Michael Hanke

From Language to Communication – Vilém Flusser's path from language philosophy to communication and media theory

In memory of Matthias Kroß

1. Introduction

Philosophy of language – Flusser's initial academic field of research, as documented in his first two published books, *Language and Reality* (1963) and *Philosophy of Language* (1965) – had been a part of philosophy since Plato's *Cratylus* and antique logos theory (as the Greeks did not have a concept for language, they treated related questions within the concept of logos theory). More specifically, the *predetermination* of thinking through language, which in Flusser becomes *determination*, has a long tradition especially in German philosophy and was intensively discussed since Johann Gottfried Herder and Wilhelm von Humboldt. Both logos theory and Humboldt have a strong standing in Martin Heidegger's *Being and Time* ([1927] 2006), which from early on strongly influences Flusser. In the twentieth century, this philosophy of language was complemented by Edward Sapir (1884-1939) and Benjamin Lee Whorf's (1897-1941) so-called Sapir-Whorf hypothesis (or linguistic relativity), by the influence of Ludwig Wittgenstein (1889-1951), and by the importance attributed to language by analytical philosophy. John L. Austin's (1911-1960) *How to Do Things with Words*, a further landmark of the field, was published in 1962 (but not taken notice of by Flusser).

By the 1920s, the philosophy of language had become a central topic in philosophy, as well as for the authors considered basic references for Flusser and who had a considerable impact on him, such as Walter Benjamin, Ernst Cassirer, Martin Heidegger, and Ludwig Wittgenstein. Wolfram Eilenberger, in his 2018 book, *Zeit der Zauberer. Das große Jahrzehnt der Philosophie 1919-1929* (translated in 2020 as *Time of the Magicians: Wittgenstein, Benjamin, Cassirer, Heidegger, and the Decade that Reinvented Philosophy*), sums up their thinking in the following words: "A philosopher, in fact, who in 1919 had nothing to say about the role of language in human cognition and the life-world, (...) actually had

would have answered in this (and any other) stage of their thinking without any complications and absolutely in the affirmative, it was as follows: The human way of life is one of speaking. In this sense, language is not a symbolic form among others, but the most important and elementary of all. It is the actual basis of our respective understanding of ourselves and the world. Last but not least, it is the form in which philosophizing plays and finds itself as an inevitable "discursive activity." (Eilenberger 2018: 135-136, my translation)

The four philosophers cited by Eilenberger – Wittgenstein, Heidegger, Benjamin and Cassirer – are basic references for Flusser (although Benjamin factors only later in his photo theory), and their common position to language attracts Flusser straightaway. Flusser, moreover, is inspired by Vicente Ferreira da Silva (1916-1963), who had launched his debut work *Lógica Simbólica* [Symbolic logic] ([1964] 2009c) in the tradition of the "logical analysis of language" of the Vienna Circle, which saw in a self-confident subject "an epiphenomenon of overarching social systems of far greater explanatory power: in the last instance of language" (Frank 2019: N3). Flusser thus joins the tradition of language analysis together with the "linguistic turn," which is nowadays in contrast to a "turn away from language," not least through insights from brain research claiming – diametrically opposed to Flusser – that the importance of language in developing cognitive skills is overestimated. It seems that, despite the energy consumed by the subject, the question of language is still open.

According to Flusser's philosophical self-portrait, "to live is to accept oneself in order to change oneself," and "to live is to search one's way" ([1969] 2002: 197-198), a philosophical process that for him at the time is not yet completed. This can be described as dialectics of continuity and new focuses, not least because Flusser himself uses the concept of dialectics quite frequently.'Turning things into objects, by working on them, complementarily brings forth the subject, a mediation process of which the result is culture (Flusser 1998b: 74). This process, understood as universal, applies also to Flusser himself, when he first considers language to be the prominent manifestation of culture, and then gradually, when working on it as an object of analysis, develops a more general attitude that replaces the concept of *language* with *code*. And, as the concept of code is more abstract, it includes language but also other code systems, such as images. Thus, it is

¹ Already in Philosophy of Language, where he calls the situation of reality established by a phrase "the synthetic result of a dialectic process that has the subject as thesis and the object as antithesis" (Flusser 2016: 37), Flusser also says of himself to possess, like most who share his cultural and historical background, "a solid Marxist basis," which, as an "anthropological model (...) stubbornly persists in the very center of my thought" (Flusser 2002: 199 – translated by the author of this paper). Accordingly, he speaks of the "dialectics of mediations" recurring in Hegel, Marx, and Schopenhauer (Flusser 1998b: 108), and also that it is desirable to have Marx in your stomach, but not in your head. On another occasion, he describes the history of the West as a dialectic between two mediations, text and image (Flusser 1998b: 73).

the notion of code and information communicated by the symbols they are made of, developed in his work on communicology (Flusser 1998a: 74) that stands as the outcome of Flusser's thinking process initiated by his analyses of language. Except that language, although later still considered to be one of the most important of all codes and the one that programs us (Flusser 1998b: 79, 81), does not stand in the center of contemporary communication revolution, that role, moreover, falls to image communication and the transition from traditional to technical images. However, these considerations rest on the "basic thesis according to which the world and life in the world is experienced, recognized and evaluated in the network of codes that program existence" (Flusser 1998b: 82-83). Thus we can describe Flusser's dialectical learning process as the path "from language to code and communication."

2. Flusser's research on language

If it is true that the first cut is the deepest, this may apply also to the development of academics, and indeed we can observe that in many thinkers' initial impacts can be traced to later works. In Flusser's case, this applies not only to the topic of his first published book, Língua e realidade (1963) (Language and Reality [2018]), but also to the references used there to develop his arguments and which never ceased to influence his thinking. These are, at first sight, authors such as Cassirer, Heidegger, Husserl, Plato, and Wittgenstein, but also Vicente Ferreira da Silva, generally less well known but tributed by Flusser in the foreword of Language and Reality (2018: 27) as sharing the ideas of the book, although it is important to Flusser, whatever his motives, to point out that he, not Ferreira da Silva, is the source of his thoughts. Philosophy of language, then, is explicitly treated in Flusser's homonymous second book from 1965, Filosofia da Linguagem (1965) (Philosophy of Language [2016]), and in order to follow the connections between his early writings on language philosophy and his later contributions to media theory and other elements of his thought, it is necessary to start from a critical revision of these beginnings. Here, the most important elements are dialogue and spoken language and its representations, considered the keys to resolving the philosophical problem of subject and object, entities later derived from the basis of language use. And, when in the context of telematic society the function of technology according to Flusser is to establish intersubjectivity and interpersonal relationships, we see this continuity preserved, yet transferred to a new focus.

2.1 The genesis of Flusser's thinking on language

In his philosophical self-portrait, In Search of Meaning, Flusser (2002: 201-205) describes the development of his thought and divides it into several periods: first, a formative period, followed by three productive phases and a present one. Initially, "during the formative period in Prague," the genesis of his thought "must be placed within the three incongruous coordinates," which he names as Marx; "the Prague School, the Vienna Circle, and above all Wittgenstein"; and Nietzsche, stimulated not least by Ortega's *Revolt of the Masses* (Flusser 2002: 199). For the period of the WWII, Flusser highlights Wittgenstein's *Tractatus Logico-Philosophicus* and Nietzsche, and further indicates Buber, Jaspers, and Heidegger as influences (Flusser 2002: 200), followed by Husserl and Kant; then, reading Cassirer, Cohen, Hartmann, and the entire Marburg School, the "outlines of my future way began to appear: my central problem was going to be language" (Flusser 2002: 201). Apart from a personal motive ("because I love language"), there is a theoretical one, which is the importance of language as symbolic form, as "the channel that links me to others, the field of immortality *aere perennius*, the matter and instrument of art" (Flusser 2002: 201). Language acquires the status of "the form of my religiosity," and, as Flusser writes in 1969 looking back on this phase, "possibly the form of my perdition" (Flusser 2002: 201), a point to be returned to.

Subsequently, in what Flusser categorizes as his "first productive phase," which is relevant insofar as only here he is presented to us as an academic author, he states: "I began to read systematically about language" (Flusser 2002: 201). This signifies regaining contact with Prague, "the Viennese" – also now "the Americans based on the Viennese" – Russell, "and Wittgenstein over again"; indeed, if, in Wittgenstein's phrase, "The borders of my language are the borders of my world" (ILP, 5.6), *reality* were to replace *world* ("The borders of my language are the borders of my reality"), we thus have a good portion of Flusser's program in *Language and Reality*. He also further refers to Heidegger and his *Unterwegs zur Sprache* (*On the way to language*) ([1959] 1985), where Heidegger detects Hölderlin and his highlighting of poetry as the basis of philosophy, an element that enters Flusser's genesis of thought ("poetry as the mouth of the unspeakable" [Flusser 2002: 202]). This relates to another influence on Flusser's understanding of language, apart from formal readings of "the great masters of language" (Flusser 2002: 201), such as Joyce, Goethe (who "is always with me" [Flusser 2002: 202]), Thomas Mann, and "the two most important influences of that period, Kafka and Rilke" (Flusser 2002: 202). Finally, music, especially in the form of Mozart, also has an influence on Flusser's understanding of language becomes music and music becomes language" [Flusser 2002: 202]). So, this is the history Flusser presents in his retro perspective that was then culminated in writing *Language and Reality*.

After Flusser's second productive phase, marked by Guimarães Rosa and Vicente Ferreira da Silva, which resulted in a series of articles published under the title Da Religiosidade (1967) [On Religiosity], he subsequently informs us, in respect to his third productive phase, in 1965: "I became conscious that my problem, language, was too vast, at that stage of my development, to be attacked 'in toto.' I had to discipline myself and refrain myself' (-Flusser 2002: 204). He "returned to logic, to those aspects of the Vienna Circle I had suppressed, to Quine, Chomsky, and epistemology," and, developing the idea of science as language, to Kant, and to Leônidas Hegenberg, a member, like Flusser, of the Instituto Brasileiro de Filosofia (IBF; Brazilian Institute of Philosophy), who had taught him logic. As a result of this: "I then wrote 'A Filosofia da Linguagem' [Philosophy of Language]" (Flusser 2002: 204). It is only after this that Flusser meets Milton Vargas, who would become one of his closest friends and intellectual interlocutors and who opened Flusser to a "new field of interest," namely, communications. As Flusser (2002: 204) reports: "I doubt that I would have taken an interest in the theory of communications without him [Milton Vargas]. But I did, and it began to absorb me. It opened up an entirely new avenue of access to the problem of language. I relearned everything." Similarly, in his philosophical autobiography, written in 1973/74 and published posthumously in German (Bodenlos, 1999) and in English (Groundless, 2017), Flusser states that the problem of the symbol appeared to him to be central, which, seeing language as a system of symbols, brought him to the philosophy of language; "and if this occupation later expanded to the entire field of communication, it was because the essence of communication was recognized in 'mediation,' i.e. in the symbolization of messages" (Flusser 1999: 162 - translated by the author of this paper). Such is the history of how Flusser came to write his two books on language and then move beyond the topic by discovering communications. Yet he never quite abandoned the subject of language, but merely approached it from a different perspective: code and communication.

2.2 Language and Reality

Flusser's first book, *Language and Reality*, was not readily approved by critics, to say the least. In fact, it was harshly criticized, as the reviews of the time attest (all in Portuguese and preserved in the Vilém Flusser Archive in Berlin presented and discussed in Hanke 2006). Flusser reacted to the critical review of Anatol Rosenfeld (1964), a Jewish exile like himself and one of the most highly

respected intellectuals in São Paulo, published in O Estado de São Paulo, a prominent newspaper both in São Paulo and throughout Brazil, by writing to Rosenfeld that his critique had "destroyed" him (Flusser 1964).

Generally speaking, there can be no doubt about the importance of language, and obviously language follows rules and so may reality; but the question is whether these rules correlate or can be deduced one from another. It may well be that the rule systems of language and reality operate in parallel, completely independent of one another. Flusser, however, defending "the intimate closeness of language to our intellect" (Flusser 2018: 158), pleads for "the identification of intellect with language" (Flusser 2018: 159) and, moreover, to derive reality directly from language, a project called Sprachontologie (language ontology). Yet in his critique Rosenfeld presents some strong arguments against this direct relation, casting Flusser as a victim of etymology, by deducing the history of things from the history of words. And Vicente Ferreira da Silva – to whom, after his death in a car accident, Flusser dedicated four articles, more than to any other thinker, belying the scope of the Brazilian philosopher's influence on Flusser - writes on the book jacket of the 1963 edition of Lingua e realidade (unfortunately reproduced neither in the later Portuguese edition nor in the English translation, although of considerable importance to contextualize Flusser's work because Ferreira da Silva had, in all his philosophical competence, accompanied it closely), that it is with "great boldness and radicality" ("grande ousadia e radicalidade") that "Flusser equates philosophy and knowledge in general with purely linguistic phenomena, affirming the correspondence between reality and the symbolic system of language."² Ferreira da Silva further makes the point that Flusser's "semantic and semiotic reflections" ("reflexões semânticas e semióticas") are considered to be partially inspired by Wittgenstein and Carnap, but considers as "daring" Flusser's thesis that the growth of language is tied to an expansion of reality. An example for what Ferreira da Silva (1963) points to as "certain exaggerations and inaccuracies" ("certos exageros e inexatidões") might be Flusser's claim that language is of such utmost importance that both natural and human sciences "study the same reality: language," which is why according to Flusser "they are complementary disciplines" (Flusser 2018: 162). All their problems could be solved by the study of language, Flusser contended, and all the humanities (Geisteswissenschaften [sciences of the spirit]) will turn into a study of language (Flusser

² "Flusser equipara filosofia e conhecimento em geral com fenômenos puramente 'linguísticos', afirmando a correspondência entre a realidade e o sistema simbólico da linguagem." (Ferreira da Silva 1963) ("Flusser equipped philosophy and knowledge in general with purely 'linguistic' phenomena, affirming the correspondence between reality and the symbolic system of language." – Translated by the author of this paper.)

2018: 159). Many would not agree with this, and one should not try to protect Flusser from his own mistakes, but rather take the critics seriously.

Flusser's project is a search for order, an order behind the chaos of reality, i.e., a structure to be unraveled by "philosophy, religion, science, and art" (Flusser 2018: 2). These latter are the methods to bring forth a cosmos, and quite similarly, Cassirer in his *Philosophy of Symbolic Forms* affirms that the "ideal world" – what would correspond to a "cosmos" – is opened to us "by religion, art, philosophy, science", as Cassirer (1944: 62) later explains. With *Language and Reality*, Flusser wants to "propose that this structure be identified with language; that knowledge, reality, and truth are aspects of language; that science and philosophy are language research; and that religion and art are language-creating disciplines" (Flusser 2018: 4). He thus connects "the structure of the cosmos with language" (Flusser 2018: 4), using a "vast" concept of language and the phenomenological method based on Husserl (Flusser 2018: 6). Language is what makes up the cosmos, as well as the intellect.

Remarkably, several elements of Flusser's later thought are already present in *Language and Reality*. Flusser himself gives us a hint about this continuity of thought, basing firstly language and later communication on the concept of Aristotle's *zoon politikon*, the "political animal" in need of relating to one another. When Flusser states in *Language and Reality* that the "intellect realizes itself through conversation" (Flusser 2018: 20), or use of language, and that it is by conversation that the intellect "preserves and increases the territory of reality," he calls this "the ontological meaning of the expression of man as *zoon politikon*" (without explicitly naming Aristotle). We find exactly the same reference again at the beginning of his book *Kommunikologie* [Communicology] (published posthumously [Flusser 1998a]) and in his article, "What Is Communication?" ([1973/74] 2002), where he states that communication is an artificial process that relies "on tools and instruments, that is, on symbols ordered into codes"; which makes "man a social animal, a *zoon politikon*," and as such, it is indispensable for him "to make use of the instruments of communication (i.e. language)" (Flusser 2002: 3). So we see here Flusser's transition from the concept of "conversation" to that of "communication."

Likewise, we find in these early works the concept of information, central for Flusser's later definition of communication, such as "[h]uman communication is the production, transfer, and storage of information," understood as "a *conversation* about the world of concrete phenomena" (Flusser [1984] 1993: 233) – translated and italicized by the author of this paper. In *Language and Reality*, we read quite similarly (without using the word communication): "The intellects absorb

information emitted by others, that is, they apprehend and comprehend, and they emit new information, that is, they articulate." (Flusser 2018: 109)

Furthermore, the languages of visual arts and music, especially the former, that become later fields of interest are given considerable attention in *Language and Reality*. Flusser here develops a concept of what he calls "amplified language" (Flusser 2018: 137). Whereas the physiology of developed language is primarily limited to the analysis of "the linguistic phenomena *sensu stricto*," i.e., "language as a set of visual or auditory symbols" called words, apart from this language *sensu stricto* the intellect has access to other "types of symbols (...) language *sensu lato*," which refers "to the vast region of music and the visual arts" (Flusser 2018: 138). Although "similar in their structures," as they also form organizations and different characteristics, music and the visual arts contain an idea that corresponds to the concept of code (not yet used here). As they all are considered to be part of language, according to Flusser the word "art" may be abandoned (Flusser 2018: 141) because music and visual art are "extensions of language," and thereby language *sensu stricto* is "the prototype and the cradle of other forms of language" (Flusser 2018: 152).

The preceding also relates to image communication. In Flusser's graph (see Figure 1), "Physiology of Language" (Flusser 2018: 176, see appendix), representing several layers of language, the center represents conversation based on symbols called words (language *sensu stricto*), whereas the left side "represents the world of fundamentally pictorial symbols, therefore, the visual arts" (language *sensu lato* [Flusser 2018: 105]). When Flusser later claims in *Kommunikologie* (1998a: 78) that in the contemporary communications revolution some codes, such as techno-images, are more characteristic than traditional ones, such as language, we see his later shift of focus from language *sensu lato* (spoken words) to one based on pictorial symbols, or language *sensu lato* (images). Moreover, when he later turns to arts – be it photography, computational graphics, or aesthetic theory in general – Flusser encounters a field that had long since incorporated his scheme of language *sensu lato*. This early interest is also documented in his letter to Celso Lafer regarding his visit during his 1966 tour through Germany to Documenta director, Arnold Bode, in Kassel (Flusser 1966).

Signaling this continuity, we find an echo of these early thoughts in Flusser's 1985 work, *Into the Universe of Technical Images.* While, as the title indicates, this book addresses technical images, in the end it turns to music. As Flusser elaborates, "I took certain contemporary tendencies as my starting points, for example, the tendency of technical images to become more and more immediate and to repress texts or the tendency of images to become electronic" (Flusser [1985] 2011: 160). And so far,

Flusser continues, "I have excluded everything to do with ear and mouth, with sound and words, from my thinking. I have omitted the audiovisual character of the universe of technical images" (Flusser 2011: 164). However, as "the world of music is a composed universe, *compose* and *compute* are synonyms. We don't need to wait for electronic music to recognize this quality about music: the universe of music is as calculated and computed as that of technical images" (Flusser 2011: 164). Music and technical images merge, which is, according to Flusser, "the only way the audiovisual character of the universe of technical images can be understood," namely, as "contemporary approaches to making music pictorial and pictures musical," which "have had a long preparation" (Flusser 2011: 165). When Flusser insists that "once they have both become electronic, visual and acoustic technologies will no longer be separable," this harks back to his claim in *Language and Reality* that music and visual arts are languages like speech and of a common origin. Furthermore, as Flusser's book on the universe of technical images addresses "how our current technological society might turn out in the future" (Ramos 2016: 205), we see that Flusser keeps his early framework and adapts it to a new research field, with a perspective change (from language) to technological society.

2.3 Philosophy of language

Milton Vargas remarks in his foreword to Flusser's *Ficções Filosóficas* [Philosophical fictions] (Flusser 1998: 18) that *Philosophy of Language* merits publication because in a way it surpasses its predecessor, *Language and Reality.*³ *Philosophy of Language* is based on a course, "Filosofia da Linguagem" (Philosophy of language), given at the Instituto Tecnológico de Aeronáutica (ITA; Institute of Technology and Aeronautics) in 1965, which Flusser administered at the invitation of Leônidas Hegenberg, one of Flusser's teachers at the IBF, and whose course "Symbolical Logic" Flusser had attended. (Hegenberg also accompanied the production of Flusser's lectures, so there probably was some kind of exchange between them.) Apart from reaffirming the primacy of language for the intellect and the world, Flusser's second book adds some new aspects, e.g. the focus on the proper name, seen as the source and center of language (Flusser 2016: 43).

A comparison of the two titles that underlines Vargas' opinion might be noteworthy. Language and Reality, the first book, directly tackles one of philosophy's oldest problems, reality, and combines it with another heavyweight in terms of problem solving, language, altogether quite unlikely to be resolved by a beginner in his first contribution to academia. Philosophy of Language, in

³ In Portuguese "merecia ser transcrito em livro, pois de uma certa forma supera o do livro anterior."

comparison, is less pretentious and is intended as a contribution to a field, not a final solution. This could be considered a step toward academic maturity.

It is well known that Flusser joined the Brazilian Institute of Philosophy in the late 1950s, but it is rarely discussed what this meant for his intellectual trajectory. Flusser was a welcomed newcomer in academia and entered a circle of mature academics whose theory preferences were well established - Ferreira da Silva being perhaps the most important name (see also Hennrich 2009), along with Miguel Reale and Leônidas Hegenberg.⁴ According to his own words, Flusser soaked up everything he could, eager to learn about philosophy and continue the path of academics so abruptly interrupted in Prague by his forced emigration. There is a small translation error in the English version of Philosophy of Language that gains some importance here: Flusser refers to a course of Hegenberg's given "here at the institute" ("este instituto"), presumably referring to the place of the lecture, the ITA, Brazil's Institute of Technology and Aeronautics ("Prof. Hegenberg said during his last lecture here at the institute" [Flusser 2016: 116]). However, in the Portuguese version Flusser states "given at IBF," the Brazilian Institute of Philosophy. If anything was discussed at the ITA, a military aviation school dealing exclusively with the formation of armed forces with emphasis on teaching and not by chance one of the few academic institutions preferenced in 2020 by the Bolsonaro administration for recruiting administrators from among its staff members - it is clearly not a place for contemporary philosophical and academic discussions in the manner of IBF, home to an elitist circle of philosophers.

Hegenberg's academic field was Symbolical Logic (see also his book *Lógica Simbólica* [Hegenberg 1966]), and Flusser's numerous references to this subject in *Philosophy of Language* are in all likelihood due to Hegenberg's influence. As initiated by the Vienna Circle of Neopositivism, and Wittgenstein (who was not a member of the Vienna Circle but was of strong influence there), Symbolical Logic was a project to cure language from its inaccuracies. On the other hand, Ferreira da Silva's oeuvre, although complex and involved in "some of the most decisive crossroads of 20th-century philosophy" (Petronio [1964] 2010: 19, my translation), placed a focus on the linguistic turn of symbolical logic as initiated by Wittgenstein, as well as on existentialism based on Husserl, Buber, and Heidegger. Given the close relation between Ferreira da Silva and Flusser, it is not surprising that we find parallels between Heidegger's concept of language as presented by Ferreira da Silva ([1964] 2009a) in "A Concepção do Homen Segundo Heidegger" [The concept of man according to

⁴ Flusser's *Travel Library* in the Vilém Flusser Archive in Berlin contains the considerable number of eleven books of Ferreira da Silva, sixteen of Reale, and two of Hegenberg.

Heidegger] and Flusser's Language and Reality. This affinity is due to the close intellectual cooperation and exchange in the intimate group of the IBF. The context of these discussions is why Flusser, in presenting Philosophy of Language, refers to "Existentialism and Neopositivism" (Flusser 2016: 11) represented by Ferreira da Silva and Hegenberg. Flusser's idea is to solve the Gordian knot of the complex relationship between language, knowledge, cognition, and reality by a simple stroke: he identifies "the intellect with the field of languages" (Flusser 2016: 22) and therefore makes the bet that everything is based on language, even philosophy itself; as he envisions, "every philosophy is, in the end, a philosophy of language" (Flusser 2016: 113). He thus considers "philosophy of language" a pleonasm, because philosophy is *always* about language (Flusser 2016: 9), which explains why "[p]hilosophy as the critic of language," and "therefore, philosophy 'tout court," becomes the theme of Flusser's second book. The solution to the traditional philosophical problem of "the theory of knowledge," together with "the classic problem of the relation between knower and known" and, further, "to identify the categories of reality and of knowledge as the rules of knowledge" (Flusser 2016: 87) leads Flusser to the conclusion that "knowledge would be anterior to knower and known. In other words: knower and known would be two aspects of the process of knowledge," brought forth in "the discourse of language" (Flusser 2016: 87). Knower and known ontologically become "the external world" and "I"; both are "two aspects of discourse, and ontologically posterior to it" (Flusser 2016: 87).

It is noteworthy that Flusser's claim that linguistic analysis be identified with ontological analysis (Flusser 2016: 88) is not in line with Heidegger – who was otherwise highly appreciated by Flusser. Although he draws widely from Humboldt's language theory, Heidegger in his reflections on language – on the basis that it is unclear, for example, due to several questions that arise, such as "what kind of Being goes with language in general?" (Heidegger 1962: 209) – comes to the conclusion that "Philosophical research will have to dispense with the 'philosophy of language' if it is to inquire into the 'things themselves' and attain the status of a problematic which has been cleared conceptually" (Heidegger 1962: 209-210). This attitude demonstrates that merely recognizing the importance of language does not necessarily imply attributing to it a central role in ontology, as Flusser does. For instance, does the difference of transitive and intransitive verbs consulted by Flusser (2016: 91) really affect our perception of reality, as Flusser would have? Given the unclear status of language, it is not plausible that its structure should provide us with categories capable of capturing reality; this impasse is not a problem only for Flusser, but for philosophy of language in general, and it presents a motive to abandon the project (as Flusser later did).

At this stage, however, Flusser does not follow Heidegger but rather the linguistic turn toward the philosophy of language as well as language and reality, which had been discussion topics of the IBF and of Ferreira da Silva (Petronio 2010: 22). Flusser connects to these discussions of his teachers; for instance, Ferreira da Silva proposes in *Dialética das Consciências* (1964 [2009b]) [Dialectic of consciousness – a book present in Flusser's *Travel Library* in the Flusser Archive in Berlin] "a key to overcome the dyad of subject and object" ("uma chave de superação da díade sujeito-objeto") (Petronio 2010: 28), and Flusser declares in *Philosophy of Language* "I believe to have overcome the nefarious dichotomy (...) subject/object, which adheres to classical epistemology and ontology like a plague" (Flusser 2016: 40). This quest is still preserved in Flusser's last and uncompleted manuscript, published posthumously in 1994, *Vom Subjekt zum Projekt (From subject to project: Becoming Human*), which proposes "projection" as a way to overcome the dyad of subject.

The importance of conversation stressed by Flusser can also be traced back to Hölderlin, mediated through Ferreira da Silva and Heidegger. Flusser writes, "Selves are an aspect of conversation, that is: Selves are how the conversation processes itself. That is how we should interpret Heidegger's phrase, 'We, human beings, are a conversation' [Gespräch] ["Nós somos conversação" [Flusser 1965: 167] in the original Portuguese edition; here also the phrase is quoted in German: "ein Gespräch wir sind"], and that is how we should attempt to define the term 'Self" (Flusser 2016: 64). Flusser here mistakes Heidegger as the source of the quote by Hölderlin. Accurately Ferreira da Silva (2009b: 172) writes, "Nos somos um diálogo', dissera Hölderlin" ["We are a dialogue,' said Hölderlin'']; and the source of this phrase of Hölderlin's is, in German, also cited by Heidegger: "In der jüngst wiedergefundenen Hymne 'Friedensfeier' singt Hölderlin (...) 'ein Gespräch wir sind" ["In the recently rediscovered hymn 'Peace Celebration,' Hölderlin claims (...) 'we are a conversation'] (Heidegger 1985: 171). Not only is Heidegger a main reference for Ferreira da Silva as well as for Flusser, but also the book in which Heidegger credits Hölderlin, Unterwegs zur Sprache, is highlighted by Flusser (2002: 201) as one of his marking influences in his first productive phase, as mentioned earlier. The underlying intention here, to demonstrate the primacy of conversation and discourse to the Self and the external world, is an idea also found in Ferreira da Silva when he writes, "man (...) depends on communal life, as a creature of this existential communication" ("o homem (...) depende da vida em comum, sendo uma criatura dessa comunicação existencial" [Ferreira da Silva 2009b: 172]); "sheer timeliness of intersubjective connection" ("pura atualidade da conexão intersubjetiva") (Ferreira da Silva 2009b: 172-173); and that "the Other emerges as a condition of our private Self" ("o outro surge como condição de nossa consciência particular") (Ferreira da Silva 2009b: 173). And this social condition as a vital determination of the human being "to be with each other" ("o seu 'ser-com-o-outro' [*Miteinandersein*]"), was, according to Ferreira da Silva (2009b: 183), clearly worked out by Heidegger. Ferreira da Silva also presents Martin Buber's idea that the basis of language lies in relations (Ferreira da Silva 2009b: 186) as well as Heidegger's claim that the beginning of language is poetry (Ferreira da Silva 2009b: 187). We do not propose that Flusser simply parroted these proposals but rather that they were topics circulating and discussed in the IBF and taken up by Flusser.

Along these lines, according to Flusser (2016: 59), both the (external) world and the Self are results of conversation: there is no world external to language, and the same holds for the Self. The place of the Self, where it is developed, is conversation, which is also where "a fabric of phrases united by links called 'arguments"' (Flusser 2016: 63) occur. At certain places in this fabric "the threads of the argument crisscross, regroup, and reformulate," and "these moments of the process of conversation are the knots of the fabric" (Flusser 2016: 63). Thus, conversation is the intellect's field, in which thoughts crisscross in crossing points that are called "Selves"; this is the context in which Flusser cites Hölderlin's phrase mistakenly attributed to Heidegger mentioned above, according to which man is essentially based on conversation, and which is how we should define the term "Self" (Flusser 2016: 64). A "knot" of phrases "is the only intellectually satisfactory meaning of the term" (Flusser 2016: 64); accordingly, the "Self" is seen as a "knot of phrases" in conversation (Flusser 2016: 86), open to different conversations in several languages of a common foundation (Flusser 2016: 66). What is valid for the Self is also valid for the external world; both "are nothing but horizons of language" (Flusser 2016: 71). First comes the meaning (of a word), and it is the "will to want to determine the meaning of words that the external world and the Self emerge" (Flusser 2016: 72). Flusser confesses he has lost faith both in the existence of the reality of the external world and in that of the soul; both must be put "in phenomenological parentheses" in order to be able to follow his arguments (Flusser 2016: 72).

However, abandoning philosophy of language, as Flusser did, does not equate abandoning fruitful concepts developed in this context that can be maintained and transferred, which is what we see; concepts such as "sign" and "meaning," "project" (*Entwurf*), "technological world," "knot," "discourse," "dialogue," "information," and "entropy," as will be shown.

In accordance to Ferreira da Silva's observation of Flusser's reflections being semantic and semiotic in character, when Flusser, in *Philosophy of Language*, first reflects on the term *philosophy*, he defines it as "a purely linguistic activity" (Flusser 2016: 2) – based on words –, and "a conversation"

(Flusser 2016: 3) that involves signs and meanings (Flusser 2016: 8). Flusser's definition thereof -"Signs are what introduces us to meaning; however, they conceal that meaning for the same reason." (Flusser 2016: 8) - corresponds to semiotic definitions of the sign as present/absent, i.e., where the material sign vehicle is considered present and the meaning absent. Signs according to Flusser can be grouped into systems, called languages, and "languages are systems of signs," whereby signs within languages are defined as "symbols" (Flusser 2016: 8). Symbols are used to define language ("The collection of all symbols is called 'language" [Flusser 2016: 130]), and they represent a meaning: "All words are symbols; entities that signify something, point to something, and substitute something" (Flusser 2016: 130). Words serve to bring forth an order or cosmos, already a quest in Language and Reality, and now also in Philosophy of Language: "Order,' and 'cosmos,' are synonymous with 'a set of regulated symbols,' therefore, synonymous with 'language,' as we have defined the term" (Flusser 2016: 120). Additionally, the situation of use and thus a pragmatic perspective is considered, in calling a situation "meaningful when it contains signs" and "ordered (...) when it has symbols contained in languages" (Flusser 2016: 8-9). This semiotic framework is later, and within the context of communication theory, maintained and expanded by Flusser, replacing the more general concept of "code" for "language." In Kommunikologie Flusser defines human communication as based on tools and instruments; namely, symbols arranged into codes (Flusser 1998a: 9); furthermore, the human is defined as a new kind of animal that organizes symbols into codes for the purpose of storing information, and a symbol as a tool intentionally produced to serve for communication (Flusser 1998a: 74-75). The World, in this sense, is a "Codified World" that is also the title of an article in which Flusser writes, "[a] code is a system of symbols. Its purpose is to make communication between people possible. Because symbols are phenomena that replace ('stand for') other symbols, communication is a substitute: it replaces the experience of 'that which it intends."' (Flusser 2002c: 36-37) By indicating that "stand for" is a quote, Flusser is obviously referencing the scholastic definition of a sign as something that stands for (stat pro) something else (aliquid stat pro aliquo), passed on in philosophy since at least 1200 A.C. (Bühler [1934] 1982: 40). All types of material can serve for the construction of symbols (Flusser 1998a: 77), and thus it is not surprising that, as early as 1969, Flusser (2002: 205) refers to Umberto Eco's project of semiotics, and later repeatedly until 1990 (Flusser 1996: 149). Thus, the semiotic coinage is a *basso continuo* in Flusser's work.

A further example of the transfer of Flusser's leanings from language to communication is when he declares both language and communication in the existentialist manner as a "project against death." In *Philosophy of Language* (2016: 129-130) we read that the phrase is a project, and that "everything we say is said in order to negate death. I can, therefore, define the phrase as a predicative project against death" (Flusser 2016: 94). Progressively, by predicating, the discourse distances itself from the borderline situation of death (or nothingness, that which is behind language), and thus creates reality, a protective cover from nothingness and death (Flusser 2016: 94). Later, in *What Is Communication?* it is expressed as: "Human communication is an artistic technique whose intention it is to forget the brutal meaninglessness of a life condemned to death. By "nature," man is a solitary animal, because he knows he will die (...). Certainly, no one can live with the knowledge of this fundamental solitude meaninglessness, [which is why] man communicates with others." (Flusser 2002: 4) In this way, the "existential analysis of discourse" (Flusser 2016: 94) turns into the existential analysis of communication.

Communication is evidently related to dialogue, and Flusser's high estimation of dialogue is often attributed to Martin Buber's influence, but another source at least as important is Plato (probably the most cited author throughout Flusser's work). In *Philosophy of Language* Flusser states, "[t]o really philosophize is to read, to write, to talk to others, and to talk to oneself through that internal dialogue that Plato calls thinking" (Flusser 2016: 3). Thus dialogue, in this context, is so fundamental to Plato as to deliver the model for thinking. Flusser further states that "Platonic tradition, which I picked up in school, is decisive for me (...) Plato [was] the basis of my thinking" (quoted after Guldin & Bernardo 2017: 390); and, reinforcing: it is the dramatic beauty as expressed in the Platonic dialogues that "turned Plato to a fundament of my thinking" (quoted after Guldin & Bernardo 2017: 390). The continuity of his thinking regarding Plato is shown when Flusser, in finalizing *Into the Universe of Technical Images*, states: "The following considerations regarding (...) the emerging society rely on a social model, namely, that of Platonic utopia, slightly adjusted" (Flusser 2011: 141). The outstanding importance of dialogue in Flusser has come a long way, so to say, and should be seen in this tradition.

Flusser's understanding of language, furthermore, does not cover only "strictly spoken language" but also written language, writing, and the alphabet, as well as "other languages such as music, dance, etc." (Flusser 2016: 58) – although these are not treated in detail. Therefore, as Sean Cubitt remarks in the foreword of the English translation of *Philosophy of Language*, "these lectures already suggest that language may not be restricted to the verbal, but might also include the figurative arts," thus including "the non-verbal aspects of human experience" in Flusser's reflections (Cubitt 2016: xiii). Moreover, when Flusser starts his analysis in *Language and Reality* with the statement that thought is "a linguistic activity that develops within the field of [a] particular language" (Flusser 2016:

11), and then arrives at the "conviction [that] the sciences, the arts, and the religions, in sum, all forms of mental activity, are the progressive elaboration of symbols, which serve as elements of this activity" (Flusser 2016: 12), this is not only, as mentioned earlier, an echo of Ernst Cassirer's *Philosophy of Symbolic Forms*, but also referenced in *Language and Reality* and highlighted in italics, accompanied by a comment not translated in the English version stating that italicized titles are considered essential to the argument of the book.⁵ Beyond that, regarding the alphabet, sciences, arts, and religions, Flusser lists some themes that he will later elaborate on, and which at this early stage already were in his purview.

In *Philosophy of Language* Flusser also presents for the first time, and canonically, his version of the second law of thermodynamics and entropy (Flusser 2016: 117-119), which he would use innumerous times throughout his oeuvre. The general tendency of the universe, according to Flusser, heads toward thermic heat death (*"Wärmetod"* is Flusser's term in German) and from a state of order to a state of disorder: entropy. However, there are "islands" in this universe governed by an inverse tendency, where "disorder diminishes and order increases," that "inform," a context in which Flusser presents the traditional understanding of information: "The increase of information is the opposite of entropy, it is, as it is commonly referred to today 'negentropy" (Flusser 2016: 118). The science that treats such negentropy is cybernetics, and "cybernetics studies phenomena that are opposite to the general tendency in nature," i.e., it studies the increase of information. "Reality" is nothing but "situations of increased reality," and man a "being that negates entropy; that negates increasing disorder" (Flusser 2016: 119). On the other hand, man is inserted in a universal tendency toward entropy he cannot escape, which is why "man is an absurd being" (Flusser 2016: 119).

Conversation is defined on the basis of predication as "that linguistic movement that predicates names" (Flusser 2016: 115), and it is through predication that conversation increases information, just as the predication of proper names toward common names "fundamentally guarantees language as a negation of entropy" (Flusser 2016: 126). Correct phrases constitute a situation of reality, and "the body of the discourse" as a whole "establishes a cosmos," or "reality," which "becomes a discourse" (Flusser 2016: 132), and the same holds for "Selves"; they "are like imaginary points where phrases crisscross within the field of thought" (Flusser 2016: 132-133). "T

⁵ Flusser's general comment preceding the bibliography in the original Portuguese version of *Language and Reality*, consequently omitted in the English translation, states: "As obras grifadas são consideradas essenciais para o argumento desenvolvido neste trabalho" [Italicized titles are considered essential to the argument elaborated in this work] (Flusser 2018: 235). For example, Cassirer's *Philosophie der symbolischen Formen* (in German) was italicized (Flusser 2018: 237), thus, unfortunately, the English translation does not provide the distinction provided by Flusser in the original text regarding the importance of Cassirer's and others' works.

becomes a concept relative to conversation, that is, (...) I am because I realize a cosmos in conversation with other Selves" (Flusser 2016: 133). In negation of nothingness, "it is in conversing that I negate death. Conversation is my negating answer to death. Conversation is my immortality" (Flusser 2016: 133). Entropy, and its negation, in this way, is given an existentialist reading.

This thought is connected to the philosophy of language by Flusser in considering "increased information' and 'linguistic discourse" as "very similar terms," and "basically, cybernetics studies this aspect of language" (Flusser 2016: 118). The "entire negentropic tendency, is an articulating tendency" (Flusser 2016: 118), articulating the inarticulated experience (*"Erlebnis,"* in German), and conversation is the negentropy of life (Flusser 2016: 119). Man is opposed to "raw lived experiences," which is why "within man (...) information increases (...). In this opposition, of man against the entropic set from which he leapt, resides human dignity" (Flusser 2016: 119). Thus, it is language activity that goes against entropy: "Language, as a set of conversations that tend toward an increase of information, is the negative answer to entropy" (Flusser 2016: 119), which is why discourse "can be considered as an informative process that is opposed to entropy" (Flusser 2016: 131). This argument is later maintained, merely substituting "communication" for "language," as in *What Is Communication?*: "Human communication (...) is 'negatively entropic" (Flusser [1973/74] 2002: 5), "a process directed against the general entropic tendency of nature" (Flusser 2002: 6).

This relates to the transfer of the concepts of the knot, information growth as opposed to entropy, and the Self brought forth by these from conversation to telematic society, described in *Into the Universe of Technical Images*. Telematic society, accordingly, "is like a dialogical net through whose threads information runs from knot to knot, (...) human and artificial intelligences, where the information accumulates to be stored, computed into new information, and finally sent on to other knots, [whose sum] increases steadily. Therefore the net must be regarded as an unnatural system. For in nature – viewed as a system – the sum of available information steadily decreases." (Flusser 2011: 115). To act in this way in order to bring forth telematic society is "seen as an expression of human freedom [understood] as a decision to oppose natural entropy. In other words, (...) as a technology derived from the human will to free itself from the second law of thermodynamics, from decay, from oblivion, from death" (Flusser 2011: 115). The knots that in *Philosophy of Language* were called the "Self," now become the "T": "To the extent they represent human (...) memories, the knots in the telematic net are known in ordinary language as "T" (Flusser 2011: 115).

Finally, present in *Philosophy of Language* is the reflection of the impact of the natural sciences (Flusser 2016: 136-137), with a reference to Hegenberg's (1965) work, *Introdução à Filosofia da Ciência*

[Introduction to the philosophy of science] (Flusser 2016: 138). The "secondary reality" established by "instruments" developed by science, the "technological world that surrounds us," threatens "to extinguish the discourse's subject" (Flusser 2016: 140). With his project, the *Philosophy of Language*, Flusser wants to show a way out of the crisis of modern natural science and the technological world created by it, along with its threat to the subject, without falling into the pessimism of existentialism. This is what Flusser considers "the very basis of my thought" (Flusser 2016: 141), while simultaneously mapping out a considerable part of his later works.

Conclusion

Language was Flusser's first academic field of research; his leading idea, to derive literally everything from language – reality, the world, the I, both natural and human sciences, as well as philosophy – was obviously equally oversimplifying and overambitious; he desisted from this course after writing his first two books on the subject, *Language and Reality* and *Philosophy of Language*, and in his later development shifted his focus first to communication and then to image communication, arts, and telematic society. He thereby maintained a series of initially applied useful concepts, such as a broader concept of language as symbolic form, the concepts of entropy and information, the interpersonal foundation of communication and social life, and the constructive nature of reality, its dialogical and processual character, and – given the social quality of humankind and the I – interaction processes involving language, communication, and mediation.

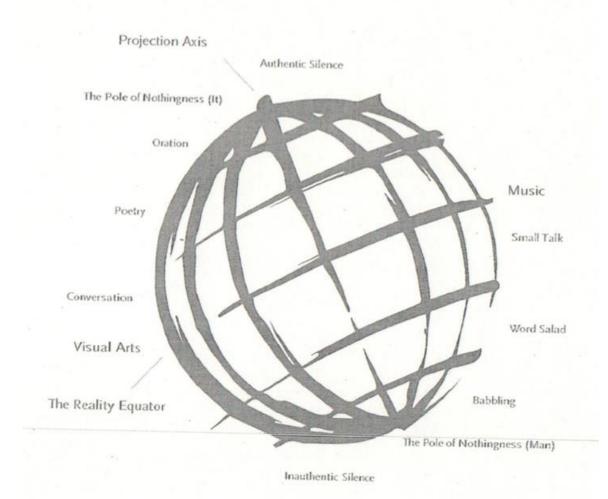
References

- Austin, J. L. (1962). *How to Do Things with Words*. The William James Lectures delivered at Harvard University in 1955. Cambridge, MA: Harvard University Press.
- Bühler, K. ([1934] 1982). Sprachtheorie. Die Darstellungsfunktion der Sprache [Language theory. The representation function of the language]. Foreword by Friedrich Kainz. Stuttgart: Fischer.
- Cassirer, E. (1944). An Essay on Man: An Introduction to a Philosophy of Human Culture. New Haven, CT: Yale University Press.
- Cubitt, S. (2016). Foreword. In: Vilém Flusser, V. *Philosophy of Language*. Translated by Rodrigo Maltez Novaes. Minneapolis: Univocal: ix-xix.

- Eilenberger, W. (2018). Zeit der Zauberer. Das große Jahrzehnt der Philosophie 1919-1929 [Time of the magicians. The great decade of philosophy 1919-1929]. Stuttgart: Klett-Cotta.
- Eilenberger, W. (2020). *Time of the Magicians: Wittgenstein, Benjamin, Cassirer, Heidegger, and the Decade that Reinvented Philosophy.* Translated by Shaun Whiteside. London: Penguin Press.
- Ferreira da Silva, V. (1963). Book jacket text to Vilem [sic] Flusser, Lingua e realidade [Language and Reality]. São Paulo: Editôra Herder; two pages, front and back, n.p.
- Ferreira da Silva, V. ([1964] 2009a). A Concepção do Homem Segundo Heidegger. [The conception of man according to Heidegger]. In: *Dialética das Consciências. Obras Completas.* [Dialectic of consciousness. Complete works]. Edited by Petronio, R. (Introduction by Miguel Reale. Afterwords by Luigi Bagolini and Vilém Flusser.) São Paulo: Editora Realizações: 299-308.
- Ferreira da Silva, V. ([1964] 2009b). Dialética das Consciências. Obras Completas [Dialectic of consciousness. Complete works]. Edited by Petronio, R. (Introduction by Miguel Reale. Afterwords by Luigi Bagolini and Vilém Flusser.) São Paulo: Editora Realizações.
- Ferreira da Silva, V. ([1964] 2009c). Lógica Simbólica. Obras Completas [Symbolic logic. Complete works]. São Paulo: Editora Realizações. (Originally published in 1964 as Obras Completas. São Paulo: Instituto Brasileiro de Filosofia.)
- Flusser, V. ([1963] 2018). Language and Reality. Trans. R. Maltez Novaes. Minneapolis: University of Minnesota Press. (Originally published as Língua e realidade in 1963. São Paulo: Editôra Herder.)
- Flusser, V. (1964). Letter to Anatol Rosenfeld, Nov. 6. Berlin: Vilém Flusser Archive.
- Flusser, V. ([1965] 2016). Philosophy of Language. Trans. Maltez Novaes, R. Minneapolis: Univocal. (Originally published as Filosofia da Linguagem in 1965. São Jose dos Campos, Brazil: Instituto Tecnológico de Aeronáutica – Humanidades.)
- Flusser, V. (1966). Letter to Celso Lafer, Nov. 1. Berlin: Vilém Flusser Archive.
- Flusser, V. ([1969] 2002). In Search of Meaning (Philosophical Self-Portrait). In: Writings. Edited by Ströhl, A. Minneapolis: University of Minnesota Press: 197-208.
- Flusser, V. ([1973/74] 2002). What Is Communication? In: Writings. Edited by Ströhl, A. Minneapolis: University of Minnesota Press: 3-7.
- Flusser, V. ([1984] 1993). Gespräch, Gerede, Kitsch. [Conversation, talk, kitsch]. In: Nachgeschichte. Eine korrigierte Geschichtsschreibung. [Post-history: A corrected historiography]. Bensheim, Germany: Bollmann: 224-237.
- Flusser, V. ([1985] 2011). Into the Universe of Technical Images. Trans. Roth, N. A. Minneapolis: University of Minnesota Press.
- Flusser V. (1994). Vom Subjekt zum Projekt. Menschwerdung [From subject to project. Incarnation]. Bensheim, Germany: Bollmann.

- Flusser, V. (1996). Hamburg, 1990. In: Zwiegespräche. Interviews 1967-1991 ([Dialogues. Interviews 1967-1991]. Edited by Sander, K. Göttingen, Germany: European Photography.
- Flusser, V. (1998a). Kommunikologie. [Communicology]. Edited by Bollmann, S. and Flusser, E. Frankfurt am Main, Germany: Fischer.
- Flusser V. (1998b). Text und Bild, 1984 [Text and picture, 1984]. In: Standpunkte. Texte zur Fotografie [Viewpoints. Texts on photography]. Edited by Müller-Pohle, A. Göttingen, Germany: European Photography: 73-96.
- Flusser, V. (1999). Bodenlos. Eine philosophische Autobiographie [Groundless. A philosophical autobiography]. Frankfurt am Main, Germany: Fischer.
- Flusser, V. (2017). *Groundless*. Edited and translated by Maltez Novaes, R. Möhlin, Switzerland: Metaflux Publishing.
- Frank, M. (2019). Besondere Kennezeichen: Keine. [Special characteristics: None]. Frankfurter Allgemeine Zeitung, 270, Nov. 20: N3.
- Guldin, R. & and Bernardo, G. (2017). Vilém Flusser (1920-1991): Ein Leben in der Bodenlosigkeit. Biographie. [Vilém Flusser (1920-1991): A life in the bottomless. Biography]. Bielefeld, Germany: Transcript Verlag.
- Hanke, M. (2006). Vilém Flussers 'Sprache und Wirklichkeit' von 1963 im Kontext seiner Medienphilosophie [Vilém Flusser's Language and Reality from 1963 in the context of his media philosophy]. Flusser Sstudies 2: 1-20.
- Hegenberg, L. (1965). Introdução à Filosofia da Ciência. São Paulo: Editôra Herder.
- Hegenberg, L. (1966). Lógica Simbólica. São Paulo: Editôra Herder.
- Heidegger, M. ([1927] 2006). Being and Time. Trans. Macquarrie J. & Robinson, E. Oxford: Basil Blackwell.
- Heidegger, M. ([1959] 1985). Unterwegs zur Sprache. [On the way to language]. Frankfurt am Main, Germany: Klostermann.
- Hennrich, D. (2009). Die Escola de São Paulo und der akademische Kontext im Brasilien der 50er Jahre. [The São Paulo School and the academic context in Brazil in the 1950s]. In: Klengel, S. & Siever, H. (eds.), Das Dritte Ufer. Vilém Flusser und Brasilien [The third bank. Vilém Flusser and Brazil]. Würzburg, Germany: Königshausen & Neumann: 51-62.
- Petronio, R. ([1964] 2010). Poeticamente o homem habita: Introdução geral às Obras Completas de Vicente Ferreira da Silva [Man inhabits poetically: General introduction to the Complete Works of Vicente Ferreira da Silva.]. In: Ferreira da Silva, V. Transcendência do Mundo. Obras Completas ([Transcendence of the world. Complete works]. Edited by Petronio, R. Saõ Paulo: Editora Realizações: 17-77.
- Ramos, A. T. (2016). Vilém Flusser, Into the Universe of Technical Images. Book Review. *International Sociology* 31: 203-205.
- Rosenfeld, A. (1964). Vilem Flusser, Língua e Realidade. [Vilem Flusser, language and reality]. *Estado de São Paulo*, June 6. Suplemento Literário: 2.

- Vargas, M. [1964] 2009. O jovem Vicente Ferreira da Silva [The young Vicente Ferreira da Silva]. In: Vicente Ferreira da Silva, Lógica Simbólica. Obras Completas [Vicente Ferreira da Silva, symbolic logic. Complete works]. São Paulo: Editora Realizações: 15-26. (Originally published as Obras Completas in 1964. São Paulo: Instituto Brasileiro de Filosofia.)
- Vargas, M. (1998.) Apresentação. [Presentation]. In: Vilém Flusser: Ficções Filosóficas. [Vilém Flusser: Philosophical fiction]. São Paulo: Edusp: 17-21.
- Wittgenstein, L. (2003). *Tractatus logico-philosophicus, Logisch-philosophische Abhandlung* [Tractatus logico-philosophicus, Logical-philosophical treatise]. Frankfurt am Main, Germany: Suhrkamp.



THE PHYSIOLOGY OF LANGUAGE

Figure 1: The Physiology of Language, according to Flusser, Language and Reality, 2018: 176.