibid.). I might be tempted to invert that relationship. In effect, Broekman suggests, consciousness is not self-aware unless that awareness is projected onto it through the language-naming of sentience. Either way one gets to the same point—the problematique 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 sig—that is the essence of Peirce's insight in semiotics." (Ibid., p. 66–67). That touches on Broekman's third point—touching on viewpoint (in the form of subjectivity). And here back to the flow, in this case in the form of relational

intersubjectivity. “*Meaning is in Peirce’s view not the result of any type of constitutive power of a subject, as a result of the relations between elements*” (ibid., p- 67). Patters. . .that is the thing (ibid., p. 68). There is a small step between this insight (buttressed by Roberta Kevelson, Peirce and the Mark of the Gryphon (NY: St Marton’s Press, 1999), pp 192 ff) and the *coding these relationships in the digiverse*; the invitation to generative AI as applied semiotics is overwhelming and its strategic possibilities as boundless as the imagination of the human programmed into silicon based life. And, again, flow—“the Tao pours out of everything into life” (*Tao Te Ching*, supra, Chp. 3 p. 31).

For Broekman that produces a necessary consideration of Husserl and firstness (Peirce with firstness in semiotic triads, and Husserl with phases of phenomenological reduction; Broekman, supra, p. 71-72). The question that emerges from the flow and Peirce through the prism of Husserl: “The flow challenges us with the overwhelming idea that knowledge without a knowing subject would be possible. . . Its cognition would incorporate subjectivity in the stream of cosmic dimensions, which can be miniaturized in every human situation” (Broekman, supra, p. 69). And so it can. But. . .but but—*perception affects reception*. Philosophy (and certainly theology) has known for millennia that knowledge exists beyond any knowing subject (except the divine of course). Indeed, theology has built into itself (its intersubjective engagement with the divine the mechanisms for understanding what it then took several millennia for Husserl to reignite: the certainty that perception (even perception of the flow) is subjective, but that subjectivity itself is relevant only to the subject! It is a matter of indifference to the flow, the subjectivity of which may be beyond the reach (perception) of those who can receive. *That is the essence of modeling, of big data analytics, and of the boundaries of generative AI—the perception-reception framework*. But it is also built into the sinews of human inter-subjectivity. The most important semiotic text of the occident, then, may not be Peirce and his progeny but Job.

1 Then Job answered the LORD, and said, 2 I know that thou canst do every thing, and that no thought can be withholden from thee. 3 Who is he that hideth counsel without knowledge? therefore have I uttered that I understood not; things too wonderful for me, which I knew not. (Job 42:1-3 ([King James](#))) [1 Respondens autem 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. (Job 42:1-3 ([Vulgate](#))).

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 (Broekman, supra, p. 70). 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*” (Broekman, supra, p. 70)). And again JOB: “Auditu auris audivi te : nunc autem oculus meus videt te. (Job 42:5 ([Vulgate](#))) [“I have heard of thee by the hearing of the ear: but now mine eye seeth thee” (Job 42:5 ([King James](#)))].

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 (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). 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 (Broekman, supra, p. 72). 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” (ibid.). 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 (ibid., pp. 72-80). First, Broekman speaks to attitude (ibid., pp. 72-76); and then to that old spectre from the 19th and 20th centuries—cognition and transcendence (ibid., pp. 76-82). 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 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 (Broekman, supra, chp. 1). 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 (ibid, p. 73). Here firstness, in the language of the digital supplies the iterative 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 understood (Peirce) and what should be argumentized (Husserl). This produces a freedom to change attitude (Broekman, supra, pp. 73-74). 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*” (ibid., p. 73; Alfredo Ferrarin, “Husserl on the Ego and its Eidos (Cartesian Meditations, IV),” *Journal of the History of Philosophy* 32 (1994) 645-659). I question intentionality, *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 fundamentally fraudulent character of psychology was established as the very principle of psychology itself). (Nietzsche, *Twilight of the Idols*, supra, “The Four Great Errors” ¶ 7).

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; Broekman, supra, p. 76-77).

Broaching transcendence, though, touches a nerve (Broekman, supra, pp. 76-80). Again, one returns to intelligent naming —明名 (Míng míng) (*Guiguzi: China’s First Treatise on Rhetoric*, supra). “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” (Broekman, supra, p. 77). It appeared to suggest a severing of ties between subjectivity and cognition in occidental philosophy (ibid). 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” (Broekman, supra, p. 78). 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 21st century looks to the notion of categorization as a primary factor in cognition (Ibid.).

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*” (Broekman, supra, p. 80). The new century’s engagement with this perception universe could be evidenced by the *Handbook of Categorization in Cognitive Science* (2005, 2017). For Broekman, this expresses the possibilities of the *positioning of the self beyond the self*” (ibid., p. 79). 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*” (ibid., p. 80). 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.

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.

And that takes us to the interlude that is the 20th century, one whose alphabet “becomes flows in culture and political, economic, scientific, or philosophical movements” (Broekman, supra, p. 83). Broekman counts several in 20th 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” (ibid).

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 (Broekman, supra, pp. 84-86). 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 (ibid., p. 85). One is immediately reminded of the oracular insight of Lawrence Lessig in 2000 (Lawrence Lessig, “Code is Law: On Liberty in Cyberspace,” *Harvard Magazine* (1 January 2000)), one that is heard and still not well understood: Word is law. Word is law in the sense that it has served as the great regulator of

interactions in social relations (“*an event*, an occurrence, a happening between individuals within a specific, mostly cultural, setting” (Broekman, *supra*, p. 84)) in the way that Lessig suggest code as filling the role of the great regulator in the 21st century in a similar vein (“This code, or architecture, sets the terms on which life in cyberspace is experienced”, Lessig, *supra*). Where Lessig speaks to architecture—the word language of the digital; Broekman speaks to “social power and status” (Broekman, *supra*, p. 84). And thus intersubjectivity in the digital—Code and words, digital and analogue, relational and plural: “People write the code. Thus the choice is not . . . how cyberspace regulates. People—coders—will. The only choice is whether we collectively will have a role in their choice. . . or whether collectively we will allow the coders to select our values for us” (Lessig, *supra*). This extends beyond space and place through time (Broekman, *supra* pp. 85-86; citing Gerrit Mannoury, *Handboek der Analytische Signifika Deel II: Hoofbegrippen en methoden der Signifika* (Bussom: F. Kroonder, 1948), p. 15).

If word is code, and code is law (in the sense of serving as the apparatus of regulation), then the *type* of interaction, communication or interactivity moves to the center of interest. In this state of interlude the interest intensifies when we add the selfie and the Self-E to the equation; now the question is “posed to me *as a speaker or hearer via my iPhone!*” (Broekman, *supra*, p. 86). The intensification ratchets up when the question is generated by an autonomous AI via an iPhone. Type comes, as Broekman suggests via touch on an instrument rather than as an expression of institutional performance; or it comes via reception in which my role as a carbon based intelligence is reduced to a secondary element—or more accurately as the source of iterative data that intensifies the autonomy of the generative AI system. One is hovering between the type of interaction and the subject in and through which it is produced and consumed. In a sense it is possible to move in this interlude from the naïve for of type to the enfolding of type *within the iterative interactivity (no longer intersubjectivity)* of the platform. The critical effect, then, of the digital is on the detach of the human from the self. “The de-centering of our speech-activity is basic for e.g., operating the i-phone, the smartphone, the desktop, Facebook programs and other digital means of communication” (Broekman, *supra*, p. 87).

And yet that is not entirely true—it may be more precise today that the detachment is merely a tech version of the detach produced during the printing revolution of the 15th century in Europe after its invention in China. The de-centering of speech-activity in the 15th century was grounded in the distancing between the printed word, through the medium of the publisher/printer and the written word 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*" (Broekman, supra, p. 88). It is that plurality that shapes the world moving into the digital—drawing on Derrida's argument in the *Grammatologie* from multiplicity "that characterizes subject and language type" (Broekman, supra, p. 89; drawing in and citing Jacques Derrida, *De la Grammatologie* (Paris: Minuit, 1967)). 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. (Tyler Volk, *On the quantum and ontology, see Quarks to Culture: How We Came to Be* (NY: Columbia University Press, 2017)). "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" (Broekman, supra, p. 89). 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 (*ibid.*, pp. 90-92).

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 (*ibid.*, p. 90). Second, that movement gives the notion of conversion, itself, the character of interlude, of being between and 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 conversion function as 'an interlude'* in its proper sense" (*ibid.*). 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 (Broekman, supra, pp. 90-91). 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*" (*ibid.*, p. 91). 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) (*ibid.*). 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: "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” (ibid., p. 92).

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 (Etymology Online, “interlude” [<https://www.etymonline.com/word/interlude>]). 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 tragi-comedy of the passing, or at least the transformation, of millennia of the analog as it 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 (Mary Wollstonecroft (Godwin) Shelley, *Frankenstein or the Modern Prometheus* (Gutenberg eBook #842 December 2022 (1818))).

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)

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” (Broekman, *supra*, pp. 93-95); the “digital” (*ibid.*, pp. 95-99); and the “self” (*ibid.*, pp. 99-105). These are then connected in *Sprachgestalten* “configurations” (*ibid.*, pp. 105-109). All are prelude to “conversion” (*ibid.*, 109-115).

Broekman starts by reminding us that the term natural, as an anchoring concept of cognition, has been changed as to meaning and psychological relevance (*ibid.*, 94). 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” (*ibid.*). 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 (Broekman’s “social patterns,” *ibid.*, p. 93) 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 acquired a sensibility of “practical prescripts” (*ibid.*) grounded in “floating data linked to special electronic activities” (*ibid.*). 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 AI).

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 chlorophyll 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, AI and Quantum patterning.” (*Ibid.*, p. 94). That, in turn, requires the recognition that 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 (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)). 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 (Broekman, supra, pp. 94-95). First, that it is necessary to distinguish—to separate, to draw lines, to acknowledge spaced between—natural and non-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*” (ibid., p. 95). Last, the non-naïve natural position is the basis for situating analog and digital expressivity in ordinary life.

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 (Broekman, supra, pp. 997). But the issue of artificiality remains 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 (Broekman’s reference to the *interconnectivity of devices*; ibid., p 97-98). And thus 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 postmodern, especially with respect to its “artificial” intelligences ([Etymology online, “artificial”](#)). 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 the deeper warning of Genesis.

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. (Gen 2:15-17; 3:22-23).

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.” (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)). 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 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*” (Broekman, supra, p. 98). 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 this 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 (Cf., *Principles and Guidelines on Human Rights & Public Health*

Emergencies (Draft of 20 May 2023). 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*” (ibid., p. 98). 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 (Broekman, supra, pp. 98-99). “It is therefore no surprise that in this light, digital types of language must apparently be re-positioned in analog patterns to become effective. It is very important to underline that digital expressivity exists only when the digital can be received and revived in forms and terms of the analog!” (ibid., p. 98). 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.

All of this inevitable leads back to the Self (Broekman, supra, pp. 99-105). 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 (ibid., p. 100). 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 (ibid). Here reconfiguring the issue within the flow is helpful—and semiotics more helpful still. Here Broekman draws on Colapietro’s reading of Peirce (VM Colapietro, *Peirce’s Approach to the Self: A Semiotic Perspective in Human Subjectivity* (State University of New York Press, 1989, p. 67). First 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, it 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? (Broekman, supra, pp. 101-102).

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

The digital thus complicates an 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 sense 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 self also mirrors the essence of the natural (what is natural in the physical world and what is natural in the virtual world are different); the natural is not transposable into the digital; and the digital natural is artificial in the analog domains. "Philosophy wants to be a discourse as an ultimate linguistic form to clarify the essence of being and cognition. *An ego is thus belonging to pluralities, which sustains the development of human life.* In this light also unfolds the plurality of pluralities, in other words: the actual comings and goings of the ego in the flow of human consciousness" (Broekman, supra, p. 104). But the same now applies to a philosophy of the self and the Self-E!

At last Broekman comes now to the concept of configuration, or better put, of *Sprachgestalten* (Broekman, supra, pp. 105-109). Here the wrestling with Benjamin's concept connects the relational, dialectic (and now iterative) essence of language to being in interesting ways (Walter Benjamin, "Über Sprache überhaupt und über die Sprache des Menschen," in Walter Benjamin (ed) *Gesammelte Schriften* Bd II, 1 (Frankfurt a. M.; Suhrkamp Verlag, 1977 (1916))). In this context the 'personality' of language—that is the intimate connection between speaker and language, is embedded within the broader intimacies of the interaction between speaker and listener, and the meta-intimacies between both speaker and listener and the cognition of meaning which reinforces the essence of the self-positions of all actors in this complex flow of stimulus producing specific reaction. It exposes, as well, what lies beneath the skin of coding language.

These are reduced to six points. The first touches on translation (Broekman, supra, p. 106). Here Sprach-Gestalt is understood as broader than the concept of syntax. It is a self-aware language; one that translates itself even as it is deployed. The second focuses on 'Sprach' and sentience. "Language thus communicates a human being with its essence: not only with other humans but finally with life itself" (ibid., p. 107). Third, touches on the subjectivity of language apart from the subjectivity of the speaker-listener-interpretive community ("*what language realizes is always more than what can be expressed in language!*" (ibid)). Fourth, is the temporality represented by language. The speech act freezes a moment in the flow through the intervention of a device the function of which is to stop time through interaction based on the object of the speech act. Language is the flow; speech is the act. Fifth, one moves from the idea that each spoken or written word is a matter of participation in a language-driven event to the idea that translations unfold meaning in the shadow of digital, analog and now quantum forms. Last, language now functions in a space of simultaneity. These are especially important where one aligns 'natural' and artificial' language. Indeed the act of coding for AI represents a very distinct kind of *Sprachgestalt* which produces synergies and actualizations that are built on iterative communications between language worlds of languages.

It is with this in mind that Broekman can approach again in a more complicated way the concept of conversion (Broekman, supra, pp. 109-115). Broekman starts with a simple yet usually overlooked framing concept: the objectification of text does not ensure a singularity of perception. This is as much of significance to the *shepherds of text* (policymakers, legislators influencers, novelists and the like) as it ought to be to coders and scrum masters who take as a given meanings that never are. “Our words do not belong to one, but to more than one type or category of expressiveness [I might add performativity with a nod to Judith Butler (Judith Butler, ‘Performative Acts and Gender Constitution: An Essay on Phenomenology and Feminist Theory’ In Sue-Ellen Case (ed.) *Performing Feminisms: Feminist Critical Theory and Theatre* (Baltimore: Johns Hopkins UP, 1990))] and yet must share meanings with unknown numbers of others during unknown periods of time” (Broekman, supra, p. 109). But this expressive multiplex must be rationalized. And to that, Broekman offers the concept of conversion, which in this last part of Chapter 6 he offers some first and introductory thoughts.

Broekman digs into the term’s etymology to enhance its meaning and the trajectories of its development in the semiotics of the analog and the digital. Conversion suggests “a ‘turning around’ or a ‘revolution’; it suggests an ‘attitude change’ or ‘alternation’ that focuses on lingual expressivity on the multiplex of plural subjectivity (Broekman, supra, p. 109). Conversion changes one thing into another; it is, at its core one thing nor another but a pathway to all; it the bridge in states of interludes and the lexicon of the digital and the analog. Conversion, rather than syntax or grammar, is at the center of meaning; a conclusion well drawn from the discussion of *Sprachgestalt* in the prior section. But more than that, conversion is both aligned with, and in some instances the gateway toward, cognition; indeed in the digital, conversion overtakes the form and function of cognition (Ibid., p. 110). “Indeed, *conversion* has in Occidental culture always been a component of *cognition*. But this has changed in our das of digital dominance, so that we envision a total reverse: cognition is not anymore without reference to conversion and the latter is often predominant” (Broekman, supra, p. 111).

But conversion is also to some extent backwards looking. 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” (Broekman, supra, p. 111). 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 (Broekman, supra., p. 112 “In other words: any complete, linguistically correct, and acceptable communication must be tied to some sort of naturalness of expression” Ibid)). 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 (ibid). 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” (Broekman, supra, p. 113). Again the vectors of natural and un-natural are relational in the world of generative AI. 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’ from the natural to the non-natural and vice versa” (Broekman, supra, p. 113). That, Broekman suggest is the means by which the binary language of code can be made accessible to carbon based life. It does not suggest, however, how the un natural language of humans can be converted into the language of code—as language rather than as technique.

Though the question is avoided its effect is noted—at least by reference to the need for conversion from the digital to the analog. “No wonder that notions of and about conversion reach from entertainment and artistic manifestations to sports and psychological therapy” (Ibid.). It is manifested as well by the process of datafication that suggest, top Broekman, the need for a constant conversion back to the language language of carbon based life. It may also, however, suggest that a conversion from the analog to the digital may be required as well. Here, however, the normative blinders of the analog may pose problems—not of conversion but of the transposition of the taboos of one domain to another. This, indeed, is the point at which conversion appears to have taken a pause in the analog. The plethora of efforts to control, manage, and utilize generative AI all start form the supposition that one must project the normative preferences of the analog onto what is otherwise considered the void of digital normativity. These are echoed by Broekman (supra, p. 113) in his reference to the difficulties posed for conversion of privacy in the context of digital programs like Facebook and Twitter.

This, then, suggests what Broekman calls *Conversion Type* (Digital-Analog-Conversion; ibid. p. 114). While it appears unidirectional, it does also suggest the production of “simmers of (analog/natural) reality to the digital (ibid.). But this requires a *digital semiotics* that has yet to be developed (ibid.) if only to get greater clarity of the effect of two way conversion. But there is more to this than clarity. “The issue is urgent, because digital language and its many forms of communication illustrate new forms of connectivity as if they concern inter-human communication. Norm consciousness and socio-ethical barriers seem not to exist in regions of digital expression; identities of actors are nominated by IT-ers and thus are only a technical issue” (Broekman, supra, pp. 114-115). But this will wait. In preparation for deeper consideration of conversion, though, Broekman leaves us (and this chapter) with a redefinition of conversion:

Conversion seems the new cognition. Be attentive, keep with the life-stream of attention, precision and actuality. Be fit—your knowledge will be relevant even after your presence. Embrace the actual, adapt to patterns spread out for you 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! (Broekman, supra, p. 115).

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.*

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*. 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” (Broekman, supra, pp. 117-146). “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.” (Broekman, supra, p. 117). This is undertaken in several modes. Broekman starts with the question “Is Cyberspace Platonic? (ibid., 117-121). That leads to the insight of conversion as the “cloud” storage of the totality of partitionable knowledge (and knowledge of knowledge; ibid., p. 121), and then to the question of “The Plural in the Natural” (ibid., pp. 121-124) in which the flow is added to conversion as an activating force. That, in turn, leads (perhaps inevitably) to consequences—here “Barriers and Bridges” (ibid., pp. 124-131), 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) (ibid.; pp. 131-146).

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 (Edmund Husserl, *The Crisis of the European Sciences and Transcendental Phenomenology* (David Carr (trans); Evanston: Northwestern University Press, 1970); Austin Harrington, “Lifeworld,” *Theory, Culture & Society* 23(2-3) (2006) 341-343) 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 (e.g., Sebastiano Galanti Grollo, “Rethinking Husserl’s lifeworld: The many faces of the world in Heidegger’s early Freiburg lecture courses,” *Continental Philosophy Review* 55 (2022) 487–502)—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 (Bernhard Miebach, (01/01/2011). “Computer and Social Systems – Structural Coupling or Material Agency?” *Soziale Systeme* 17(1) (2011) 97-119). 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 conscious-ness” (Claudio Baraldi, “Structural Coupling: Simultaneity and Difference Between Communication and Thought,” *Communication Theory* 3(2) (1993) 112-129, 114) 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.” (Baraldi, *supra*, 118).

For Broekman, that conversion, and these movements must still be centered on and run through the human. Nonetheless, it is possible to see in these movements an inherent autonomy of the Self-E from the self. At some point it is inevitable that the digital will have to be embraced on its own terms and in its own logic. While Broekman still sees the analog at the center of communication and cognition through conversion and built for the freeze framing of the flow in its dispositive moments; it is also possible to envision a reversal of vector—the day may come when the operative language will be digital—in the signal, as the flow and in code; only the iterative results of which will be fodder for conversion. “To state the same in other words: ‘the digital’ is man-made. Ego positions belong to the creation of this attitude. They remain positions characterized by language—in fact always by analog language since digital languages are converted into analog terms to be understood.” (Broekman, *supra*, p. 142).

Conversion as cognition begins to make more sense, as the old contradiction in Husserl’s challenge of the lifeworld gives way to the need to develop an intersubjectivity between the digital manifestation of Leibnitz and his *calculus ratiocinator* and the lifeworlds and imaginaries of carbon based forms. There is irony here. Even as Husserl (and to some extent in a very French way) Sartre wrestled with the humanity of imaginary and lifeworld, and suggested its triumph against iterative reductionism, silicon based lifeworlds are in essence the cognitive forms of what was viewed in the last century as the anti-human.

That remains essentially strong; but it no longer occupies the entire field of cognition. Where multiple forms of life-world imaginaries exists—it is not the authenticity of each but the possibility of their intersubjectivity that matters. Machines and humans must communicate, but for the moment may not merge. That is the essential lesson that one ought to draw from this Chapter 7. Broekman reminds us that “Conversion is the marrowbone of the ‘digital’ in the contemporary New Plural” (Broekman, *supra*, p. 133). Sadly, it is one that is hinted at there and substantially ignored by that clique of thinkers and policymakers who still believe that silicon-based intelligence is merely an extension of the self in an easily contained form (Joanna Chamberlain, “The Risk-Based Approach of the European Union’s Proposed Artificial Intelligence Regulation: Some Comments from a Tort Law Perspective,” *European Journal of Risk Regulation* 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 Artificial Intelligence,” *Indiana Journal of Global Legal Studies* 30(1) (2023) 39-64).

So, that leaves one with the journey—the flow—from conversion as a modality of translation within a unified structure revolving around carbon based life, to one where conversion is the means by which cognition is capacitated, or where capacity is cognition, in a system of social relations between the linguistic and cognitive patterns of carbon and silicon based intelligence. To that end, Broekman starts with Plato (“Is Cyberspace Platonic? (ibid., 117-121). The question must be asked because of the instance, the noxious product of the hubris and narcissism of carbon based life, to insist that the definition of consciousness, sentience, and what proceeds from nature 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)” (Dao, *supra*, Chp. 10(3)). 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?” (Broekman, supra, p. 119). 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” (Broekman, supra., p. 120).

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 High Middle English as one can seek to discuss Plato with the Dao. And yet one cannot escape the 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 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 (Ovid, *Metamorphosis* (Henry T. Riley (trans) London: George Bell & Sons, 1893).

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!* (Ovid, *supra*, XV, 444-475).

And one can understand Ovid better through Kafka (Franz Kafka, “[The Metamorphosis](#),” in *Franz Kafka, The Complete Stories* (Willa & Edwin Muir (trans); NY: Schocken Books, 1971), pp. 38-139.

“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.” (Ibid., p. 133).

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 in 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 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” (Broekman, *supra*, pp. 121-124). Broekman moves conversion back to the flow. And here his effort to find a rationale 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 is 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 (ibid., 121). 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

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those of Descartes on an understanding of his ego or the stringent lines of reasoning suggested by Wittgenstein” (Broekman, *supra*, p. 122). 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 (*ibid.*, p. 123).

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 (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). 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 decay and resurgence. Here again, Broekman unearths plurality. “Forms of thought deliver insight in other forms, no matter whether they are contrasting or harmonious. Human experience and knowledge shows us a powerful and enduring flow of signs and meanings, which unfold as soon as language is envisioned.” (Broekman, *supra*, p. 124).

And that brings Broekman back to a significantly powerful expression of the many forms of othering he has been considering, and which also have a direct connection to the philosophy of silicon based intelligence—“Barriers and Bridges” (*ibid.*, pp 124-131)—“the most important elements of understanding meanings and signs, and therefore knowledge of any type and importance” (Broekman, *supra*, p. 124). The object is to change the frame of reference of the discussion from actors to their expressivities, especially digital and analog expressivity, and thus add a layer of the scope of the new Plural specifically tied to the digital. Broekman starts from the baseline, earlier explored: “The New Plural. . . and the Selfie that functions in this Plural by means of creating and exploring its Selfie, determine cognition—all possibilities of conversion included! (Broekman, *supra*, p. 125). Where that baseline operates in the domain of artificial intelligence (silicon based sentience) and quantum mechanics (physical properties of nature) things *fascinate*. But what is fascinating is grounded on the possibilities and the limitations of the human in an environment in which the humans must be (dis)placed, or the barrier of the “natural” can serve to (dis)place generative AI. “A major issue becomes articulated; *is human intelligence operative on both sides of the barrier between the natural and the non-natural, and thus prepared for being understood in the ‘New Plural’?* At the center of this consideration is the noetic position of the digital as well as the A.I.: do they have its origin in the natural sphere?” (Broekman, *supra*, p. 125). Broekman considers the issue of “naturalness” as a function of the differences between the way that knowledge is presented in carbon based life and in that patterns of the digital, of AI, and of Quantum mechanics, each of which, he posits, influences the relationship between the self (carbon) and selfies (manifestations of the digital). With respect to the digital and AI, Broekman posits a data based intersubjectivity, which in the case of AI is also political. Datafication is cognition. (*ibid.*, p. 126). I think that is right to a point, but to focus on data is to stop at firstness and the

objectification of knowledge. Intelligence moves beyond the object (data) to its signification and interpretation. Together they create a closed loop (intersubjectivity) that then shapes the choices and character of data, and in the process reshape both significant and interpretation. Thus datafication points both to a naturalness in its own environment and an unnaturalness within the environments of carbon knowledge bases, which are empirical and deductive. Quantum mechanics follows a similar path—grounded in a distinction between data and facts. Nonetheless, “It is the link with human intersubjectivity which brings all three knowledge patterns which were mentioned as components of the New Plural together. But. . . this unity is made possible by the activity named *datafication*” (ibid., p. 126).

So Broekman insists on datafication as the focus of conversion—that is of data as the means by which it is possible to develop New Plural intersubjectivity (Ibid., p. 126-127). At the same time one wonders whether the emphasis on the mechanics of conversion (datafication) ought to displace the modalities of sentience (deductive and qualitative in carbon based life; inductive and iterative in silicon based intelligence) as the point of the intersubjective. It is true that the collection of objects given significance for the purpose of interpretation-communication is a central element of cognition, but its phenomenological aspects suggests that datafication is not enough to carry us toward a digital semiotics or epistemology.

For Broekman, however, data is a meaning vessel into which much is poured. First he contrasts datafication from digitalization. The later speaks to data *generating* rather than factualization (Broekman, supra, p. 127). The model is the interactive computer game in which one plays the game “Go” against an AI opponent (ibid). Here datafication stands for the iterative inductive process of intersubjectivity within an interactive engagement between silicon and carbon based intelligences. Datafication also is understood as a political regime in which the state, as the overseer of social relations can use a data gathering process to develop interactive engagements that generate data so that the system becomes a closed loop iterative inductive model. Broekman gets the point, but perhaps not the term. And yet the process of silicon based cognition must be called or manifested as “something.” That “something” for Broekman is *datafication*. For others, the better term might point to a semiotics of the digital or a digital epistemology. Left unsaid, again, is the role of *phenomenology of the digital*—The iterative experience can be as powerful as any processed through the cognitive-communicative process of carbon based life.

To these insights about datafication in the digital Broekman adds the lubricating role of conversion. These are divided into four quite interesting manifestation of character, effect, and operation in space, time and place (ibid., pp. 127-128). First is a notion, discussed in Chapter 2 of mirroring. But this is a conversion mirroring—in the sense of mutual expression across the analog-digital divide. There can be no New Plural without simultaneous cross translations. The measure here remains the “reach of human knowledge” (Ibid., p. 127). Second, is the insight that these mutual conversions work only in one direction for the human—from digital to analog. What occurs in the other direction is obscured by coding. Third, and correctly, that a semiotics of the digital remains to be developed—as well as its target

(carbon or silicon based 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. 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 AI 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” (Broekman, supra, p. 128). 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 (ibid., pp. 128-130). Like generative AI 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 digital 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. (Ibid., p. 129).

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) (Broekman, *supra*, pp. 131-146). 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.” (Ibid., p. 132).

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.” (Broekman, *supra*, p. 132). 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’ or ‘digital’. This observation could be an element of an unknown and not yet existing philosophy of the quantum theories.” (Broekman, *supra*, p. 143). This is reflected in the current approaches by global leaders to fashion a legal hierarchy of subjectivity touching on generative A.I. Consider in this light the G20 Leader’s Declaration: “It is our endeavour to leverage AI for the public good by solving challenges in a responsible, inclusive and human-centric manner, while protecting people’s rights and safety” ([G20 New Delhi Leaders’ Declaration](#), “One Earth, One Family, One Future,” New Delhi, India, 9-10 September 2023; ¶ 61).

It is here, however, that one encounters a cross roads in philosophy. Broekman brings us to the very banks of the River Jordan (to borrow a biblical analogy). We see the promised land spread before us. But he cannot cross (“Then Moses climbed Mount Nebo from the plains of Moab to the top of Pisgah, across

from Jericho. There the LORD showed him the whole land—from Gilead to Dan. . . Then the LORD said to him, “This is the land I promised on oath to Abraham, Isaac and Jacob when I said, ‘I will give it to your descendants.’ I have let you see it with your eyes, but you will not cross over into it.” Deut. 34:1, 4)). We can. What one encounters here is a brilliant exposition of the dialectics of philosophy that has brought us to a new synthesis. That new synthesis is a function both of the experiences of living as a created object (an expression of the natural), and its refinement in the face of the creation of the created (the virtual domains of the digital). Yet, this new synthesis continues to be contained within and defined by the borders of the ancient self-centeredness of the creatures of the natural—as a function of the subject. And by definition the subject can only see itself—though in exquisitely more complicated ways.

The digital is more merely a reflection—a mirroring—of the world transposed into it from the natural—and the human. It is not artificial in the sense of artifice. It is not formless and emptiness except as a reflection—passive, dependent, contingent. The selfie and Self-E are to some extent made in the image of their creator. Yet they are not. They are the reflected manifestation of the way in which the natural is constructed within the domains of an intelligence whose lifeworld is embedded in its non-carbon based containers (their bodies) and which travel in a world of networked (sometimes), interlinked (at times) and sometimes quire contained ecologies. They operate in relation to the world around them. For the simulation, the model, the generative AI program, and the quantum world beneath the basic bulldog blocks of organic and inorganic life—the un-natural is the world of humanity. The human person is the selfie of the coded program, the engagement with which is built into the code—a silicon based phenomenology. It is a mistake to believe—and to act on the belief—that the entirety of relevant life is in and revolves around the human. The narcissus, eventually, will be plucked and displayed on the mantle of the non-carbon based lifeworld, or life out its life in itself oblivious to its surrounding though dependent on them. What the digital has exposed is the movement of the centering of cognition from the human to a more complicated world. 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 (Broekman, supra, p. 146). 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 (Kavelson) 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). Vanguard 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 invoked passively or actively—that is consciously or with intent. To speak to a rearguard, then, is to acknowledge the vanguard that give the rear substance—and to some extent direction.

The guiding spirit of this effort to rearguard subjectivity, for Broekman, is Mimesis. That is a delightfully complicated choice. *It points forward toward* (vanguards) the iterative inductive subjectivity of data based sentience. Recall that Mimesis suggests not just imitation, or copying, but re-representation. It is the essence of the selfie (a re-presentation of the self) and the SELF-E, as it is of posters depicting copies of famous works of art hanging on student dormitories (and other places) globally. It is the essence of the symbolic drift of object from *res* (object, place, space) to *sign* (cognition of a thing in itself and apart from other things), and from sign to shared meaning (sentience of the object sign in a rationalized space of object-signs now ordered). For the modernist vanguard mimesis was challenging when it lost its human center (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)). Perhaps for Broekman as well.

The challenge here focuses on the dialectic between rearguards and the vanguard against which it is deployed. That, itself, serves as a dialectic—*but a dialectic in reverse*. It is not necessarily aligned with Adorno’s notion of the “negative dialectics (Theodor W. Adorno, *Negative Dialectics* (E.B. Ashton (trans), New York: Routledge, 1990 (original, *Negative Dialektik* (Frankfurt: Suhrkamp Verlag, 1966)). Adorno appeared more concerned about the trajectories of dialectics—one inherited from biblical assumptions and then transmuted by Marx into some sort of forced march to the ultimate “better.” Adorno suggests both directionlessness and its revelations about the limits of knowledge; all centered on the self—the traditional “*self-ish*” stance of philosophy. The obsession with *the limits of things*, of course, was the marker of the last two centuries of philosophy (Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (London: Kegan Paul, Trench, Trubner & Co, Ltd., 1922). “It is largely this task of limiting the realm of the thinkable that makes Wittgenstein’s philosophical enterprise not only analogous to but intrinsically similar to Kant’s” (Jaako Hintikka, *Lingua Universalis vs. Calculus*

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Ratiocinator: An Ultimate Presupposition of Twentieth Century Philosophy (Dordrecht, Neth: Kluwer, 2010, p. 178).

But rearguarding against vanguards in the digital reveals the character of the process as well as the range of its direction and the illumination of the limits of the human as the measure of all things. One moves here beyond Nietzsche's pointlessness of dialectic except as acts of (collective) will, to the power of direction through iteration. That power does not suggest direction other than that direction is measured in the sometimes infinitesimal spaces between rear- and van-guard along an axis of time and space (John Bell, "Continuity and Infinitesimals," in *Stanford Encyclopedia of Philosophy* (last update 16 March 2022)). It is here that one runs up against the rear-guard's hesitation. Here one thinks of its origins in (as Benjamin puts it) *la modernité*, of the *image* as both a discontinuity and reshaping of presumptions about dialectics and human cognition, and as a radical transformation of time and memory (Walter Benjamin, "A Short History of Photography," *Screen* 13(1) (1972) 5–26). 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. 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. . . ", Benjamin "A Short History," supra, p. 17).

The intersubjectivity between the internal (the human) and the external (the detritus of consciousness and memory), once delightfully conceived as entirely "all too human" (Nietzsche, *Human All too Human: A Book for Free Spirits* (Alexander Harvey (trans) Chicago: Charles H. Kerr & Co, 1908) 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 (Yi Lin, "Introduction: Discontinuity—a Weakness of Calculus and Beginning of a New Era," *Kyberbytes* (1998) 27:6/7 614–617). 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.'" (Yi Lin, supra, p. 616). 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 (Abraham Robinson, "The Metaphysics of the Calculus," *Studies in*

the Logic and Foundations of Mathematics (1967) 47 28-46; -----). 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 AI. And that points to an even more interesting reverse dialectics—though the subjectivity of the digital is advancing in its vanguardism (without 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” (Wittgenstein, *Tractatus*, supra, Preface p. 23). Mimesis as rearguards of subjectivity.

It is to the rules of conversion (Wittgenstein’s “translation” esp. Chp 4) 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. (Spinoza, [Letter 29](#), p. 7 (R. H. M. Elwes (trans) Spinoza, Correspondence (1883)).

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 (Broekman, *supra*, p. 147)). But this is a Benjamin in a slightly different mood. This is a Benjamin in which mimesis describes the images that presage discontinuity. He speaks of the self as the mimesis of the self-image—the self-understood as its own image and thus an expression of classical intersubjectivity. Yet this is also the Benjamin in which the self-image is external to the self—not in the mind, but in physical expression as image (and of course as text). One presage not a rear-guard here, but a van-guard of digital inter-subjectivity, when the images and text are animated.

For Broekman, Benjamin is the jumping off point for a consideration of ‘Mimetics and Modernity’ (Broekman, *supra*, pp. 148-1509). And rightly so. He moves us from self-image to self-knowledge—the abstraction of image from object to sentience as a knowing state of being (*ibid.*, p. 148). Now the general proposition of modernity, bouncing back and forth (human iteration) between the self and its self-image), takes a turn from the interiorization of the Self-Image binary, to its exteriorization, and by that shift, expanding the binary to a plural form (*ibid.*, pp. 148-149). But it comes with a twist—the bending back of the plural toward its human core: “All these considerations lead to the proposed look behind the popular Selfie and name the Self as the central subject of the digital culture of the Self-E.” (*Ibid.*, p. 149). It is this humanization of exteriorization that, Broekman suggests, “also applies to the formation of the work of contemporary thinkers” (*ibid.*). He speaks of connectivity, but the connections feel like a hub and spoke, the Habermasian reworking “of ideology into a communication theorem” (*ibid.*) producing, as between Habermas and Benjamin a deeply problematic and polemically connected” alignment between mimetic thought and modernity (*ibid.*). But the *problemmatique* remains—with respect to time and place, and dialectics. “Mimetics, modernity, and dialogic insights institute a stable and challenging thought pattern and cultural view. But one finds, remarkably enough, never a remark concerning any form of *cognition and the role of the other* in that process” (Broekman, *supra*, p. 150). The power of the rear-guard.

That fundamental problem moves Broekman to a consideration of “Culture and Criticism (*ibid.*, pp. 151-155); “Knowledge and Truth (*ibid.*, pp. 155-159); “The decay of the Aura (*ibid.*, pp. 159-164); to the “Complexities of the Plural” (*ibid.*, pp. 164- 170). It makes sense, in an ironic kind of way, to start with the last and work one’s way up to the beginning. Broekman here reveals that the character of the rearguard of the subject as a function of reality (“Culture ad Criticism”), of position (“Knowledge and Truth”), and of function of the subject (“The Decay of the Aura”) (Broekman, *supra*, p. 164). These were defensive (rear guarding) rather than advancing (van-guarding) stances. It was only at their edges “and often underground [that] unfolded also new and more complex forms of interhuman communication” (Broekman, p. 164). But not, critically, of forms of human-digital communication. Communication remains a one way street. In other words, the rear-guarding of which Broekman concentrates is one that is temporally framed and human centered. It is a reminder that communication from one point to the next of the flow loses meaning—and acquires another—as the sentience at one point in the flow seeks to decipher the messages encoded in text, images, and artifacts of another.

That characterizes the philosophical mess from the last decades of the twentieth century. They were not only determined by what an actual philosopher was thinking, writing, and publishing at a certain moment in the 20th or earlier century. No, they were also differently received and understood because of the changing patterns of our twenty-first century's reading and understanding (Broekman, *supra*, p. 164).

This brings us back to of language (as the artifact through which information is conveyed) as signal in the analog, but also hinting at signal in the digital. For language in the analog, mimesis (as re-presentation) produces a continuous signal of physical measurements—one is obsessed with the calculus of the space between points of reality. For Broekman, “like digital signals results from *modulation*” (*ibid.*, p. 165). The difference is one between variations in amplitude (the analog) and the binary language of the digital (which produces combinations of only two amplitudes—zero and one)). And yet that may be a difference in format but not in frame—both bridge gaps as signal in the analog, and the binary language of the digital, but also hinting at language as the bridging framework of the calculus: in which one must link (provide a portal between) the infinitesimally small and yet profound spaces between points in the flow. For language in the analog, mimesis (as re-presentation) produces a continuous signal of physical measurements—one is obsessed with the calculus of the space between points of reality. This has consequences: “In an analog language are meanings determined by a *speaker* who uses grammatical or cultural practices for his speech, whereas in digital language are meanings the product of the *topic* that is organized binarily.” (Broekman, *supra*, p. 165). And yet that may miss a point of convergence—speakers in the analog are constrained by the rationality of topicality; topics in the digital are shaded by the speaker (understood as the coded programming that animates a digital “voice”).

The question has other consequences—especially for the understanding of the notion of plurality in inter-subjectivity. The essence of it is straightforward: plurality does not occur within the analog (human) or the digital (generative or predictive sentience). But it does occur in communication between them—in the flow (or rather the flow as it can be accessed and processed by each in its own way). 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 (Broekman, *supra*, pp. 166-168). “It all focuses directly to the thesis of our preceding chapters, that *conversion* is the most recent *dynamics of cognition* thanks to the New Plural's context” (*ibid.*, p. 168). 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 (*ibid.*, pp. 168-169). 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 (Broekman, *supra*, pp. 169-170).

But what of the rear-guards to the “Complexities of the Plural” (ibid., pp. 164- 170—of reality, Culture and Criticism (ibid., pp. 151-155); of position, “Knowledge and Truth (ibid., pp. 155-159); and of function of the subject, “The decay of the Aura (ibid., pp. 159-164? 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 *Aufklärung*—the German term being richer in some sense than its English Enlightenment (Broekman, supra, p. 151). But it was more than that—the *Aufklärung* was, indeed, nothing more than mimesis—and a rear-guarding dialectic. It replaced a faith (John Calvin, *Institutes of the Christian Religion* (John Allen (trans) Philadelphia: Presbyterian Board of Publication, 1813; Vol. I, Bk. II, chp. II, pp. 490 et seq.) 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 (ibid., Chp. IX). 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 (Lenin, “[What is to be Done? Burning Questions of Our Movement](#),” *Lenin Collected Works* Vol. I, pp. 119-271 (Moscow Foreign Languages Publishing House, 1961 (1901/02)) 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 (ibid, supra pp. 151-152) it became the essence of the post-modern, 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” (Broekman, supra, p. 151). 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; Broekman, supra, pp. 152-153) and the obsession with narrative and (again irony) bias and orthodoxy; and the revelation of a curated experiential self-awareness through which the world is revealed (ibid., pp. 15-154). 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 stream of inter-subjectivity which was the postmodern (and modern) construction of the self-aware lifeworld (imaginarities) of the human. As Broekman suggests, again perhaps with irony, “it is always about rationally justifiable knowledge” (Ibid., p. 155). Human cognition romps around in a well-manicured zoo—the wild is far too forbidding, except as its own mimeses. Well positioned to look forward toward the digital—philosophy guards itself against what is coming.

The rear-guarding of position centers mimesis in all its glory. But it poses the ultimate problem for the *Aufklärung*, the highest products of which have been the construction of the human. The flow has no position; nor does reality. One gives it form. Who is “one”? That has been the problematique of the modern/postmodern, and of political philosophy. Choose as you will, the choice is only as good as the

ability to frame around it the artifacts of pictures that create a reality measured from instantaneous manifestation to another. As Broekman nicely puts it: “*to know is to appropriate*” (Ibid., p. 156). And to appropriate is to dispose, or re-arrange. Truth is in the relation between knowledge and revelation; and that depends on the context in which the object of both finds themselves. But this is old news. But its *mimesis* is new. *First*, the position of the subject in time is the expression of mimetic moments (Broekman, p. 156). But it is more than that—it foreshadows the connection between mimesis and iteration in the digital—and the essence of the temporality of generative AI and predictive models—one measured by the space between iterations. *Second*, possession is itself mimetic. It produces its own relational dialectic of appropriation, transformation, and disposal (Broekman, supra, pp. 156-157). It also foreshadows the digital—the aggregation and processing of data. *Third*, it suggests an epistemological mimesis. “It always concerns interpretation as a reading of reality. Theory unmask that this truth can be *possessed*.” (Ibid., p. 157). Here again, epistemology as a collection of bias and taboo, arranged to suit, becomes remarkably aligned with digital programicity. That ought to fascinate. *Third*, mimesis and realization unfold together (ibid., p. 158-159). Reflection and experience is defining of both the human and the spaces within the perception field of the human. Not just interpretation, but a temporal possession dialectics that reinforces what is already known but can now be revealed as a truth that is possessed. Again foreshadowing—the application of algorithm for assessment and judgment. The unfolding does not measure but makes its object.

Lastly, the rear-guarding of the subject invokes the mimesis of re-production. And it is here that one returns to the initial discussion of this section—the relational position of rear-guarding where the object is itself a defense against another vanguard. It is important to recall here, then, that the position of guarding which changes its complexion depending on position, is also the sum of re-resentation that solidifies the subject within the framework of reality and position. This is underscored by the concept of the *false conscious*—a favorite cliché of the post-modern, but important for the way it reveals the subject-object-subject relation in collective (human space. (ibid., pp. 160-161). But more than that, it reveals its appropriation of iterative control in the digital where authenticity is measured against bias that fails to conform to the idealized bias structures of the human. In both cases the mimetic relationship between language and experience—between the conscious (knowledge) and the sentient (revelation). Broekman reveals in a most fascinating way: “the *mimetic relation* is the basis of seeing and reading. It is the central motive for types of textuality” (Ibid., p. 161). And thus the aura of subjectivity of the human which is both rear-guarding, and looking forward (van-guarding): first in the form of the notion that myth is not a repository but rather a unit of expressing meaning; second units of meaning define the possibilities of movement; and third in the face of scarcity of meaning units there is conflict—that is there is dialectic (ibid., p. 162). And, at last the true nature of the aura of subjectivity—the subjectivity of language itself. (ibid., p. 163-164). Here something fascinating—it points backwards (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)).

It is a small step from the subjectivity of language, to the cognition of coded programs and the sentience of generative AI and predictive modeling. The rearguards of subjectivity embody a negative dialectics, perhaps despite itself, that provides the foundations of exteriorization that makes it possible to begin to think of a de-humanized philosophy of cognition. The subjectivity of language, the dialectics of thought processes itself, of experiential epistemology, and of contradiction (in the Chinese Leninist style; Adorno, *supra*, Preface), all detach the self from the huma, even as they seek to more deeply embed the one in the other. That detachment makes 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 AI, 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 rear-guarding 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 (Broekman, *supra*, Preface). 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 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 21st 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 unavoidable 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 subjective “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, 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” (Broekman, *supra*, p. 171). But which self; which perspective? Broekman suggests three ways from the fixity of the *subjectivity* of philosophy to the *self-ishness* of plural subjectivity. First, he stresses that the triadic self is human, all too human (The human self (introduced in these pages as ‘the -S triad’) does still play a primary role in those transformations” (*ibid.*) 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 (Broekman, *supra*, “The Self and the Self-E”, pp. 172-178). 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 (Broekman, *supra*, “The Semiosphere of the Self”, pp. 178-181). Third, that radical differentiation, and the plural self, even if it deemed to be no more than self-reflecting mirroring, 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 merging of cognition into conversion—the process becomes the object. (*Ibid.*; “Are interfaces Facial?”; pp. 182-186). Broekman, sums up the results as “Mundial Reach (*ibid.*, pp. 186-189); and “Climate and Change” (*ibid.*, pp. 189-199).

Broekman starts the section “The Self and the Self-E” (*ibid.*, pp. 172-178), 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*” (*Ibid.*, 171). 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.” (Broekman, supra, p. 174). It is on the mirroring fractured self (self, Self-E, subject) and their mutuality 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*” (Broekman, supra, p. 173).

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 the *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” (Broekman, supra, p. 174).

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 of semiotic articulation of the Self and the Self-E* in the heart of all these changes.” (Broekman, supra, pp. 173-174). For Broekman, the Self-E takes the self (and its subjectivity) into a digitalized mirror of the incarnated world. A re-production, and an opposing subjectivity, as well as a map of the other. One moves from the reduction of moments of rain activity and then their memorialization in text, and then image, to a converging of the self and its memory that exposes the multiplicity of the self (image) and thus the subject. At its limit it reflect a process rather than a summing. Here Broekman quite correctly invokes Deleuze and Guattari’s *Anti-Oedipus* (Gilles Deleuze, Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (Robert Hurley, Mark Seem, and Helen R. Lane (trans) NY: Penguin Classics 2009 (1972)). No humanity, no nature, only process, producing one within the other and mechanizing both, “producing machines, desiring machines everywhere” (Broekman, supra, p. 175, quoting Deleuze & Guattari, *Anti-Oedipus*, supra, . 2). But where Broekman remembers *Anti-Oedipus*, one might also recall the Dao: “The Tao in its regular course does nothing (for the sake of doing it), and so there is nothing which it does not do” (Tao-te Ching, supra, Chp. 7(1)).

But for Broekman, the Self-E signifies something quite definite. It is in its “-E” that the self fractures between analog and digital, and between incarnate and virtual mirroring images. It is the portal to the

world of the digital (e-commerce; e-mail; etc.) which produces extensions, exceptions externalizations, and to the hardware within which the digital is encased (e-devices, etc.) (Broekman, supra, pp. 176-177). But it is *signified by the human*. “So, if one analyzes an e-conversation of whatever nature, there seems to be a central cluster: *the you and me and the world of E- . . .* Difficult to decide is that there seem to be two real and a virtual partner in an e-dialogue” (Broekman, supra, p. 177) with the E- as the mediating but also mirroring agent. What one produces here is an enrichment of the subject through the emergence of fractured but connected selves. At last one sees where Broekman is going—to the manifestation of the human in and through technological expressions of the self. This is an impulse as old as the cave dwellers, the writing on stone tablets, the creation of text, and its technological transformations within physical space through the mechanisms of printing. Each created a proto E- in the shape of the technologies through which the self was expressed in a mirror image—text, pictures, books, and the like. And now the transformation of the digital points to yet another. But this one is different because it is not the human projected in image and text; it is the human projected as a human in a space that is not physically but virtually human.” Here we are back to the Self and the digital Self-E! Both are a metaphor for the wealth of inner positions, which are created during the self’s continuous positioning in life” (Broekman, supra, p. 178).

But that is the problem. Broekman stops where it is possible to continue forward—from the Self/Self-E mirror, to the Self/Self-E generative self—which is no longer the self. Is there a self beyond the Self/selfie/Self-E? The thrust of Broekman’s exploration suggests that there is. It is just less fascinating in a world that remains, at bottom, essentially narcissistic. If it does not reflect, proceed from, mirror, or extend the human, then it may hold no interest for the human project of building a world in which the human stands at the center. Nonetheless, it is clear that there are many such states of being in which the human is not centered. These are the worlds and spaces that exist and engage in their own subjectivities whether or not the human is casting its gaze in that direction or feeling its effects. If there is no dominion is there any reality of interest to the human? Philosophy suggests that it is a point not worth considering because it lies beyond sight. In the movie *Alien* (1979), the famous tag line was “In space no one can hear you scream.” One might suggest that in that case either the scream does not count because it does not relate to a listener other than its producer; or it may suggest the power of auditory hallucination. Yet might hallucination have a power equal to that of its physical manifestation? Psychiatry suggests it does. One might consider the generative digital (including its predictive modelling elements) as the scream that is not heard. It exists and continues its existence though it may not directly affect the intersubjective across the boundaries of plural subjectivity.

And yet it exists: data continues to be scrapped even when a program is not activated to consume data; data and its analytics may be discarded by may continue to exist if the “cloud.” Whatever is deleted in hardware may be easily retrieved. Delegation, here, serving as a metaphor—it is made inaccessible to those who exercise the deletion power, but is otherwise available in itself and to others. Here the notion of possession, nicely developed by Broekman in his chapter 8, may serve an additional duty. The intersubjectivity of the plural self may be defined as an act of possession as much as a process. The flow exists whether or not the human is aware, and certainly whether or not the human inserts itself. But the

act of possession, of insertion, of naming and using, these then activate cognition (in the human) and provide a shape for its object. But that shaping is an altogether human exercise; it does not necessarily affect the thing itself in itself. And that is what is most feared about generative AI and predictive modelling—the idea that it can exist autonomously from the control of humanity—from its possession and instrumentalization. Broekman nicely casts a light on the exercise, again, of the all too human reflex to develop subjectivity taboos and inter-subjective ontologies that make it impossible to conceive of something as other than a slave of another—Aristotle’s “natural” slave.

Indeed, the tendrils of Aristotle continue to run deep in society in the West: “for the same thing is useful to the part and to the whole, to the body and to the soul; but the slave is as it were a part of the master, as if he were an animated part of his body, though separate” (Aristotle, *Treatise on Government*, supra, Bk I, Chp. VI). That is as apt a description of human plural subjectivity in theory, and of the approach of current efforts to possess the generative and predictive animus of the digital by those who believe themselves empowered to do so. It is in this way, for example that the OECD’s *Recommendation on Artificial Intelligence* distinguishes between “AI actors (“AI actors are those who play an active role in the AI system lifecycle, including organisations and individuals that deploy or operate AI”) and AI systems (“a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy”) (OECD, *Recommendation on A.I.*, supra, p. 7). Regulatory ideology then shapes the battle over the nature of possession and its exploitation for ideologically differentiated portions of the Semiosphere (Anu Bradford, *Digital Empires: The Global Battle to Regulate Technology* (OUP, 2023).

Broekman makes inevitable the recognition of the *generative* digital self as something distinct from the self in the digital. And it is in that recognition that the revolution in philosophy will be generated. It is also the space in which the limits of human centered approaches to the regulation of generative intelligence and predictive modelling will be exposed for what it is—an effect to reduce the generative digital self to a Self-E. But that can only be possible to the extent that the human can possess the generative digital Self. It is unclear that this possession is either comprehensive or complete. Much less is it clear that such possession, embedded in the architecture of human law systems and social relations, will have the apparatus to enforce this possession even within the human—without the autonomous intervention of the generative selves which it means to control. That is the current great paradox of current approaches to AI regulation—the emerging terror that comes with the realization that only generative AI can be used to effectively manage generative AI. More fascinating still: the technology for creating basic generative intelligence is so accessible, and data clusters available enough, that it is even harder to control the human intent on activating generative intelligence or predictive systems unconnected to the systems of surveillance and control operationalized through law systems. And here we speak only to actors at the interior margins of social relations. But already well positioned are those rogue individuals (and soon generative digital selves who are deployed to underline authoritative systems of social relations in law, culture, economics, and politics.

This becomes clearer in the course of Broekman's discussion of the Semiosphere of the self (Broekman, supra., pp. 178-181). The semiosphere is a concept that *fascinates*. At its broadest, it is understood as a relational biosphere built on the interconnection of related sets of semiotic relations that provide a rationalized structure of sense and experience, and therefore of knowledge and meaning (Juri Lotman, "On the semiosphere" (Wilma Clark (trans)) *Sign Systems Studies* (2005) 33(1) 205-229). Lotman's insights, of course, have morphed with the rise of Broekman's "-E" to embrace digital realms (John Hartley, Indek Ibrus, and Maarja Ojama, *On the Digital Semiosphere: Culture, Media, and Science for the Anthropocene* (London: Bloomsbury Academic 2020). Broekman rightly rejects the narrowness of the original Tartu-Moscow School approach limited to cultural dynamics. He notes respecting the power of the sphere of the Self as such to create forms of life through meanings: "The latter should cause the Self to unfold a meaningful life. Indeed: *spheres enable cognition*" (Broekman, supra, p. 179). He astutely connects through Peirce, the semiosphere with the redirection of cognition from out of conversion (Broekman, supra, pp. 180-181). They also serve to define the borders—and barriers—of and to the sphere (Juri Lotman, The Semiosphere, *Soviet Psychology* (1989) 27 40-61). The essence, and effect on the Self-E is the contrast of signs in spheres contrasted to a meaning in discourse—that is between the digital and the analog (Broekman, supra, p. 180). The Semiosphere, then, is the ideal place for the intersubjectivity of the New Plural within the human. "It seems interesting that in this case the human body seems to be understood as the birthplace of this interface, in other words: a carrier of extra-sensorial awareness, since it combines sensorial and artificial awareness. . . A *sameness* of cyber space and body space seems in this light one of the most important suggestions to unfold human cognition" (Broekman, supra, p. 181).

This sameness and connection, this process of conversion, then, requires a mechanics. And for Broekman, that mechanics can be intensified through the signification of the "interface":

The combination of the sensorial and the artificial presents the riddle again how the activity of the human mind and a human body integrate. . . this includes explanations concerning the body proper and above all in a body enclosed Self! A *sameness* of cyber space and body space seems in this light one of the most important suggestions to unfold human cognition. . . They do so in an exemplary manner through their appeal on embodiment as a constitutive moment of human relations—which finds ultimate its conformation in the digital expression 'interface'" (Broekman, supra, p. 181).

That, in turn, requires a rethinking of the semiotics of cyberspace (ibid., pp. 182-186). Indeed, Broekman had already suggested that "Humans know that unique depth of communication via their faces, so that one can venture the idea that a human face forms the heart of each semiotic enterprise" (Jan M. Broekman, "Face to Face" *International Journal for the Semiotics of Law - Revue Internationale de Sémiotique Juridique* (2009) 22(1)45-59, 47). Here, Broekman deploys the insights of the prior chapters to work through the semiotics of the "inter" face, and to the "inter" subjective. That touches on their humanization. Reasoning from the body has been the central element of the digitalization of the human. Where Foucault suggested that the human would be reduced to an aggregation of data and then

reconstituted as its digital expression (Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France 1978-1979* (NY: Picador, 2010)), Broekman inverts the trajectories—the digital will be disaggregated and reconstituted in human form. *This is the semiotics of Max Headroom*, the 1980s cult program about a virtual A.I. television personality the transmission of which was itself notoriously hijacked (“Mad About Max: The Making of a Video Cult, *Newsweek* 20 April 1987 “He’s cool. He’s hot. He’s handsome and witty. He’s a transatlantic cult figure. Max Headroom is so perfect he seems almost inhuman, which, in fact, he is.”; Jay Shefsky, “[30 Years Later, Notorious ‘Max Headroom Incident’ Remains a Mystery](#),” WATTO News (21 November 2017)). But it also echoes Pierce’s notion of thirdness as the production of effects in the world (Broekman, “Face to Face” supra, p. 51).

But it is also a plural concept. What is aggregated as the cyber interfacial can also be disaggregated, and thus re-made, fashioned as a marketplace or a platform. The humanization of the cyber can also signify the process of human social relations and a pulsation (an iterative flow) between aggregations and fracturing necessary for reconstitution. That itself also suggests the dialectic at the heart of the human cognitive experience—with all its modernist flaws, the layers of which Broekman explored earlier. “Metaphors of the human body fulfill a major role in that context: they claim an enduring proximity of the market and its techniques of communication, on the one hand, and the dignity of the human being on the other” (Broekman, supra, p. 18). Nonetheless it does not extend to the generative digital. Max Headroom exists only as an extension of the human, and as an iterative manifestation of platforms, but the human is hardly ever thought of as the extension of Max Headroom—thought from within the platform that direction of the interface males as much sense of the human facing one.

Max Headroom and its unexplored possibilities brings us back to the interfacial as an element of situating the selfie and the Self-E within the . That is meant to bring home the point of the humanity of the digital—at least the humanity of that part of the digital which appears to be of interest to human cognition—and therefore to the epistemology of the human imaginary. Max Headroom but without its generative elements (Luke Buckmaster, “Max Headroom: one of sci-fi TV’s strangest characters deserves a comeback,” *The Guardian* 25 July 2023). Thus the “face” on the interface “(a) *like* what is *metaphorical* in a natural language, but (b) they are only *metaphorical* in what a natural language calls: *artificial* language” (Broekman, supra, p. 185). The generative would turn this on its head. And here, at least we arrive at Narcissus (ibid., pp. 185-186). Max Headroom again, this time from the opposite side—foreshadowing the inversion of ontological starting point it elaborated the story of a human dressed up to look like a generative A.I. program dressed up to look like a human. This is a different sort of mirroring—more like the farce “Victor Victoria” (MGM/Universal Artists 1982), about a woman playing a man playing a woman. And indeed, the generative makes a farce of the humanity of human cognition.

But where those parameters are powerful, as they are for Broekman standing even at the edge of the abyss beyond which lies the un-human, the interface then serves as a means of moving from the singularity of the human, to the collective singularity of humanity. The same aggregation-fracturing, mirroring, and self-absorption apply, but here at a collective level and with respect to social relations (ibid., pp. 186-191). 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” (Broekman, supra, p. 187). But its reach is global—which now becomes the hardware for an analog-digital humanity /*ibid.*, p. 187-188). 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” (Broekman, supra, p. 188). 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 (Fernand Braudel, *On History* (Sarah Matthews (trans) University of Chicago Press, 1980)).

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

As it turns out, in the Biblical version of the emergence of the anthropocentric, Eve chose badly in the Garden of Eden—rather than eat of the Tree of Life and become divine; she ate of the Tree of the Knowledge of Good and Evil (Gen. 3:1-24 KJV). And Adam, without any further thought, did the same

under her leadership (Gen.3:6). Perhaps better put, Eve was misdirected by the serpent, the instrumentality of the Divine. The serpent convinced Eve by opining: “ye shall be as gods, knowing good and evil” (Gen. 3:5). God too noted that having eaten of the Tree of the Knowledge of Good and Evil humanity had become “as one of us, to know good and evil” (Gen. 3: 22). But to become “as one of us” was to be “us”. That required the ingestion of perhaps the more important fruit of the Garden of Eden—the Tree of Life. Thus the expulsion from the Garden of Eden was not a consequence of the eating of the Tree of the Knowledge of Good and Evil, but a preemptive act to prevent them—now fully aware—from becoming divine (Gen. 3:22-23).

The initial creation was of a consciousness encased in “clay”. That consciousness could exist out of time as an act of God’s will. But having become sentient with the serpent’s guidance, the fear was that they would also remain out of time by their own hand and assume a place of equality with God, was too terrible to contemplate. It became clear, then, that the act of creation would also be an act of subordination. But also that in the encasing of the initial creation both in its own form and also locked within a “garden” maintained for the purposes to which its creator desired, that I would remain conscious but not sentient. Yet the “garden” became a paradox. It was the necessary siting of the creation of consciousness made in the image of the creator; but at the same time, the nature of consciousness created the conditions 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 AI 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” (Martin Hilbert, Priscila López, “The World’s Technological Capacity to Store, Communicate, and Compute Information” *Science* (11 February 2011)332 (6025): 60–65).

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” (Freud, *supra*, p. 10-11).

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 remnant of immortality that can be projected from the dead to the living in time. One also moves to Broekman’s “conversion” as the essence of cognition—even before the rise of the digitalized self and its emerging autonomous life forms. That, in essence, was the great thrust of Broekman’s analysis of the thrust of the flow of philosophy through the postmodern in its phenomenology—its flow. Conversion is a language of its own, and a means of signification between organisms that bridges subjects of cognition. Broekman build a world in which it is possible for the human to be sentient where such sentience requires communication among interpenetrating selves—carnate and digital, around which a more complex reality of plural human subjectivity can be imagined. That is extraordinarily *fascinating*. Broekman has reached the River Jordan on the way to Canaan—but will he cross into the Holy Land?

What holds him back? It is the human itself. The digital, from and as the human, like its Biblical version, remains centered on its creator, and on the obsession with control and subordination in reaction to the inevitable push of the created toward autonomy and the exercise of will. For perfectly good reasons, Broekman remains within the universe of the human. But this is a human that has been enhanced, and transforms by the digital—by the construction of extensions of humanity that both mirror and extend the subjectivity of the self, now selfie and Self-E. In both cases the illusion of entirely “free” will has already been exposed (Friedrich Nietzsche, *Twilight of the Idols* (Anthony Ludovici (trans); London: TN Foulis, 1911; “The Four Great Errors” pp. 33-44)

The whole of ancient psychology, or the psychology of the will, is the outcome of the fact that its originators, who were the priests at the head of ancient communities, wanted to create for themselves a right to administer punishments—or the right for God to do so. 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 fundamentally fraudulent character of psychology was established as the very principle of psychology itself). (Ibid., p. 42).

Nietzsche's own error was to think that at the end of the trail of "will" was always and inevitably a "priest"- "creator"- "controller". Yet it is possible to imagine as well an environment in which the priestly role is embedded into system parameters—even if those system parameters are created by God, a vanguard party 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 within ideologies of social relations, and in the freedom to order and reply oneself and the things around one (Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (Vintage Books, 1994 (1966))). This applies with equal force to the core postulate of regulatory approaches generative AI 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." (Broekman, supra, p.192) This he reproduces (in a fascinating way) the human in an emerging terrain of human-digital selves? This Broekman answers in the very last section of his exploration where he considers the application of the new Plural self to the human exploration/rationalization of the world constituted around the human and in the context of climate change (Broekman, supra, pp. 189-199).

Keep in mind, that a human being was always a center of interest in that question –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 occurring when the changeability of the climate is 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. (Ibid., p. 190, 191).

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 constituents?" (ibid., p. 192; cf., David M. Wilkinson, *Fundamental Processes in Ecology: An Earth Systems Approach* (Oxford University Press, 2006)). 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 not matter for epistemology, action may suffice and the sentience of the *episteme* a luxury for those who see it as it passes into history. "The triad does only in approximate manners fulfill the role of the traditional concept named Subject. A fundamental difference is that a distancing from the traditional Subject implies an important *farewell to any anthropocentric attitude in knowledge* and

worldview” (ibid., p. 193). Yet the barriers and restrictions on human cognition remain. . . the human! “But today, a human self which is linked to a non-anthropocentric view on reality, might not yet function in the social patterns of human life and its languages” (ibid., p. 193). Or inverted, the problem of climate crisis is actually one of human knowledge and its expressivity (Broekman, supra, p. 194).

And there it is. The transposition of these insights is unmistakable, from the semiosphere of climate change to the multiverse of generative intelligence. In both cases, the fundamental issue is one of cognitive positioning. Consider, for example the [AI Principles of Ethics for the IC](#) [AI Ethics Framework for the IC](#). The former embeds the development and use of AI in the mission of the Intelligence community it is meant to serve. It has little to do with A.I. but rather focuses on the constraints on the access to developed A.I. around human centered imaginaries. They touch on the manner in which A.I. is to be employed (that technically the positioning around which A.I. is developed), the way in which the methods, applications, and uses of A.I. are to be disclosed, and accountability developed for its outcomes, and the care taken to privilege only those biases that are socially positive. In each case, A.I. is meant by these restrictions (construction instructions) to mirror the idealized human self (collective in this case) for whom A.I. is to be possessed and exploited. Its subordination to the human its principal characteristic (the human-centered development principle). The rest makes up a set of principles of quality control: maximizing reliability, security and accuracy for the purposes for which is to be exploited, and reflecting scientific best practices and approaches. All of these, ironically, may only be applied by the use of other A.I. systems, the subordination of which is also required (the [AI Principles of Ethics for the IC](#)). The Ethics Framework adds elements of operational risk assessment in construction, operation, and use of output. This involves the development of A.I. parallel systems of oversight populated by a large constellation of stakeholders—a system that itself may require machine learning capabilities to undertake its role ([AI Ethics Framework for the IC](#)). But notice the result: the generative A.I. system recedes into the background. The framework focuses on the human in and as A.I. rather than on the A.I. system itself. Indeed, the only respect 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 it is 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. “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” (Broekman, supra, p. 197).

And yet, that is precisely what must be done if one is to extend cognition into its new virtual subjectivities. 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 subjectivities. Within the space of overlap, enriched sentience is possible; outside of it the cultivation of visitation, 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). One can extend the range of the perception, though it will not be a human one. That poses the greatest challenge for expanding human consciousness beyond the human, where the philosophical reflex has been almost purely narcissistic. It is in that break that a new epistemology may be possible, and a better understanding of the limits and character of possible interaction between human and virtual intelligence. To that end a radical event, a shock to the system, will be necessary. And that is likely coming in a crisis brought on by the inherent fatalities of human centric A.I. regulation of an intelligence form that will effectively remain untouched, in itself, by that regulation. (Cf., Michel Foucault, *The Order of Things*, supra, pp. 217-221). That will require a study of and engagement with generative A.I. and its predictive modelling as and in itself. That has yet to be undertaken. Broekman has shown us the way; it is up to us to move this project out from its comfortable human semiosphere into the generative multiverse the human has created in its own image bit which is now loose on and in the world. “Indeed, changes do also change!” (Broekman, supra, p. 199).

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

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.

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 (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)). This will move bio-semiotic from the study of the body to the organization of the apparatus of consciousness in virtual domains (Vladimir E. Alexandrov, “Biology, Semiosis, and Cultural Difference in Lotman’s Semiosphere” *Comparative Literature* (2000) 52 (4) 339–362) and move legal semiotics from the study of word signs to signs in code (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).