

# IN DIFESA DELL'UMANO

A cura di

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## IN DIFESA DELL'UMANO

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Abstract

Indice dei nomi

# **Knotting and unknotting our times: a philosophical reflection of time and space in the light of urgency**

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## **I. Thinking our time (in knots<sup>1</sup>)**

Every time we perceive the scent of an end, we are summoned to position ourselves, to express what has been, what is our condition and what is to come. Ours is, certainly the time of the end of times. A time in which the end has become the void center around which we revolve. Philosophy only speaks when there is a limit at stake: a beginning, an end, a border, a frontier. Hegel claims famously in his *Grundlinien der Philosophie des Rechts* that philosophy aims at grasping the present time in concepts. There is a here and now, there urgency, there is a time to react regarding planet warming, there are regions and geographies to point at regarding violence. And yet, there is no measure anymore to determine what is actuality or the present, what is contemporary. Time is fragmented as well as space. There is a multiplicity of time scales (cosmic, planetary, human, cultural, personal) and velocities (the human body, our cars and trains, information), but also of

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<sup>1</sup> I will not quote Luciano Boi. He is too present in this text to do it. I will just say that I thank him the rich interpretation of topology and contemporary mathematics. His reading of topology as hermeneutics of space concerning philosophy, mathematics and art is a leitmotiv in the present text. I will provide some references in the bibliography.

subjective appropriations (what is urgent, what should come first, how much time do we have left). There is no “fundamental” difference between life-time and clock-time. There are several clocks and several lives. There is also a multiplicity of space scales (elemental particles, molecules, living organisms, living collectives, all living-species), different modes (continuous, discontinuous, with borders, infinite, homogeneous, non-trivially connected), different subjective relationships to it (earth as our space -be it in terms of Husserl or of Galilei-, the cultural world-worlds, my city, my house, my body). Far is the possibility of fixing a last instance or a fundamental scale, the possibility of a whole in which we could univocally place the particulars, or the chance of finding the last constituents of being (the atoms: physical, logical, metaphysical, social, etc.).

The individualistic point of view is incomplete: no particles, no molecules, no letters, no words, no individuals may be conceived of without an environment, without a space in which they are inscribed and without constitutive relationships to a community. Of course, we should distinguish between the universal or general, the particular (a mere case to be subsumed in the universal) and the singular (there is no other like it, but it is at the same time a particular but endowed with general properties). But this does not change the issue at stake. On the other pole of pointillism, the atomistic universe, there is the whole, be it as a discrete structure, be it as a continuum. The whole has here priority over the parts, such as in the atomistic view the individuals do not change when associating, rendering all association a mere epiphenomenon. But in a strict *whole*, individuals are *nothing* outside the position they occupy or the role they play in it. Relationships here *exhaust* individuality. In the world of the continuum, by contrast, there are no individuals. They are not even an epiphenomenon, but a mere surface effect, a *trompe-l'œil*.

There are several problems haunting all three positions. When we reify individuals, all associations remain superfluous (save we concede another level of organization in which we could testify some type of “emergence”). It does not matter if we deal with physical or logical atomisms, if we practice some methodological individualism or if we intend an ontology grounded in set-theory, the result is the same. And there are reasons at every level to call this into question: in physics we associate a *field* to every particle (in our regular



understanding of quantum physics, leaving aside more topological approaches to matter as in string-theory), in language we have topological models (as in Thom or Petitot) being more powerful to describe processes and changes of state (such as catastrophes), in society there is need of thinking the “common” (the so-called “commons”, but also the *popular will* lying at the base of democracy). Structuralism meant the priority of relationships over individuals but also the autonomy of structures themselves<sup>2</sup>. Being relationships prior to individuals, the later have no autonomy or consistence, their very individuality depends on the structure and their “essence” depends on the place they occupy or role they play in the whole. This means they cannot change or be other, for either they are not allowed to because of the structure constrains or they change, and *ipso facto* cease to be what they are. There is no *local play* but only a generalized “movement” of the structure. The continuum makes general *connections* possible but in such a way that individuality is never fully attained. Everything is connected with everything in a non-differentiated fashion. Such an immanent position flattens being and leads to a loss of structure. A “topological” approach is here possible, but not without a mixed approach, namely between the continuous character of topology and the discontinuous aspect of algebra.

We have dealt only with the problem of continuity and discontinuity, but it has become clear how it is inseparable with another set of pairs: local-global, identity-difference, presence-absence. But let us return to the beginning. We said we are summoned to take a position, to express ourselves in face of the current problems haunting humanity. But we are not summoned only as “technicians”, namely as experts in this or that field looking for

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<sup>2</sup> In linguistics and philosophy, structuralism is usually seen as the determination of the value or signification of words and other elements as they are inserted in chains (like phrases) with other words. A word acquires its meaning according to its position regarding other words in a phrase. But the broadest sense of structure is based on the idea of *functions*. Kant pointed out how experience takes form in judgements, that is, through predication. But in current logic we can express such relationships in the language of set theory and thus through functions. Instead of predication we use properties. We thus decide inclusion if  $x$  makes the formula true. We express a myriad of mathematical relationships in the language of set theory and through variables and functions. There isn't always a direct translation of set-theory into philosophical structuralism, but it prevails the idea that very different “contents” (given by mathematics by its different fields and branches, say analysis, geometry, algebra, etc.) can be analyzed in terms of axioms, dictionaries (including variables and constants), operators or connectors, syntactic rules, and rules of inference. Now, 20<sup>th</sup> century mathematics, especially influenced by topology and its association with algebra, led to category theory, where *functions* can be generalized to *morphisms* (different types of structure-preserving maps relating all types of objects and not only sets in the proper sense). If there is a legacy of structuralism in contemporary philosophy it is the use of the concept of function (anticipated, of course, by Neokantians like Cassirer) which now can be generalized to that of morphism.

“solutions”. There are already several alternatives to all the problems we are facing. What we don’t have any more is the general field(s) in which we could *orient* ourselves. It was Kant’s question how to *orient ourselves in thought* when we have no recourse to our usual scheme of subsumption, where concepts are at-hand and our only task is limited to decide if particular cases fall or not inside the former. The whole *Critique of Judgement* is a call for thinking parallel to strict theoretical and strict practical horizons. The afore mentioned sets of concepts are not categories for they do not apply to objects, but to more general structures. We do not talk about sets of objects either, but of “spaces” in which objects and links among them deploy. But even further, we do not speak of space in general or of *the one space*, but of spaces, and in this regard, we refer to: a) a *multiplicity*; again, not of beings, not even of Being, but of spaces of Being, including a *multiplicity of types of differences* (excluding thus something like “difference in itself”), and b) a myriad of links connecting such spaces. There should be little debate about the fact that our time was marked by two main concepts: difference and multiplicity. *Difference* refers to the impossibility of unification of beings (not in God, not in cosmos or nature, not in a subject) and the distinction of beings and Being (ontological difference) inasmuch the latter allows to consider a) the totality of beings as an *interpretation* (as sense and not as reality) and b) the possibility of being-other of such a totality (privilege of possibility over actuality). Multiplicity is the name opposed to “the one”. As the former concept it reflects the impossibility of unification, but it also has positive meanings: abundance, excess, surplus. We could actually collapse both concepts in one, but only if we see its Janus-face: as lack and as excess at the same time. There is subtraction from totality, from unity, from the generality of the concept, etc., but there is, at the same time, abundance, productivity, excess.

But the question is now the following: to which extent are we still in the epoch of difference/multiplicity? Or to put it differently, what is the *diagnosis of our time* such that we can *trust* difference and multiplicity as strategies to orient our thought and our praxis in the right way? Could it be that that debate corresponds to another time? Could it be that difference as a concept does not make the difference anymore? Could it be that the struggle between the one and the multiple is but a limited aspect of a broader question? This is

indeed our position. But before we go any further, we have to concede that we live in a time in which *multiplicity* is not a possible strategy (conceptual, political), but the very essence of our times. There is a multiplicity of concepts of multiplicity. A multiplicity of multiplicities. If Hegel claimed the task of philosophy to be, as we said, to grasp our own time in concepts, we can fairly ask, what constitutes the present? And: What is a concept? We cannot adopt Hegel's view without an examination of "presence" and "concept". But let us consider another formulation on the same problem. Deleuze writes in *Difference and Repetition*:

The task of modern philosophy is to overcome the alternatives temporal/non-temporal, historical/eternal and particular/universal. Following Nietzsche we discover, as more profound than time and eternity, the untimely [*intempestif*]: philosophy is neither a philosophy of history, nor a philosophy of the eternal, but untimely, always and only untimely - that is to say, 'acting counter to our time and thereby' acting on our time and, let us hope, for the benefit of a time to come'. (Deleuze, 1994, p. xxi).

There are only two things to change in this quote: the words *always* and *only*. Deleuze underscores *one* of the tasks of contemporary philosophy at the level of the *concept*, a task *established by Hegel*: the overcoming of the classical oppositions of philosophy. Overcoming does not mean dispensing with. It is rather a matter of *doing something* with oppositions and through them. Let's consider how Hegel accepts *true contradictions*: both A and  $\sim A$  as Deleuze appeals to some *tertium datur*: neither A nor  $\sim A$ . But the task here is not to simply take sides, but a) to make appear the widest field (in this case the *tetralemma*: A,  $\sim A$ , A and  $\sim A$ , neither A nor  $\sim A$ ) and b) to deploy philosophy across the complete field. To state it otherwise: to orient ourselves we need the biggest map of our situation; to argue, we need to make use of it, instead of following a single direction. Deleuze is right: we are not concerned anymore with the *fulfilling* (teleology) of some project, for instance, modernity, nor with the eternal (atemporal Platonism), but, and here lies the difference, *also* with the untimely. We could think of the untimely in musical terms as a *rubato*: stealing time from the rhythm of presence in favor of expressivity.

Our *field* implies history *and* eternity *and* the untimely *and* the *particular knot* which ties them together. To ask about our time requires: a) to ask for the *field of concepts* and

relations available to us (our map, so to speak or, as we will see, the *atlas of maps*) b) the knot we are tied to, which at the same time gives us consistency. Our time is not the present. It is not the last element in a series of moments. It is not the fate written in some dark moment of history. It's not the conclusion of some epoch. It's not the future. It is the *interlacement* of all that. To put it in somewhat phenomenological terms: it is the *sheaf of intentional rays interlacing past, present, and future* (primary and secondary). This is what we call a *subject*: someone *tied* to some condition or restriction (*contrainte* in French) and someone capable of something (what we call *agency* in a broad sense), i.e. having access to some *power* (*Gewalt* in German) opening a range of *possibilities*. This is also what Kant thinks under the term "transcendental" as *conditions of possibility*. On the one hand, the limit, the restriction, the boundedness. On the other, the possible, activity and power. The transcendental is thus the *struggle to determine* what will count as our condition, our unsurpassable horizon, what is to be accepted so that we can act, and what will be considered *a limit to be surpassed by invention*. A limit has this paradoxical condition: it can only be *stated* if it can be *surpassed*, for if we were absolutely subject to or determined by it, it would not be a limit *for us*. At the same time, if limits were simply surpassed and assimilated, they would turn into mere internal determinations (as Hegel claims: mere *Bestimmungen* of thought) and would cease to be limits. A limit must be surpassed and not-surpassed (i.e., not sublated, *aufgehoben*) to be effective. This is also why the limit between the real and ideal must be at the same time real and ideal. But we will return to that.

What is our task? To *gather the crucial maps* we use in different regions of existence and in different scales (the eternal, the historical and the untimely, for example) and to *construct the atlas* in which we exhibit its reciprocal connections and disruptions (transits and obstructions to put it mathematical terms) gluing them together, such that we can *orient ourselves*, putting into play *what is to count as a restriction and what as potency-possibility*<sup>3</sup>.

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<sup>3</sup> This on the condition of thinking possibility not as something lying in isolated objects or subjects, but between them. A property is the capacity to produce effects on other(s). At the same time, power is not an inner force (some impulse or *connatus*) but a relation stemming from differences as in electricity and magnetism.

## II. The time of the end of times

But do not let us move too fast into maps and spaces in general. There is still more to say about our times. The 20<sup>th</sup> century projected a shadow on Western history, the shadow of the *end*. It was the time of ends and deaths: of God, of man, of history, of truth, of the world, of philosophy. It included, above all, the three *objects* of the *metaphysica specialis*: God (theology), man (rational psychology), and world (cosmology), and eventually the core concepts of the *metaphysica generalis* or ontology, where being loses all independence to be captured in the orbit of subjectivity as “sense” (*Sinn*) and of the real-ideal field of language. The “catalogue” of what is (including its modes) became devoid of content for it is language that makes present what is to be counted as existent (all differences between reality, the real, the actual, the ideal, etc., were taken to be “grounded” in “possibility” and “indeterminacy”). Also the *structure* of Being (categories, but also its whole “logical” assembly) dissolved in games of language. The so-called *transcendentalia*, like the good, beauty, and truth were taken to be “inwardly” and not “originary” enough<sup>4</sup>. Only “the one” deserved some relevance, namely, to be the concept of the *ancient metaphysical regime* to be displaced by the new king: multiplicity. However, the long obituary of the 20<sup>th</sup> century was escorted by chivalry of future. Starting with Nietzsche, the prophet of the century that came after him, there was no antichrist without some promised *Übermensch*. It is not by chance that he conceived of himself as the philosopher of the future. There was also a promise of a new humanity to overcome history as the history of class-struggle. Even the pessimistic Freud devoted his efforts to elaborate a clinical praxis to cope with the

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<sup>4</sup> Against all presence, i.e., all *constituted* beings, against all qualities and properties, against all categories, against all transcendental concepts, we believed in possibility, on the *totipotentiality* of origins. No boundaries, no previous history, just the “cut” by which some decision introduced man in history, in language in tradition. It follows from such a *credo* that we had to dismantle all positive knowledge to reach the water of possibility, the source out of which fate is decided, when the “originary” *concepts* are coined and the ground *decisions* are made, to control secretly (i.e., *transcendentally*) the course of history. We can thus understand the despoliation of responsibility in Heidegger’s discourse, explaining the atomic bombs not as punctual decisions but as effects of a more originary and abstract decision. It is the time to dethrone the concept of ontological difference in the realm of history, for it leads to another version of transcendentalism where the empirical is seen as radically pre-constituted by the subjective-ideal, i.e., by decisions of subjectivation that create the perceptible and the understandable. We should not forget Heidegger’s reading of the role of transcendental imagination in the *Critique of Pure Reason* as the common root of sensibility and understanding.

meanders of desire. We bet on all sorts of paths for liberation: of desire through sexual revolution, of exploitation through economic revolution, of sense by a revolution of language (how we write, how we sign, how we use words, etc.). This wouldn't have been possible with the strong belief on some last instance. Yes, the so-called thinkers of suspicion showed that the world was nothing but a *product* of more "originary" forces, the *surface-effect* of another *field*. In short: consciousness was a product of unconscious forces (drives, will-to-power, desire) and unconscious structures (language or economy). But this was far from leading to a generalized state of helplessness like the one taken over our spirit. On the contrary, it *followed* (despite the irreconcilable nature between the chosen paths of Marx, Nietzsche, and Freud) that *intervention* was not only possible, but a duty. The field of intervention was clear as well: either material production or a talking/writing cure in language. The 20th century attempted revolution in sexuality and economy, daily life, and art. We also *knew* what it was all about: it was the *metaphysics of presence*, it was *capitalism*, it was *Christian morality*, it was *colonialism* or *patriarchy*. We knew the fundamental concepts and tendencies to be countered: centralization, rationalization, homogenization, abstraction, identity, the one (unity of knowledge, of experience, of the subject, etc.), so we called for decentralization (multiplicity, rhizomes, dissemination), for heterarchical (horizontal, instead of hierarchical) social orderings, for difference, authenticity, and concreteness (daily-life, or the body, or the senses, or the empirical).

And yet, the catastrophe could not be stopped. An apparently nihilist epoch lived explicitly from spiritual resources drawn from the belief on revolution: scandal, uprisals, peripheral demonstrations, "events", "invention", "creation", "production". But "revolution" was inseparable from the wider frame of historicism-historicity. We believed above all on history. We created the philosophical genre of all-embracing readings of history. The later was to be read as and only as the forgetting of being, or the repression of desire, or class-struggle, or aggression against the Other, or as the epoch of sameness, etc. It does not matter if the ruling principles were "metaphysical", "conceptual" or "material". The field was in front of us to intervene it, even if it was difficult. We lived the epoch that spoke of epochs. The time of the end of times that believed in new beginnings. It was a time to return to the roots: the forgotten Western scientific project, to Greek rationality, to the

poetical thinkers called the Presocratics, or even farther, namely, to transcend Athens reaching Thebes and Jerusalem, or even farther, rushing us into (our naive picture of) primitive existence, where the sacred, the gift and the gods were still among us. And if we distrusted allegations in favor of the past and the origins, we had the reciprocal strength of future: the new man or someone coming after man. We wanted Christianity without Christianity namely, to break our time in two: before and after (BC, AD), just like the French revolutionaries wanted to. Not unlike Nietzsche, Marx, or Heidegger. We wanted spirituality without religion, philosophy without concepts, commitment without loss, concreteness without boundedness.

We believed in time. Not necessarily in its teleological version, but in time and maybe history, after all. We wrote big histories of the West (I will underscore the already common observation that postmodernity turned its hostility to *big narratives* or *metanarratives*<sup>5</sup> (*métarécit*) into another one; but it was probably Heidegger who, denouncing the *gigantomachy* of metaphysics only changed the terms of the denounced *hybris*). We believed that being *critic* meant to carry out some sort of “deconstruction” of history, or to make philosophy of history *gegen den Strich* (against the grain, as Benjamin wrote), to practice “genealogy” or “archaeology” or “microhistory”, etc. The enterprise fell far from its aim. It showed however how trivial our conceptual apparatus was. Despite the complexity exhibited in contemporary thought it could not but rely on easy distinctions and naïve structures. To put it in somewhat Hegelian terms: we were stubbornly *unilateral*. Too simple with the diagnostic and therefore too simple with the ways out. Too naïve regarding the belief on a last instance. Too simplistic while *opposing* the inside and the outside, the same and the other, the master and the slave. We were even too simplistic while embracing “dialectics” for what should be called into question is not only simple and static contradictions, but the form of difference itself. But those who recognized *difference* as the concept to be fought for, those who saw beyond binarism and opposition, were quickly led to a unilateral valorization of difference as directed against “sameness” and “oneness”. The

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<sup>5</sup> It is also unexplainable how a world led ultimately by chance could have allowed such long-lasting tradition of repression and control such as metaphysics. It is a big question how a world made of unstable games of language could have created such stable paradigms. Additionally, the whole idea of non-continuity in history collides with the homogeneity we ascribe to it.

militant task interfered with the *discovery of the field of differences* at play in our times. We were too eager to apply or extract consequences from the scandals and breakthroughs in science and mathematics before taking the time to *see the new landscape*<sup>6</sup> extending before our eyes. We made the word cartography one of our favorites, without really making any kind of big maps. Hegel said that philosophy aims at grasping its own time in concepts. It is a philosophy of history. This is an earlier and more powerful version of the “ontologies of the present” practiced in our times in the name of otherness. We are now aware of the fact that otherness is a more subtle concept, not meant to *localize* who is inside and who outside<sup>7</sup>, who belongs or who does not, but the very *vagueness of all decisive boundaries*.

The question of time is threefold, for it includes the origin, the development, and the end. No philosophy of time is achieved without such structure. We may stress the past (as mythology), the present (as in science) or the future (as in politics and theology). Schelling’s *Weltalter* made us aware of this threefold structure of time, creating three moments which were to interact in different combinations (present-present, present-past, past, future, etc.) and directions (going from past to future, for example is not the same as going from future to past). Less than a century later, Husserl described time the structure of time consciousness as an interlacing (*Verflechtung*) of time-phases (present, past and future) through intentional rays (*intentionale Strahlen*). Time has a *structure*, i.e., it has a form, a con-figuration. Form, configuration, structure, are all *spatial* concepts. And this seems to have been Husserl’s constant enterprise, to recognize form and structure at the core of consciousness. Time and space had to be related. Not only were structures subject to time, but time has a structure itself. But what and whose time are talking about?

We owe Husserl the discovery of otherness in the sameness of consciousness, even if against his own project. For it was him who “ran into” the problem of other minds, being forced to think the *space* of intersubjectivity. If “presence” was related to the absence of past and future in the flow my own time consciousness, my very presence as ego was

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<sup>6</sup> We understand the concept of landscape in the sense of Waddington and Thom, as the topological space of possibilities.

<sup>7</sup> Derrida’s *quasicontcept of différance*, for example, far from calling into question the goal of conceptual localization, can only be grasped (being localized) withing a very precise set-theory, namely as a process of diagonalization. See for example (Priest, 2001).



related to the relative absence of the alter ego. And it was also Husserl who raised the question of the otherness of animals regarding humanity. If we are fair with him it is since the very beginning of his oeuvre in the Logical Investigations that presence (*Evidenz*) was related to initially empty intentions (*leere Meinungen*) grounded in language (in signs: *Zeichen*). But such a play of absence-presence in consciousness is relatively simple if we *add* (i.e., if we complicate it with all layers involved in intentional analysis) the relative exteriority of time-phases (past, present and future<sup>8</sup>), the relative exteriority of the community of egos and the relative exteriority of other animals capable of constituting a world. To this picture we should also add the coexistence of different times. Husserl was conducted from an interrogation about consciousness in general to its historical grounding. But this means that an originally universal enterprise reveals its relative *particularity*. And indeed, what is the “West” without its exchange with the “non-West”<sup>9</sup>?

Ours is the era of space. Not because we are finished with time and history, but, on the contrary, because time ceases to be a homogeneous and non-structured medium. Time ceases to be a simple order (neither a *complete order* nor a *poset*) where we can establish a *univocal sequence* in a simple line (i.e., under a single criterium such that there is an operator and a rule to unambiguously assign a place to each element). There are several times, first, because the phenomenological analysis of time consciousness is grounded in the experience of a *singular ego*. It follows that intersubjectivity must constitute a unitary time (valid for all) but constituted by several semi-independent but interlaced streams of consciousness. And since there are several historical traditions, it is also a phenomenological question to describe “world history” when we can no longer resort to a simple ordering. Ours is the time of space so far all the all-encompassing principles used to effectuate the procedure of unification were called into question. There is indeed no simple unity in science, nor in philosophy, not even in mathematics or logic. It is not that we have

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<sup>8</sup> We leave aside the precise analysis of time in Husserl’s work, especially that of retention (*primäre Erinnerung*) and far past (*sekundäre Erinnerung*) or protention and far future. We also leave aside the problems of self-reference as the (self) constitution of *time in time*.

<sup>9</sup> Western philosophy constituted its own image through an imaginary East. Hegel’s lessons on the history of philosophy depict the latter as the sunrise of humanity, its infancy. The West plays the role of the sunset, *Abendland*, where maturity takes place: *the owl of Minerva spreads its wings only with the falling of the dusk*. It was already Kant who considered the Aufklärung as man’s emergence from his self-incurred immaturity (*Unmündigkeit*).

several competing theories to explain the same phenomenon, we have rather different *frameworks* in which the very concept of science is at stake. Take for instance the common problem of consciousness, caught between *physicalism* and *emergentism*. We identify in 20<sup>th</sup> century philosophy the common division between continental and analytic. Such a division points towards an even deeper diversity of a field on inquiry reluctant to any unification. In mathematics we identify the quarrel between set and category theory regarding the foundations of mathematics. In logic we can testify on the plurality of systems: first and second-order, formal and intuitionistic, consistent and paraconsistent, classical and non-classical, etc. Ours is the time of space because all the prior *unifications* assured by the cosmos, God, or man or by means of knowledge, natural law or metaphysical causality enjoy no legitimacy today. Space is thus the name of difference and multiplicity. Space implies multiplicity, openness, lack of external boundaries.

*Structuralism* is a philosophy of *space*. But as we have seen, so is phenomenology when it attributes subjectivity some structure. This implies, necessarily a violation of ontological difference. It was Fink (and Derrida, following him) who underscored the inescapability of *ontification* of being. This is not due to our finite condition. It has a structural reason. There is no possibility of speaking of things outside the language of things. Philosophy, if it wants to remain philosophy namely, to speak in *concepts* (instead of a mere self-destruction or deconstruction) requires an ontification of being. But at the same time, beings not caught in some transcendental prison should be freed from the dominance of subjectivity and language, without being radically exterior to them. Derrida's logic of supplement or "*différance*" or quasi-concept of "writing" is nothing but a reformulation of Fink's thesis namely, that metaphysics consists in the separation of "the originary" and "the derivative", such it it can be *prima philosophia*. *Firstness* requires a *last instance* or origin and a *simple register* where "beings" can be assigned to and classified in their *totality*. "Writing" means questioning the possibility of absolute firstness and thus of first philosophy in general. This is precisely what we mean by space, an *openness*.

We could understand structuralism in several ways (Rabouin, 2011). Concepts may be analyzed as *complex* entities, possessing an *inner* structure (we do not overlook the problem

of defining the concept “structure” in a structuralist fashion), such that we attend to the immanent relationships. In this sense, a concept is a “space”. We could conceive of a concept as an element having meaning in *relationship to* other concepts. But in this view, we would be eventually led to the *environment* in which this or that difference “counts”. We could take this environment as a more or less vague surrounding or as a determinate “field” (again, a space or structure). And we can, of course, repeat such differentiation in new orders. We could take the “spaces” that operate as the surroundings of a determinate “space”, etc. We will not choose but move across different levels. But the focus will be more on what the *effects* of the concept and practice of structuralism were in our prior philosophical spaces. And indeed, structuralism *did* something to our philosophical milieu: it gave space a new metaphysical dignity. Structuralism did not start the criticism against the concept of substance. It was preceded by German classic philosophy and consummated by Neokantism. Structuralist was however the idea that things appear in structured sets and in bundles.

In our times we do not consider beings as fixed entities, but as collections of structure-preserving transformations. We do not consider beings as having properties but as being capable of *acting* upon other beings (through morphisms), what we could also call *expression*. We certainly do not exhaust our philosophical considerations with beings, but we care about “relations” (and if they are real or ideal, pure *thought relationships* or *real connections*). And we do not consider single relationships but collections of relationships producing spaces (universes or, taking inspiration from mathematics, categories). But we cannot be content with such minimal structures of objects and morphisms, for we can go “downwards” expanding objects or points into whole structures and “upwards” collapsing whole structures into points of a more complex one. We can treat relationships as objects from some point of view and we can penetrate objects to show their internal form. But above all, we care about structures of structures, spaces of spaces, relationships of relationships. Now, since we are already acquainted with the paradoxes arising from self-reference, we also include it in our universe of relationships. Why do we refer to structuralism in the context of a philosophy concerned with historicity and time? Because structuralism was a vindication of space in the midst of a time dominated by the concept of

time. We say that ours is the time of the end of times for several reasons. First, because independently of what happens, we are fundamentally concerned with the ends, included our own existence as species<sup>10</sup>. Second, because finally we see how historicity dissolves as it applies to itself. As time bends towards itself, the very idea of time as history becomes uncertain. Indeed: the concept of time came to be at some moment in time. What do we do with such a paradox? If everything came to be, if all beings and all categories are contingent, what was before them? Nothingness?

Derrida is probably the philosopher to have seen with clarity the conditions (possibilities and impossibilities alike) marking our time. No starting or ending, because this is precisely the point: we can no longer identify the beginnings and ends of history, of man, of God, of truth, of the world. All we counted as dead survives in the form of a specter. What Derrida calls the “logic of the supplement” is the last confusion, where it is no longer possible to differentiate Being from beings, the transcendental from the empirical. And yet, we must, and we do it all the time. There is no God, we can claim, but there is the trace of God, as there is the trace of man and the trace of the world. Nothing has disappeared, it has become ambiguous, mobile, multilayered. No last instance. No whole. No last elements. Not even ontological difference is at our disposal. As Derrida (1997) argues in *De la grammatologie*, we cannot fully and hierarchically separate the transcendental from the empirical: the aspiration of all *prima philosophia*, based on the distinction between the originary and the derivate. Writing is “invented” to transcribe ideas and sense, but sense must presuppose the structurality and materiality of the former. Being as *absolute firstness* is not only ontologically but also hierarchically prior to beings. In this sense, Heidegger’s ontological difference *continues* Kant’s transcendental difference, even if its devoid of content (there are no fixed categories). But beings are as transcendently tied to some *a priori* as they are relatively free. Without the *bindedness* that Being grants to beings we would fall into substantialism or a vulgar empiricism. A fully transcendental Being would allow no

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<sup>10</sup> It was partially right Heidegger noting the significance death has for existence. *Dasein* “opens up” to its possibilities confronting the nothingness of death. But death as species namely extinction, has a whole new meaning. Extinction means abolishing Being as he understood it. It means breaking the structure of historicity in which we inherit both as receiving and as giving. Since all our theories of the gift take place within language and tradition, we confront the possibility of an unprecedented silence. It is especially our unjust distinction between nature and culture what makes our extinction so dreadful. But, as we will see, there is no right to insist in such an intolerant distinction.

degrees of freedom and autonomy to beings (and not only to the so-called *Dasein*)<sup>11</sup>. There is no last structure, but also not no-structure.

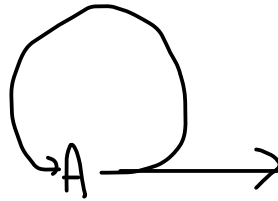
The main question of an epoche obsessed with time lead to the fundamental question of origins and constitution (in the phenomenological sense of the word). But it was necessary to complete the full twist and to apply time to time, namely as the origin or self-constitution of time as time. This leads necessarily to a self-destruction of philosophy and its concepts. But at the same time, this destruction or deconstruction resulting from the reconduction of the constituted to the constituent and the constituent to its self-constitution is positive, for it opens up a wider space. This is precisely the contribution of structuralism. For the same token, all questions of *time*, like fate, origin, end, history, etc., must confront the question of structure, i.e., of *space*. In the end, there was still structure and not *creatio ex-nihilo*. Or, if we want to rephrase it: it was space. Following Plato in the *Timaeus*, it was *xhora*, a third (and conceptually bastard) kind, not to be confused either with Being (forms, eternity, the one) nor with becoming (beings, multiplicity, change). Every question about time leads to a question about space. This is, as Derrida (1982, p. 8) puts it: the becoming-time of space and the becoming-space of time. But let's note that Derrida reconducts the *difference* between space and time to a *time-difference*: becoming, falling again into the same one-sidedness he tries to avoid. We will conserve however Derrida's call for philosophy:

How are we to think *simultaneously*, [...] *différance* as the economic detour which, in the element of the same, always aims at coming back to the pleasure or the presence that have been deferred by (conscious or unconscious) calculation, and, on other hand *différance* as the relation to an impossible presence, as expenditure without reserve, as the irreparable loss of presence [...] that apparently interrupts every economy? (Derrida, 1982, p. 8).

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<sup>11</sup> It is disputable how free human beings are in Heidegger's thought. But while in *Being and Time* transcendence is ascribed to *Dasein* in present time, in the later oeuvre the "anthropological" residue is evacuated in favor of the history of Being. In this sense, no historical event is seen as a real event but as mere consequences of the only and absolute event in which everything started, the *originary anonymous decision* after which a fate was established despite having obeyed no necessity a priori. The precise analysis of events in time and space, with its conditions and degrees of freedom is replaced by some generic "history of Being" explaining everything and nothing. It is in the guise of Heidegger that several other histories were proposed in 20<sup>th</sup> century allegedly having dominated the totality of history.

Let's provide a context to interpret the quote. *Loss* and *return* are the two forces governing difference. Return is the path of the circle, self-reference either as self-presence in the form of self-consciousness or in the form of a metaphysical structure assuring the proper and regular circulation of signs, meanings, ideas, people. Loss is the name of self-reference as "power-set", as the impossibility of consciousness to attain its own origin, impossibility of foundation of the ego by the ego, beings by beings, the impossibility of a meta-language, etc. It is disputable if Derrida lived up to his own *dictum*. The quote is nonetheless clear: it states the double need of return and loss, self-consciousness, and dissemination. We could advance a simple diagram for that: an *arrow dividing itself*.



### III. Space and mathematics

To Being and time, we should add space. We will not discuss if Heidegger sufficiently interrogates space beyond the "spatiality" of Dasein. We will rather insist in the initial vindication of space by structuralism facing the overwhelming concern with history, time and becoming under the names of difference and multiplicity.

Philosophical structuralism is not *grounded* in mathematics. But mathematics and philosophy share a neighborhood. Not only philosophy and poetry. There is a very extended tendency inspired by Heidegger (but also Bergson and even the late Husserl) to align mathematics with science, the technical world, and the oblivion of Being. On the contrary, thought shares border with poetry, invention, and language as the house of Being. But this is based on a poor apprehension of mathematics as the realm of number, aimed at *calculating* relationships in the world in order to put beings at the disposal of humans through technology. But this is not mathematics or, if we will, the mathematical. Number and calculation cannot exhaust it. In the *Critique of Pure Reason*, Kant (1999) devotes the section called the *Transcendental doctrine of method* to confront the methods of

mathematics and philosophy. But before the confrontation takes place, it is obvious for Kant that there are several categories shared by philosophy and mathematics. It is easy to list concepts lying at the border of both disciplines: unity, multiplicity, the void, the infinite. This is even truer for our times, where mathematical logic directly includes in first-order logic quantification:  $\exists$ ,  $\forall$ ,  $\exists!$  and the corresponding negations ( $\neg$ ). Existence, universality, singularity. Those are central concepts to all philosophy, whether in ontology, metaphysics or political philosophy. The infinite has also played a central role in modern and contemporary philosophy from Descartes to Lévinas and in modern mathematics, from Leibniz (the first to tame it) to Cantor (the first to make it mathematically rigorous).

Now, beside the “big concepts” we could enumerate, we referred to structuralism so far it naturalized the formal approach to human affairs. But if “the formal” pointed at the beginning to ideas revolving around algebraic structures (in linguistics and anthropology) it soon became clear that the mathematical was broader, involving order and topological structures (at least). It must be noted that the aftermath of the “crisis of foundations” in mathematics lead to the project of grounding all mathematics in set-theory. Also philosophy, both continental and analytic, when not doing logic, considered mathematics as some version of set theory. The great leap forward consisted in the recognition of the mathematical character of *language* and of all *conceptualization*. Taking language as the last instance of meaning and world and making sense dependent on the structure of the former, the path was open for mathematics in a territory in which only the wings of poetry were allowed. Math is not without poetry. But the incursion was crucial to allow other mathematics to be considered with philosophical dignity. Is mathematics thus called to deliver philosophy a new set of categories to ground a new ontology? Not at all<sup>12</sup>. There is

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<sup>12</sup> With these ideas we do not intend to discredit Badiou’s philosophy. On the contrary, he is the exact example of the favor that mathematics can *do* to philosophy renewing its conceptual field. His use of mathematics is similar to that of Lacan. Nasio (1987) recalls how Lacan decided to call his linguistics “linguisterie” and that it would be fair to call his topology “topologerie”. Badiou does not propose “mathems” but makes use of some “mathematerie”. Even in mathematics axioms play a complicated role. For the “working mathematician” axioms are given. But in a historical process, axioms are rather the *result* of reflection upon practice. Non-Euclidian geometries and the axiomatization of set-theory by ZF(C) are good examples. In the first case it was necessary to suspend the parallel’s postulate in order to make curved spaced possible. In the latter, axioms were introduced to produce a *consistent* theory to make it useful. We cannot oversee the pragmatic side of axiomatization. In mathematics axiomatization has not only to do with consistency and completeness, but also with the fashion in which a group of axioms work together. We have for instance, the proof of independence of the axiom of choice regarding the rest of axioms in ZF. It is simply

and there will always be an unsurmountable distance between both disciplines. Kant shows easily how metaphysics starts with the confusion of methods and thus using the prestige of mathematics in philosophy. But there is always a philosophical decision in how to interpret mathematical terms. We do not have to agree neither with Kant's philosophy of mathematics (this requiring pure intuitions) of his conception of philosophy (as fundamentally analytic, historically sterile) to concede that philosophy can share concepts with mathematics but is not entitled to import its methods, including the use of axioms and proofs. Philosophy offers arguments, but never proofs, as old metaphysics intended to demonstrate God's existence. Philosophy uses principles, but never axioms. The same is valid for definitions, which mathematics requires for its practice, and which philosophy uses only provisionally. Taking mathematics to be a science of being qua being is *dogmatism* in the precise sense of the word.

We now ask: in which relation does philosophy stand to mathematics? What does it mean that they share a border or a neighborhood? We could distinguish (problematically or tentatively) mathematics from *the mathematical*. The former is what Kant understood as mathematics proper as a practice based on the construction of concepts *in concreto*. Again, besides Kant's claim that mathematics needs pure intuitions, we can concede that mathematics operates with axioms and definitions and rules of inference, without which no proof would be possible. This is the concreteness of mathematics. But there is mathematics and metamathematics or the mathematics of mathematics. It was certainly Hilbert who called the attention from mathematicians to the problems of foundation and the possibility of the unification of the mathematical field through in the light of axiomatic and formal reasoning. In this respect, mathematics approached philosophy asking about its own foundations. Self-reflection is the mark of modern philosophy and it was a matter of time for mathematics, the queen of sciences, to pose the question of foundations. But mathematics did not approach the question philosophically, as Husserl intended to (grounding mathematics in transcendental subject), but mathematically. In philosophy, self-reference led to self-consciousness (Hegel) or self-constitution (Husserl), even self-

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not legitimate to make ontology with *one* branch of mathematics, based on *one* particular axiomatization. One must show how subjective decision and pragmatic considerations define this or that set of axioms which cannot therefore be taken as the most general.



interpretation (Heidegger). In mathematics, it led to the set of paradoxes we are familiar with: Cantor-Russell, Gödel, and its variants as the *Haltproblem* and others. It is at level of foundations that mathematics becomes progressively conceptual, without necessarily reaching a philosophical stance. Conversely, philosophy approaches mathematics as it reflects upon the formal and concrete conditionings of thought and language in general<sup>13</sup>.

We cannot blame philosophers to reject mathematics so far they understood a discipline based of measure (as in present in sciences) or formalization (as we are led to in set-theory). The continuum of topology, intuition in geometry, the locality allowed by category theory or the integrative powers of *topos theory* were necessary to make productive transits between the philosophical universe and the mathematical one. As Lawvere states it: philosophers need to learn mathematics and vice versa. We can recall an example showing the penetration of *other* mathematics (i.e., or at least critical with a concept of mathematics as a purely formal discipline expressed ontologically in set-theory and analyzed structurally in mathematical logic (proof-theory, computation-theory, and model-theory) in philosophical thought, which wouldn't have been possible without a revolution in mathematics itself. Frege compares concepts to spaces demanding the former to be well-defined:

A definition of a concept [*Begriff*] (a possible predicate) must be complete; it has to determine unambiguously for every object whether it falls under the concept or not [...] Figuratively, we can also express it like this: a concept must have sharp boundaries [*scharf begrenzt sein*]. If one pictures a concept with respect to its extension [*Umfang*] as a region [*Bezirk*] in a plane, then this is, of course, merely an analogy [*Versinnlichung*] [...] A concept without sharp boundaries would correspond to a region that would not have a sharp borderline [*Grenzlinie*] everywhere but would, in places [*stellenweise*], be completely blurred, merging with its surroundings [*in die Umgebung*]

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<sup>13</sup> Saussure is credited in modern linguistic as the father of structuralism. Even without resorting to strict mathematical concepts, he laid the ground for a formal apprehension of language. This is true, but incomplete in our current horizon. Linguistics and especially philosophy had to wait some time to digest Peirce's semiology to consider it an equally consistent formal model for signs alternative to Saussure (additionally based in the continuum). After the discrete and combinatorial structuralist models, Thom also offered a topological reading of language adopted by his pupils like Petitot. In any case, the common trait of the above-mentioned models consists in recognizing the formal level of language, not contrary, but tied to language expressive and poetic capacities, i.e., its power to *produce* sense. From the side of literature, it suffices to glimpse at the works of the *OuLiPo* to see the power of formal procedures in poetical composition. Even Italo Calvino spent some time in the *Ouvrier de Littérature Potentielle*.

*überginge*]. This would not really be a region at all; and, correspondingly, a concept without sharp definition is wrongly called a concept. [...] The law of excluded middle is in fact just the requirement, in another form, that concepts have sharp boundaries. Any object  $\Delta$  either falls under the concept  $\Phi$  or it does not fall under it: *tertium non datur*. (Frege, 1903/2016, § 56, p. 69 in both editions).

In his *Philosophical Investigations* Wittgenstein (1999, p. 34) quotes this passage from Frege's work in order to introduce his own theory of language games. For Wittgenstein it may be true that *some* concepts operate in this fashion, but not language *in general*, to which concepts *belong*. In other words, how well defined a concept is depends on its intended *use* (*Verwendung*) and thus rests on pragmatics grounds. In the end there is no last instance to define the proper use of language, but only language games, defined by sets of rules. There are games with more or less strict sets of rules. If we compare classical and paraconsistent logic, we see ourselves in the same situation: the former provides a powerful system of deduction, but at the cost of being extremely restrictive. If we want to extend logic and to reason in a wider specter of realms of experience, we have to pay a price: a weaker power of deduction.

Wittgenstein argues against Frege showing that vague concepts can be and are *effective* in everyday life:

[...] is it senseless to say: 'Stand roughly there'? Suppose that I were standing with someone in a city square and said that. As I say it I do not draw any kind of boundary, but perhaps point with my hand-as if I were indicating [*zeigende Bewegung*] a particular spot. And this is just how one might explain to someone what a game is [...] The point is that this is how we play the game. (I mean the language-game with the word 'game'.) (Wittgenstein 1999, p. 34).

Such an argument would not challenge Frege's position if Wittgenstein had not extended his view to *the whole of language* as to make every set of rules a different language-game. Mathematically it is out the question that different contexts (categories, for example) allow *different* types of objects and relationships among them. Frege would have needed to concede that topological spaces, for example, do not resemble everyday spaces like

districts, because even if we have a compact space, we do not need a metric space defined over our topological space  $\tau$ . Things get complicated when we make use of spaces with fuzzy borders, as we do with fuzzy sets which can nonetheless be considered in a mathematically rigorous fashion. But if this is true, if there is geometry or topology of reasoning, then, we have different types of spaces or structures in which we can think. It is finally thanks to category theory and topos theory that we can associate topological spaces to algebraic structures, but also topological spaces to algebras and thus to logic<sup>14</sup>. Topos theory allows the construction of different types of logic (through the subobject classifier) showing its homomorphisms with other mathematical structures.

The thesis on the plurality of language games is not Wittgenstein's last word. He does not defend a fundamental incommensurability regarding language games as the "postmodern" would facing the multitude of interpretations of the world. The ultimate question is rather: how different language games *relate to each another* through family-resemblances (*Familienähnlichkeiten*). It is an error to consider the second Wittgenstein as defending a new form of atomism, this time of language games instead of logical propositions (as held in the *Tractatus*). What is a "resemblance" but a morphism namely, a structure preserving map? And if we ask about the ties among all language games, would we arrive to some sort of sheaf in which the disconnected language-games exhibit its transits and obstructions?<sup>15</sup>

As long as we use systems of ordering and signification for life, existence or meaning, we are bound to its material-formal (objects-morphisms) conditions. Take *dialectical materialism*. It is material so far it is concerned with bodies and forces, with economic conditions and life and its reproduction. But historical development is bound to a *more dialectico* and thus to a *logic* involving different forms or configurations of society. Take phenomenology, where no suppositions are allowed but only what shows itself and by itself. But there is the fundamental "a priori of correlation" the basic *structure* of givenness as intentionality. And there is the basic *structure* of time-consciousness as a variety (*Mannigfaltigkeit*). Take structuralism: there is the open play of signifiers *and* the law of

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<sup>14</sup> We know, for example, that Grothendieck topos are isomorphic to intuitionistic logic and Heyting algebras.

<sup>15</sup> To develop a theory of mathematical sheaves philosophically interpreted has been one of the pillars of Fernando Zalamea's central work. See: (Zalamea, 2012).

signification found in linguistics. This is precisely what characterizes 20<sup>th</sup> century, the “idealization” of all the spheres of existence. There are no unmediated events, no uninterpreted facts. In positive terms, *there is always some relationship conditioning Being*. Metaphysics is the meditation on such ultimate structures in which anything happens. There is no “in itself” out of a relationship, a “for another”. The focus cannot be on “things”, not even on “processes”, but on relations. It is not “correlation” as such what decides a realist or an idealist philosophy, as if things levitated as points in an empty space, but the *reality of relations*<sup>16</sup>. Philosophical structuralism associated itself early with the linguistic turn. The paradox is that as language was considered from an increasingly more abstract perspective, it lost more and more its *linguistic specificity*. As a consequence, the structural frame allowed to link language to several other fields of sciences, not necessarily social or human. For nothing prevents us to use non-Euclidian geometry in perception, in reasoning-models, in physics, or in biology. Given such a “diagonality” of formal thinking and ranging from “pure” uses in mathematics to strict applications in physics, to approximations in biology, to conceptual elaborations in psychology and cognitive sciences, to speculation in philosophy, all fields exhibit *local overlappings*.

We have spoken of spaces. Spaces in the sense of structures, patterns, and forms. Spaces as logoi. Such spaces should be understood as structured domains of Being. We ask for the ways in which we can map the worlds and how we can construct different atlas gluing them, but also how we understand their spatial-temporal structure. Are they continuous, discrete? Do they have holes? Do spaces share borders? Or do they form links (brunnian, for example)? Do spaces have open textures? Or holes? Take for example the old separation culture-nature. We ask if culture and/or nature are unified fields (or simply connected spaces) in themselves. We ask if there is *only one* relationship among them: opposition, difference, identity, becoming, or several at the same time, depending on the

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<sup>16</sup> See for example Nef (2017) and his distinction between relations (purely conceptual and subjective) and connections (real). Causality and effectivity in general can only be thought of in the context of a real *nexus* between things and not in the midst of mere “relationships”. There is another important issue at stake here: to connect things respecting their individuality requires a “topology” that cannot be neither fully discrete (ontology of separated objects) nor fully immanent or continuous (for it does not allow autonomous individuals beyond the relationships in which they participate). The first issue concerns the difference between real and thought links between things (and processes). The second, the metaphysical topology of beings. But we could wonder if only two sets (the real and the ideal) suffice.

region and the chosen morphisms to relate them. Because if nature and culture are *locally* differentiated (for example, multiconnected) then it is not valid to assume a global relationship. It may be that some regions of nature are opposed to some regions of culture, but another set of morphisms would deliver a greater degree of continuity up to isomorphism or indiscernibility. Plato defined philosophy in *The Sophist* through dialectics as the *science of divisions*. This is precisely what we have assumed as the great philosophical task: to reconsider the types and nature of differences: oppositions, borders, limits, thresholds, distinctions between the inside and the outside, continuity, etc. We can end this section with a quote of *The Sophist*:

Stranger: Now since we have agreed that the classes or genera [γένη] also commingle [μείξεως] with one another, or do not commingle, in the same way, must not he possess some science [ἐπιστήμης] and proceed by the processes of reason [λόγων] who is to show correctly which of the classes harmonize [συμφωνεῖ] with which, and which reject one another, and also if he is to show whether there are some elements extending through all and holding [συνέχοντ] them together so that they can mingle [συμμείγνυσθαι], and again, when they separate [διαίρεσεν], whether there are other universal causes of separation? [...] have we unwittingly stumbled upon the science that belongs to free men and perhaps found the philosopher while we were looking for the sophist? [...] Shall we not say that the division of things by classes [τὸ κατὰ γένη διαίρεσθαι] and the avoidance of the belief that the same class is another, or another the same, belongs to the science of dialectic [διαλεκτικῆς ἐπιστήμης]? (Plato, 1921, (253b-d).

#### **IV. Contemporary landscapes**

But why should we care about philosophy, about its obsession with time or the “emergence” of space? We face all sorts of urgent problems: political, social, economic, ecologic. We face massive extinction, pollution, exploitation, poverty. Why should we waste time wandering in the meanders of philosophy? Why should not philosophy turn more and more “concrete”, even flirting with social sciences to adopt its methods and its relation to data and empirical research? Shouldn’t philosophy be concerned with our most urgent problems? Why not limit itself to comment science, to help doctors and lawyers to

clarify their thoughts, to offer arguments to discuss bioethics? The easiest answer would be the *transcendental* either Kantian or Husserlian or Heideggerian, namely that philosophy *grounds* science. Sciences do not understand themselves. Philosophy would then play the role of the self-explication of reason assigning for itself the territory of “originareity” and leaving to every science the multiple provinces of the “derivate”. But as we have argued, there is no *last instance*, no ultimate space or territory: not in subjectivity, not in nature or the world, not in God, and certainly not in language. There are landscapes. Several of them.

Yes, it is philosophy the only field in which such a negative answer concerning the last foundations can be formulated, but philosophy itself cannot reserve for itself the reign of origins. This is precisely what forces her to *listen* to what is said in its neighborhoods: poetry and mathematics. Regarding science, we will content with the Kantian view that science advances in the dark what philosophy can later reflect upon. There is no deduction *downwards*<sup>17</sup>, such that we could start with an a priori investigation of the principles or the last ground of experience. Deduction in the Kantian sense means *explaining retrospectively* how all the content of our experience is concretely possible. This requires traversing all the meanders of science for there is no common sense that could allow us to anticipate nor the contents, nor the methods. Such as Kant elaborated a critique of reason to explain Newton, we have the harder task to reason upon the main areas of science in which things and relationships of different kind and order deploy. Any attempt to jump over the concrete world (both in science as in history) would mean to fall prey to the transcendental snare. Additionally, since philosophy has no other element than thinking-language, it must take words, relationships, arguments, and figures from all other disciplines. Philosophy is in this sense more “diagonal” than hierarchical. This connects with what we have said about space. *Space cannot be known fully a priori*. It has to be *investigated*, and, above all, traversed, walked through, since there are several kinds of it.

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<sup>17</sup> When concerned only with retrospective questions towards the origins or beginnings, philosophy remains unilateral. The historical question in all its variants is caught in non-simultaneity, in the obsession with origin and not the display of and interaction between beings. This takes place in space. Space is the *taking-place* of things in connections.

One of the procedures to investigate topological spaces is to assign other objects to determine the group of all different possible *paths*. Spaces allow different types of paths according to its compacity, continuity or global character, for example. This is the central contribution of the concept of space: that it makes possible a set of possible paths through which thought, existence, actions, etc. can *circulate*. Today the question of space does not serve the cause of locating things in places in order to trace plain lines, borders of frontiers. We produce such lines of discernment in and through movement. What we see in our world is different modes of circulations: of desires, of bodies, of commodities, of ideas, of information, of money. Exchange and circulation produce dynamical spaces which we inhabit. Why is there something rather than nothing? This is considered the ultimate metaphysical question. If philosophy is to survive its demise by science, it must *speculate* beyond the given, beyond the empirical, but without relapsing to metaphysical confidence in the *a priori*, namely that *there is* one realm of Being and that it is *knowable* with pure concepts. In 20<sup>th</sup> century we changed the question replacing the “why” by a “how”. *How* there is something? But this *how* required to *separate* the thing (some-thing) from its *origin*. Things engender things, but things do not come from things, but from nothingness, from possibility, from openness, for things always produce similar things. This was the conviction and the reason why we deprived the present from its forces, confining all our hopes for change in the abstract possibility and in miraculous events. This runs against all determinate existence conceiving of it as captured in some *a priori* fate and having no other hope as destructing itself to attain the virginal state of the possible when nothing had been said.

This is the obsession with time and genesis. “Space” means, in contrast, structure and simultaneity, not subtraction (*via negativa*) and not irruption (the event, the new), but working with what is at hand in the realm of determinateness. And it also means the possibility of emergence not by recourse of some obscure origin, but by the interaction between spaces (where the concept of *emergence* can be recognized). Ontological difference, the idea which culminates the epoch obsessed with time and which constitutes our precedent horizon, is a hierarchical, one-directional and dualist difference. It is intolerant to *heterarchy* (horizontal relationships), to accepting a multitude of arrows

("relationships") going in different directions (allowing one or more arrows going from beings to Being), to concede to possible contamination or confusion of the terms or even the becoming of one the other (but in Heideggerian terms this would tantamount to the oblivion of Being). We dare to say that ontological difference rescues Being from oblivion at the cost of forgetting beings, so far they are deprived of all autonomy). And yet, Heidegger, the thinker of ontological difference is also the thinker of the *open*, of space in a very Platonic fashion, *where* beings come to be, insist in their existence, change, and disappear. Space, as Plato defends in his *Timaeus*, is the "where", the territory in which Being enters into existence (as multiplicity and becoming), into the *real*. It is space where Being and beings interlace. Plato thus presents us the triad: Being, becoming and space, reminding us that the later is to be thought of only through a *bastard* reasoning. Time is, of course, no less paradoxical, as we testify this throughout the history of philosophy. Time and space are two paradoxical and interlaced dimensions in which Being ties itself to *existence*. To name the knot between time(s) and space(s) (and not only, as Derrida proposes, the reciprocal *becoming* of one into the other) we will use a term that Bakhtin uses to analyze the novel: *crhonotope*:

We will give the name chronotope (literally, 'time space') to the intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature. This term [space-time] is employed in mathematics, and was introduced as part of Einstein's Theory of Relativity. [...] we are borrowing it for literary criticism almost as a metaphor (almost, but not entirely). What counts for us is the fact that it expresses the inseparability of space and time. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the movements of time, plot and history. (Bakhtin, 1982, pp. 84-85).<sup>18</sup>

The *chronotope* would be unit of analysis to analyze experience beyond its psychologic and literary domain. When we speak of space in mathematics, we do not mean its empirical dimension, but rather the *structural* character of experience: we mean *logos* as some *dynamical order* (or, as we claim: orders). Topology for example is a dynamic theory of

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<sup>18</sup> Bakhtin claims in a footnote to have taken the term from Ukhtomski, a psychologist concerned with the world as a spatial-temporal complex. His work was concerned with Kant's transcendental aesthetics and the anticipations of perception (Chebanov, 2015). Bakhtin also declares his work as an effort to develop a theory of time and space of experience in literature.



space. The arrows of category theory can be read as the relationship of separated objects (categories of functors) or as *transformations*. Both deliver us chronotopes, i.e., interlaced landscapes of the real. It is not hard to accept that experience is distributed across different spaces (or chronotopes), i.e., fields with different objects and relationships among them. Different worlds with its corresponding horizons, but somehow *connected*. What we can say with words does not coincide with what we can say with painting. Acting in politics is not the same as acting in love. The rules of architecture are not the rules of literature. There are also different scales: individual, group, society, humanity (but also in structures as it happens in language: phoneme, word, phrase, discourse). And yet, we cannot separate our political engagement with the fashion in which we love. We do not separate our local from our global existence. We hear paintings and see music. We translate one language into another. We see patterns and forms repeating across very different, even incommensurable domains of Being. As in fractal structures, we recognize in several phenomena self-similarity in its different scales. There are spaces. *In plural*. Conceptual spaces. Logical spaces. Perceptual spaces. Color spaces. And there are also different types of logical spaces: classical, paraconsistent, anti-classical, as well as different spaces of perception (we see with projective, but touch with Euclidian geometry. We knot the seen with the heard, the sensible with the understood. But let's be clear on this point. It is not that we proceed "synthetically" among separated regions. There is from the outset no possibility to create clear-cut regions.

We showed the precedent epoch as concerned mainly with time. It culminated in a period obsessed with end, fate, and the possibility of being saved by recourse to "the possible" against a real allegedly captured in *a priori* determinations. But in this framework structuralism managed to capture the structural dimension of experience. This meant a new approach of mathematics and philosophy, of time and space. But the consequences were far-reaching. A first recourse to algebraic structures soon extended to topology and eventually to category theory, where a plurality of concrete spaces could emerge. This plurality, however, did not lead to a disjoint universe, where worlds run parallel to each other. On the contrary, the worlds relate to each other in different forms, delivering a sheaf of landscapes. Being formulated in structural terms, the closed realm of subjectivity and

language necessarily connected to the world of nature and *idealities* in general. But the plurality of worlds also required to conceive of idealities as determinate worlds, where determined realities deploy. This is why the “openness” and “multiplicity” of space play imply a realist position. We could say that if time delivers us from the fixation to determinations, space delivers us determinations. For this to be possible it is needed to recognize the productive character of spaces, their “creative” life (through transformations of all sorts, like immersions or embeddings). Such an interaction(s) between time(s) and space(s) can be captured in the concept of chronotope. Concerned with chronotopes, philosophy turns a science of divisions, i.e., a reflection upon the structures involved in our spatial-temporal landscapes and how beings change or persevere in their form: a morphology, concerned with morphogenesis, structural stability, metamorphosis, and dissolution of form or destruction, very much in the guise of René Thom and Luciano Boi. But such a morphology (not only of *beings and processes*, but of the *worlds or spaces* in which different beings exist and interact) is already a theory of borders, limits, thresholds, and their interlacements. We ask, for example, how are beings at the same time individual (independent, separated) and related (both in thought in relationships and among other beings in effective, actual, or possible connections)? We ask for their borders, if they have windows, but also if they are connected (in a simple or non-simple manner). We ask also: how are beings linked to each other? Speculative realists like Quentin Meillassoux (2009) have identified the main trait of current philosophy as “correlationism”. The term captures the idea according to which the world is only the result of subjective mediation either through thought (conscious) or language (unconscious). In other terms, the world is only the result of a *correlation between subject and object*. Against this, he claims that a realist position should suspend the correlation in the name of a *pure access* to the great outside of the real. This is not the place to discuss his thesis. We just want to state that a realist view should run in the *opposite direction*, not suspending one correlation, but *multiplying the correlations*. There are different types of subject-subject, subject-object and object-object nexus (included both the link among to separate things and processes of transformation of things)<sup>19</sup> with different types of arrows, what necessarily implies that these may be

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<sup>19</sup> A. Berque (in press) has expressed this in precise terms: there is no decision to be made between the earth of Galilei (nature, *Erde*) and the earth of Husserl (the world of meaning, *Welt*): Reality is neither A nor non-A (lemma of the third): neither a pure object (S) simply outside, nor a simple representation (P) here, inside; it is

*directed*. But there are also “second-order” links which relate different domains or regions of Being (i.e., spaces or even categories) and not only things. But we also cannot dismiss altogether the fundamental phenomenological claim that everything must be testified by us. The subject is also the *focal point* from which the beyond (the real without “us”) can be stated and expressed. It is just that this testimony, conscious evidence, is complex, multilayered, and modal, implying also different connections/relations and degrees of immediacy. The real would not be knowable if there wasn't a fundamental connective structure in which we *participate* but which, in turn, we make it the object of our considerations. This produces an unavoidable quiasmatic situation.

This seems to be the first step to come into terms with our most urgent problems. Being urgent does not make something evident. Take the example of the afore mentioned *opposition* culture-nature. It is the point of departure of all linguistic structuralism. And yet such a simplistic separation of the two domains what: a) reduces nature to matter and culture<sup>20</sup> to form, denying all autonomy to the former and attributing an exaggerated agency to the later, justifying the domination from the active over the passive; b) assumes that nature is a place of order, equilibrium, and peace<sup>21</sup>, leaving invention and symmetry-breaking to subjectivity; c) reinforces subjectivism but not in the form of consciousness, but in the realm of language, what only *displaces* the former, offering thus no criticism to the priority of the human over the non-human. This is only an example of how the borders between domains serve as frameworks which determine our cognitive and practical approaches to “otherness”. It is difficult to see how we can approach the climate crisis without redefining the *landscape of relationships* between nature and culture.

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a thing (chose) (S/P), at the same time A and non-A (fourth lemma: the sylleme), half-inside half-outside, namely in the milieu.

<sup>20</sup> Lacanian psychoanalysis is in this respect ambiguous. On the one hand it depends on the “arbitrariness” of the linguistic sign, interpreting thus language as a miracle in the nothingness of nature. On the other hand, the unconscious does not attribute self-dominion to man, on the contrary it reintroduces traits of nature into subjectivity, like automatism and repetition. In this sense, it may be true that language represents a cut of man from nature, but only from an idealized form of the later in which everything falls into its proper place. But it is also true that the unconscious represents a no man's land, something between self-consciousness and absolute automatism.

<sup>21</sup> One cannot hold the thesis that language introduces absence in nature without assuming this to be unproblematically ordered. But attributing “lack” and “chaos” to nature makes harder to interpret language as *the* cut of nature from itself, as if it was not discontinuous long before the coming of humans.

On the side of subjectivity (but again, there is nothing more blurred and problematic as the separation between subject and object), we face the problem of otherness in the figure of the stranger. But we cannot think anymore in terms of exterior-interior. The so-called immunological paradigm was based on the distinction between the proper and the alien. But the current complication of borders (political, geographical, linguistic, etc.) and the corresponding belongings provide the concept of otherness a meaning different to simple exteriority, namely as the impossibility to *unambiguously situate people*. The other is not the foreigner, neither the good one: absolute exteriority and justice, nor the bad one: the dangerous alien. It is the one who cannot be *definitively assigned* to a territory, to a tradition, to a world: *far away so close*. In politics there is also an old-fashioned separation between the State and the People, confronting them as two *unities* capable of producing an all-embracing antagonism. But the State constitutes no ultimate unity; it is fragmented. It is not only divided in “powers” (legislative, judiciary, executive) but every power is distributed in itself in other subspaces. The State is so much an actor as it is an arena (space) for dispute. For this reason, the decision to exert the political either “inside” or “outside” the system has no sense. The system is a system precisely because it is distributed and lives in and from internal conflict. For this very reason, such as there is no absolute interiority, there is no absolute exteriority, and thus concepts like “transgression” or “exceptionality” lose their radical signification. A transgression *here* may be an act of conformism *there*. We discern only when moving up and down between the local and the global, and when we move along spaces tracing the sheaf of possible paths. We cannot ground our ethics in exteriority, otherness, or difference, because the “one”, the “same” and “interiority” were and can never be achieved. There are types or modes of otherness and sameness (or equivalences, homomorphism, like isomorphism, endomorphism, automorphism, etc. as it is expressed in category theory).

There is urgency. There is crisis. There is disorientation. There is despair and suffering. There is destruction of the environment, of cultures, of bodies and modes of life. There is oppression. We are called to act. And yet, we come from a time in which we acted. We come from a time of mobilization in wars, of uprisals in revolutions, of resistance in guerrillas. We can say everything but that we didn't try to transform the world. But can we

really claim that we understand it? Can we claim that the difference between interpreting and changing the world, between theory and praxis is still something evident? Hasn't the vert border separating one from the other become problematic, elusive? Subject, object, action, transformation, theory. Have we tried all the possible arrangements of the constellation involving those terms? Is there just one? Have we tried a philosophy of superimposed constellations, in which the constant displacement of the eye is absolutely needed? Have we tried a philosophy in which concepts gain its meaning in a moving and complex space? Have we been up to our times? And even better, have we been up to the knot in which our own very time is *caught and held together* at the same time?

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