



Building Transdisciplinary Urban Space (Part II): Phenomenological Transurbanism

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This paper is the second of a set of three papers that utilizes the classification of transdisciplinarity into theoretical, phenomenological and experimental transdisciplinarity (Nicolescu 2010) to suggest some fundamental perspectives and concepts that would be required in order to start building a transdisciplinary vision for urban space in research. The work is divided into three papers. In the first paper we dealt with *Theoretical Transurbanism*. **Theoretical transdisciplinarity** in urbanism (the first paper) needs to take into account the dialectical process of scaling and the interrelationship among various spatial scales; it also needs to come to terms with the idea of relationality of urban space, a humanistic view of space and place, the “poetics of space,” and a clear understanding of the idea of space in contemporary physics theories such as quantum gravity. In this second paper we deal with **Phenomenological transdisciplinarity** as applied to urbanism, or the experience of the built space, which needs to transcend both intellectualism

and empiricism via Merleau Ponty’s and Lefebvre’s triad of spatial practices, representational space and spaces of representation, differential space, and Soja’s thirdspace; it also makes use of the architectural concepts of schemata, diagram and type; further, phenomenological transurbanism uses the concept of palimpsest in order to account for the experience of time in space. The third paper deals with **Experimental transdisciplinarity**, which in urbanism takes into account basic quantum concepts such as non-locality, entanglement, discontinuity, non-separability, and aims at explaining processes of planetary urbanization in the so-called “Anthropocene,” characterized by glocalization, hybridization, complexity, sustainability, remembrance and the reality of digital spaces.

Keywords: Being-in-the-world, differential space, thirdspace, hybridity, schemata, diagram, spatial palimpsest.

1 Introduction

“There is a theoretical transdisciplinarity, a phenomenological transdisciplinarity, and an experimental transdisciplinarity. The word theory implies a general definition of transdisciplinarity and a well-defined methodology (which has to be distinguished from “methods”; a single methodology corresponds to a great number of different methods). The word phenomenology implies building models that connect the theoretical principles with the already observed experimental data in order to predict further results. The word experimental implies performing experiments following a well-defined procedure, allowing any researcher to get the same results when performing the same experiments” (Nicolescu, 2010).

For Heisenberg, reality is “the continuous fluctuation of the experience as captured by consciousness. In that sense, it can never be identified to a closed system.” By “experience,” he understands not only scientific experiments but also the perception of the movement of the soul or of the autonomous truth of symbols. For him, reality is a tissue of connections and of infinite abundance without any ultimate founding ground. “One can never reach an exact and complete portrait of reality,” writes Heisenberg. The incompleteness of physical laws is therefore present in his philosophy, even if he makes no explicit reference to Gdel. Heisenberg asserts many times, in agreement with Husserl, Heidegger, and Cassirer (whom he knew personally), that one has to suppress any rigid distinction between the Subject and Object. He also writes that one has to renounce the privileged reference to the exteriority of the material world and that the only way to understand the nature of reality is to accept its division in regions and levels [1]. It is with this starting point that we begin the journey into phenomenological transurban space, a dimension of space that puts at the core the “beingness-in-the-world” of the knowing subject.

2 Phenomenological Space: Merleau-Ponty

This section follows the discussion by Shengli Liu, The 3rd BESETO Conference of Philosophy. The primitive structure of being-in-the-world is ultimately revealed through an integrated spatial archaeology which is nothing but Merleau-Ponty’s phenomenology of space. The spatial archaeology of the

lived body establishes the rootedness of consciousness in its body, while the spatial archaeology of the perceived world further reveals the primordial hold of the body on its world. Only by this integrated spatial archaeology can the general thesis of “being-in-the-world” be finally established. We will explicate the argumentative significance of Merleau-Ponty’s phenomenology of space by clarifying the fact that space is one of the primordial expressions of our being-in-the-world.

According to Merleau-Ponty, the existential structure, or the mode of being, of human subject can only be characterized as being-in-the-world. In this structure, human subject exists not in an unilateral, detached or purely external relationship, but in a reciprocal, communicative relationship with his world, which calls for further clarification.

In fact, that Merleau-Ponty manages, in *Phenomenology of Perception*, to denounce empiricism and intellectualism simultaneously is largely due to his successful thematization and rejection of their common epistemological presupposition, although they appear to be in opposition to each other. Actually, empiricism presupposes a determinate world that exists externally and independently of human consciousness. According to intellectualism, the world is merely the product of the conscious constructive act. In spite of the entirely different metaphysical status of the world, both theories share the same epistemological presupposition concerning “a fixed and determinate world.” It is the absolute fixity and determinacy of an objective world that characterizes the dogmatic concepts of “objectivity”, “truth” and “reality” of both empiricism and intellectualism. Merleau-Ponty thematizes this common epistemological presupposition in *PhP* as “objective thought” or “natural attitude.” Due to this natural attitude, the fundamental structure of being-in-the-world is blurred and distorted by theoretical elaborations [2].

We have first the conception of the spatiality of the body as an external object,

an objective spatiality or “spatiality of position”, related to what Merleau-Ponty freely

calls “external space”, “objective space” and “intelligible space.” Thus defined, the relation between the body and space can only be termed as “a body *in* space”, i.e. a ready-made, objective body located in determinate positions and occupying a fragment of the objective space [3].

However, the perceptual experience of the proper body, or our lived body, brings a different archaeological picture about spatiality.

We discern in our bodily experience, not an objective spatiality or a “spatiality of position”, but a “spatiality of situation” in relation to the so-called “bodily space”, “orientated space” and “lived space.” The evidence is that the spatiality of the lived body cannot be defined by pure homogeneity and exteriority. When the lived body is engaged in a certain situation in face of its tasks, it displays various orientated distinctions, such as top and down, right and left, etc, and its parts are inter-related or enveloped in each other to fulfill its tasks. Thus bodily space can be distinguished from objective space by its necessary orientation and its ambiguity between interiority and exteriority [4].

The relationships between the two spatialities, according to Merleau-Ponty, comes to a “dialectic” of two dimensions:

one is the relationship of founding and founded, the spatiality of the lived body is the founding and the objective spatiality the founded; the other is the relationship of expression and expressed, the objective spatiality is the “explicit expression” of the bodily spatiality as the expressed [5].

Intellectualism shows us the spatial conception of an objectivist world picture: a single objective or geometrical space, which is homogenous and isotropic with its interchangeable dimensions, related to an objective world and deployed completely by a universal constructing consciousness.

In this geometrical space, movement is conceived as a pure change of positions so that the objective conceptions of the identical

object in motion and the pure relativity of movement become inevitable. However, in our perceptual experience of spatiality, we have perception of necessary orientation, distinct depth, pre-objective movement, etc, i.e. “the knowledge that a *disinterested* subject might acquire of the spatial relationship between objects and the geometrical characteristics” within a perceptual field; furthermore, in the whole of our spatial experience of the perceived world, we are led further to examine every possible experience of spatiality, especially that of various anthropological spaces, i.e. the spatial experience that an obviously *interested* subject might acquire of the world or the perceptual field *itself*. These experiences bring us an archaeological picture that is different than that of the intellectualism. It is from the above two perspectives that Merleau-Ponty further proceeds with his spatial archaeology of the perceived world to a more primordial level of being-in-the-world [6].

Obviously, this relation cannot be found in the matter of perception, but only in the form of perception, although the traditional form-matter relation should be re-considered against empiricism and intellectualism.

Space is thus introduced as “a form of perception” into the whole phenomenological project in *Phenomenology of Perception*. This argumentative intention explains Merleau-Ponty's persistent preference or adherence to a relationalist notion of space rather than the substantialist or attributionalist one. He thus defines space as “the universal power enabling them [i.e. things] to be connected,” or the setting of “co-existence” [7].

This definition also brings to light the rootedness of Leibnizianism in *PhP*, whose influence will become more conspicuous in *The visible and the Invisible*.

Hence Merleau-Ponty regards this relationalist notion of space as “the symmetrical notion” of the intentional structure of being-in-the-world. This explains why he

thinks he is approaching the structure of being-in-the-world “in a more direct way by examining ... the notion of space,” and why he repeatedly chooses space perception as the example of his phenomenological analysis [8].

3 Differential Space

Researchers who engage with Lefebvres work particularly those who pursue empirical research, tend to work with the concept of the spatial triad which has become well-known over the decades.

However, Lefebvre is ambivalent about differential space, associating it with a utopian post-capitalist world, “on the horizon produced by social revolution that will result in a planet-wide space of “transformed everyday life open to myriad possibilities” but he also detects differential space more prosaically in the immediacy of Brazils favelas and in 1960s Paris [9].

The teleological nature of Lefebvres historical dialectic in which an inevitable transition unfolds, from the absolute space of nature to capitalist abstract space, finally reaching utopian differential space, has been observed several times. Differential space is possible partly because under the conditions of neo-capitalism land and property is abandoned periodically by capital interests and the state.

This withdrawal from space occurs continually in urban areas even in the centre of cities. Abandoned urban land is seen in a variety of positive light including the opportunities it engenders for natural space wildlife habitats. Although the contention by some that abandonment and vacancy are simply stages on the road, perhaps a long road, to redevelopment and regeneration is more dubious. In the UK and other countries capital and state abandonment of space is associated with the cyclic, sharp economic crises of capital and with more long term structural changes in the economy in the fields of for example, manufacturing industry and transport infrastructure. From his Marxist perspective

Lefebvre highlights the potential for ordinary users of space to seize new rights to urban space and produce differential space from abandoned abstract space: An existing space may outlive its original purpose and the *raison d'être* which determines its forms, functions, and structures; it may thus in a sense become vacant, and susceptible of being diverted, reappropriated and put to a purpose quite different from its initial use [10].

In addition to what might be called ‘utopian socialist’ differential space, Lefebvre speaks of another kind arising from what might be called the here-and-now contestations and bodily “re-appropriation” of city space. An example in 1969 was the take over by Parisian students and others of the wholesale produce markets of Paris, Les Halles Centrales, which were “transformed into a gathering-place and a scene of permanent festival,” that is a ludic space of play rather than work.

Lefebvre presents a contradictory categorisation of ludic space suggesting at one point that it is a vast counter-space that escapes the control of the established order only to affirm also that the space of the leisure industry, through commodification is a victory of neo-capitalism. However, leisure space bridges the gap between spaces of work and spaces of enjoyment and fun. It is therefore “the very epitome of contradictory space” hosting exuberant new potentials. Lefebvre is clear about what differential space might be and how it might arise: From a less pessimistic standpoint, it can be shown that abstract space harbours specific contradictions. Such spatial contradictions derive in part from the old contradictions thrown up by historical time .. Thus, despite – or rather because of – its negativity, abstract space carries within itself the seeds of a new kind of space. I shall call that new space differential space, because inasmuch as abstract space tends towards homogeneity ... a new space cannot be born (produced) unless it accentuates difference [11].

4 Thirdspace: “Beyonding” And Hybridization

4.1 Edward Soja

Thirdspace is radically different way of looking at, interpreting and acting to change the embracing spatiality of human life. It is the third aspect in a new way of thinking about space and spatiality.

Thirdspace is based on the work of a number of social scientist, most notably Henri Lefebvre. Lefebvre introduces thirdspace in slightly different form and under a different name: ‘Spaces of representation and can also be seen as ‘lived space’. It is not the name however that matters, it is the idea. Thirdspace is the space we give meaning to. A rapidly, continually changing space in which we live. It is the experience of living [12].

Therefore, the understanding of spatiality today cannot ignore the third space dimension in spatial practice.

The spatial taxonomies like third space, migratory, hybridity, liminality, marginality, interstices, space of resistance etc. are conceived as postmodern and post-colonial conceptions of social space. These terms could categorically be called as Third space and become part of methodological discourse. The ramifications of these things are significant for the conception of spatiality as spatial complexes while theorising space he challenges the hegemony of “essentially historical epistemology” and calls for a critical theory that “re-entwines the making of history with the social production of space, with the construction and configuration of human geographies”. Like Foucault, Soja takes issue with what he regards as an imperious, historicist paradigm in which space “still tends to be treated as fixed, dead, undialectical; time is richness, life, dialectic, the revealing context for critical social theorization” [13].

Thirdspace invites us to “think differently about the meaning and significance of space and those

related concepts that compose and comprise the inherent spatiality of human life:

place, location, locality, landscape, environment, home, city, region, territory and geography”. He introduces this epistemological notion ‘Thirdspace’ to emphasise new ways of thinking about space in order to establish an equal primacy of what he called “third existential dimension.” His aim is not to abandon the historicity in the modernist thought but assert the importance of historicity, sociality and spatiality in understanding social processes [14].

Even though he draws heavily upon postmodernist thought and its critique of modern epistemology and ontology which involves a rejection of totalising metanarratives, he does not dismiss the modernist approach, rather purposively construct a critical tension between postmodernism and modernism out of which emerge the domain of Thirdspace. It is the domain in which spatiality comes into its own as a genuinely constitutive element in the structuring of the world. Drawing upon Lefebvre who identified the centrality of space, Soja argues,

... that all social relations become real and concrete, a part of our lived existence, only when they are spatially inscribed that is concretely represented in the social production of space. Social reality is not just coincidentally spatial, existing in space, it is presuppositionally and ontologically spatial. There is no unspatialized social reality. There is no aspatial social process. Even in the realm of pure abstraction ... there is a pervasive and pertinent, if often hidden, spatial dimension [15].

Thirdspace is also the domain that seeks to go beyond simple dualistic, binary or bicameral approaches and set different modes of spatial thinking. Spatiality is either seen as concrete material forms to be mapped, analysed, and explained; or as mental constructs, ideas about and representations of space and its social significance. Soja critically re-evaluates this dualism to create an alternative approach, one that comprehends both the material and mental dimensions of spatiality and look for

multiple perspectives to construct the knowledge of spatiality.

Thirdspace is space and spatiality people constructed through social practices. It is, for Soja, a “transcending composite of all spaces”. It is the space of the “directly lived”, the space of “inhabitants” and “users”, containing all other real and imagined spaces simultaneously. Even though it draws upon both the material and mental spaces of perceived space and conceived space as we have mentioned earlier, it extends beyond them in scope, substance and meaning. It is simultaneously real and imagined and more. He writes,

Everything comes in Thirdspace: subjectivity and objectivity, the abstract and concrete, the real and imagined, the knowable and the unimaginable, the repetitive and the differential, structure and agency, mind and body, conscious and the unconscious, the disciplined and the transdisciplinary, everyday life and unending history. Anything which fragments Thirdspace into separate specialised knowledge or exclusive domains – even on the pretext to handling its infinite complexity – destroys its meaning and openness [16].

Soja has developed spatial concepts Synekism, Fractal and Archipelago to facilitate the contemporary urban studies. Synekism is coined by Soja himself to refer the dynamic formation of the polis state – the union of several small urban settlements under the rule of the capital city. It is “the stimulus of urban agglomeration”. From a social science point of view, it is a nucleated and hierarchically nested process of political governance, economic development, social order, and cultural identity. Fractal is used to configure the discourse about the multiplying and cross-cutting social mosaic that have developed in city spaces: that the term is to describe the combined and interactive spatiality and sociality of urban and regional forms. Soja defines,

a fractal is anything that contains in its parts self-similar images of the whole ... as the blood vessels in the hand, which resembles the entire circulatory system of the body. This was an appealing quality, suggesting that each piece of the restructured socio-spatial mosaic can be seen as a

kind of social hieroglyph representing and revealing all the complex dynamics of the postmetropolitan transition, much as Marx used a simple commodity such as a pin or a pair shoes to open up a critical discussion of the inner working of the whole capitalist economy [17].

He goes on to state,

there is also a compelling analogy here to my argument about lived space. Adapting a critical thirdspatial perspective allows us to see in every empirical site, from the body to the global sphere, the fundamental nature of the spatiality of human life, in all its richness and complexity, much as an individual biography or a social history opens up possibilities to consider all aspects of the general human conditions [18].

4.2 Homi Bhabha

Literary critic Homi K. Bhabha introduces the concept of ‘hybridity’ against the containment of cultural differences and challenges all hegemonies structured through binary antagonism. For him,

... all forms of culture are continually in a process of hybridity. But the importance of hybridity is not ... to race two original moments from which the third emerges, rather hybridity is the third space which enables other positions to emerge. This third space displaces the histories that constitute it, and set up new structures of authority, new political initiatives ... The process of cultural hybridity gives rise to something different, something new and unrecognisable, a new area of negotiation of meaning and representation [19].

Bhabha locates the origin of the notion ‘cultural difference’ and hybridity within colonial discourse itself where it is articulated as resistance to ‘colonial authority’ – a process by which in the very practice of domination the language of the master becomes hybrid. The field of signification of colonial cultural differences announces a modality of misappropriations of signs that produces a discursive instability at the level of enunciation; a productive ambivalence which deconstructs the fixity of the boundaries

(coloniser/colonised) of colonial discursivity and construct hybrid identities. He writes,

It is significant that the productive capacities of the third space have a colonial or postcolonial provenance. For a willingness to descend into that alien territory ... may reveal that the theoretical recognition of the split-space of enunciation may open the way to conceptualizing an international culture, based not on the exoticism of multiculturalism or the diversity of cultures, but on the inscription and articulation of cultures hybridity. To that end we should remember that it is the 'inter'-the cutting edge of translation and negotiation, the in-between space – that carries the burden of the meaning of culture ... And by exploring this third space, we may elude the politics of polarity and emerge as others of our selves [20].

The notion hybridity or third space of Homi Bhabha is a floating metaphor for a critical historical consciousness that privilege spatiality over temporality; but the privileging of spatialization is not ahistorical and timeless rather he tries creatively to spatialize temporality. This is an envisioning of cultural politics of third space, an effective consolidation that helps to dislodge its entrapment in hegemonic historiography and historicism. In the introductory chapter of his above cited work *The Location of Culture* he writes:

It is the trope of our time to locate the question of culture in the realm of the beyond. At the century's edge, we are less exercised by annihilation – the death of the author – or epiphany – the birth of the "subject". Our existence today is marked by a tenebrous sense of survival, living on the borderlines of the "present", for which there seems to be no proper name other than the current and controversial shiftiness of the prefix "post": postmodernism, postcolonialism, postfeminism .. The beyond is neither a new horizon, nor a leaving behind of the past .. we find ourselves in the moment of transit where space and time cross to produce complex figures of difference and identity, past and present, inside and outside,

inclusion and exclusion, for there is a sense of disorientation, a disturbance of direction, in the "beyond": an exploratory, restless movement caught so well in ... here and there, on all sides, ... hither and thither, back and forth [21].

The social articulation of difference, from the minority perspective, is a complex, on-going negotiation that seeks to authorise cultural hybridities that emerge in moments of historical transformation. The "right" to signify from the periphery of authorised power and privilege does not depend on the persistence of tradition, it is resourced by power. He explains further the notion "going beyond" as:

Beyond signifies spatial distance, marks progress, promises the future, but our intimations of exceeding the barrier or boundary – the very act of going beyond – are unknowable, unrepresentable, without a return to the "present" which in the process of repetition, becomes disjunct and distance – to live somehow beyond the border of our times – throws into relief the temporal, social differences that interrupt or collusive sense of cultural contemporaneity ... If the jargon of our times – postmodernity, postcoloniality, postfeminism – has any meaning at all it does not lie in the popular use of the "post" to indicate sequentiality – after feminism; or polarity – antimodernism. These terms that insistently gesture to the beyond, only embody its restless and revisionary energy if they transform the present into an expanded and excentric site of experience and empowerment ... If the interest of postmodernism is limited to a celebration of the fragmentation of the "grand narratives" of postenlightenment rationalism then, for all its intellectual excitement, it remains a profoundly parochial Enterprise [22].

He goes on stating:

Being in the "beyond", then, is to inhabit an intervening space, as any dictionary will tell you. But to dwell "in the beyond" is also as I have shown, to be part of a revisionary time, a return to the present to

redescribe our cultural contemporaneity; to reinscribe our human, historic commonality; to touch the future on its hither side. In that sense, then, the intervening space “beyond” becomes a space of intervention in the here and now [23].

Hence, the going beyond is the spatial act of intervention to revisit and reconstruct subjectivities in order to inhabit multiple positions of subjects as an enunciation of cultural difference. Thus Homi Bhabha's notion of hybridity/third space connects spatial concerns with cultural politics to provide multiple identities challenging all the binaries which are part of homogenisation and universalisation of human existence with singular analytical categories. He advocates supplementary readings by focusing on “hybridization” of discourse to locate space of “empowerment” and “resistance” for the “other” in allowing “cultural difference” to emerge.

5 Space as Architectural Imagination

My description of space as architectural imagination is essentially interpretive, as well as cognitively productive, following mainly Michael Hays, who draws on Kant. For Kant, a schema of the imagination is not quite a concept and yet is something more than an ordinary image. A schema is something like a script for producing images in accordance with the symbolic order – a synthetic operator between the sensible and the understanding.

In Kant's architectonic, the imagination must coordinate with the two other faculties – the intuition and the understanding – to construct its practical-empirical role out of machinic parts.

The intuition synthesizes sensory experience. The understanding spontaneously deploys concepts and categories. But intuitions are purely sensible, and the understanding cannot scan sensible objects. So we need a way of relating and connecting these two separate faculties. “There must be a third thing,” Kant writes, “which must stand in homogeneity with the category on the one hand and the appearance on the other, and make possible the application of the former to the latter. This mediating representation must be pure (without

anything empirical) and yet intellectual on the one hand and sensible on the other.” This third thing is a product of the imagination; it is the schema. The function of the schema is to subsume the uncoded array of sensations, the empirical objects of intuition, and convert them into images that can be processed by the understanding [24].

But a schema is not itself an image in an ordinary sense, because it is not a thing. Rather, a schema is a rule for an image that is produced in the act, or procedure, of schematization, a dynamic process that takes place in the imagination. Kant gives the instructive example of a triangle: The schema of a triangle can never exist anywhere except in thought, and signifies a rule of the synthesis of the imagination with regard to pure shapes in space.” Images remain attached to the senses, incommensurable with the concepts used by the understanding, while schemata regulate the abstraction of sensation into something the understanding can process. A schema is a necessary component of perception itself, but also a requirement for practical and theoretical knowledge, as well as reflective interpretation.

According to Michael Hays, the space of architectural imagination, in between sense data and understanding, schematizes – it produces an abstraction, a (sometimes geometrical) ordering system (palladian villas), a template, a geometrical essence, a diagram with universal validity. In doing so, it places itself at the level of universals, of common features, of logics. Imagination organizes data according to principles that can be received by the understanding; in this respect, architecture produces knowledge. Appearance and representation are important; repetition is important, very important in architecture. Harmonious resonance between the visual images and some “idea” of types that we begin to understand, we tend to, lean towards common elements. The understanding cannot grasp the sense data without the work of the imagination. Imagination presents schema to the understanding. This is architectural knowledge. Imagination is temporal and multiple vs understanding, which is universal and unique.

5.1 Types

Quatremère de Quincy's definition of the architectural type states:

“The word ‘type’ does not represent so much the image of something that must be copied or imitated perfectly, as the idea of an element that must itself serve as a rule for the model; but “type” is not the image of something that has to be copied or imitated perfectly (de quincy), but the idea of an element that serves as the rule for the model (formal type), a “rule” that generates all possible instances, the way palladio’s diagram produces all villas – that produces variations on the villa type, so that all conventions are represented in and through the architecture, as all the functions of the palladian villa are represented in their architecture” [25].

In the half century since Wittkower’s powerful demonstration of the schematic imagination at work in interpretive practice, scholars have grown skeptical of the transcendental formalism of models like his, turning their attention instead toward methods able to accommodate newly conceived issues of multiplicity, potentiality, virtuality, and becoming, as well as various materialist tendencies.

5.2 Foucault and Deleuze

New practices of the imagination began to develop in the 1970s and 1980s, primarily following the work of Manfredo Tafuri but also influenced generally by exchanges across various critical disciplines that accepted Marxism and psychoanalysis as common metalanguages and tended to use methods derived from ideology critique and deconstruction [26]. Since the 1990s, the works of Michel Foucault and Gilles Deleuze have been the dominant influences on architectural interpretation. In particular, Foucault’s diagram of the architecture of the 19th-century panopticon and Deleuze’s reading of that diagram as a cartography of an entire social and historical field have authorized new modes of architecture’s appearance and new constructions of the architectural imagination.

Foucault is concerned with how the apparatus of power and knowledge configures a domain of visible matter (the “seeable”) that is shaped by the articulable functions (organized utterances and discourse, or the “sayable”) into various disciplinary forms like the panopticon.

In his study of Foucault, Deleuze focuses on the relation of the visible (which is not reduced to a thing seen but comprises “multisensorial complexes,” processes, actions, and reactions) and the articulable (or discursive formation), rendering their interaction as an agon of Kantian sensibility and conceptuality. “Between the visible and the articulable we must maintain all the following aspects at the same time: the heterogeneity of the two forms, their difference in nature or anisomorphism; a mutual presupposition between the two, a mutual grappling and capture; the well-determined primacy of the one over the other.” The visible, like Kant’s intuition, is passive and determined, while the articulable, like Kant’s understanding, is spontaneous and determining. But just as Kant needs the schema, Foucault needs a third agency, a mediator of the confrontation, but one in a space removed from the visible and the articulable, “in a different dimension to that of their respective forms.” This nonplaced operator is what Deleuze, reading Foucault, calls the *diagram* [27].

The schematic imagination is an imposition of order on a stratum of sensible and conceptual knowledge that has no exterior, on an assemblage that is autonomous and closed. The schematic centers, territorializes, and patterns sensation in accordance with categories and concepts already present (even though they can be known only retrospectively),

whereas the diagrammatic draws the center of the assemblage together with peripheral force fields and operations exterior to the assemblage proper; the diagrammatic is concerned with deterritorializing and reterritorializing. If the schema is a template, the diagram is a frame and a connector. The diagrammatic imagination comprises functions that trace and map a region captured from a larger field, thereby also creating an outside. Deleuze resorts to prose poetry to define the outside: “The outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside” – that is, an inside of thought [28].

“Thinking involves the transmission of particular features: it is a dice-throw. What the dice-throw represents is that thinking always comes from the outside (that outside which was already engulfed in the interstice [between seeing and saying] or which constituted the common limit).” He asks, “If the outside, farther away than any external world, is also closer than any internal world, is this not a sign that thought affects itself, by revealing the outside to be its own unthought element?” The outside is the unthought other; it is difference itself. The outside is the virtual; and the virtual is history. But it is not the history of architecture’s actual unfolding; it is not the archive. The virtual is, rather, absolute history – the constitutive outside that, across an implicating membrane, disturbs the identity of the inside, the actual, and is nevertheless both a prerequisite for the actual’s constitution and a record of its existence. Virtuality is the source of resistance [29].

Near the end of his Foucault study, Deleuze inserts an illustration of the diagram. It depicts the “line of the outside,” an indefinitely unfurling plane with an atmosphere above – itself populated with condensed particles and intersections of forces tossed about – and a sedimented “strata” below (more packed and stacked, having been archived).

Between the two lies a “strategic zone,” a zone of negotiation between the formed strata and the unformed outside. The left-side strata are archives of visual knowledge, and the right is a kind of sound cloud of articulable knowledge: “the two irreducible forms of knowledge, Light and Language, two vast environments of exteriority where visibilities and statements are respectively deposited.” Together the two archives delineate a band of forms of content and forms of expression that can be taken to determine the limits of actual, concrete historical formations of knowledge and power. Deleuze calls this the concrete assemblage, in contradistinction to the abstract machine of the diagram itself. In between the two archives is a striking enfolding of the line

of the outside, pulled down into a pouch, a pocket, an implication “constantly reconstituting itself by changing direction, tracing an inside space but coextensive with the whole line of the outside” – a “zone of subjectivation,” as Deleuze labels it – the place of thought itself [30].

Architecture is both an artifact of culture and a sociopolitical act; hence, the architectural project does not simply reproduce the contexts that are its sponsors but rather connects to their fields and forces in complex and often contradictory ways, drawing up the threads of the real into a fabric whose weaving operations may be modeled as much on dreams and prayers as on maps and machines.

Architecture retains the power to negate certain dimensions of historical social life and expose undiscovered spaces, expanding the territory on which we dwell. “It is here that two forms of realization diverge or become differentiated,” Deleuze instructs, “a form of expression and a form of content, a discursive and a non-discursive form, the form of the visible and the form of the articulable. ... Between the visible and the articulable a gap or disjunction opens up. ... The concrete assemblages are therefore opened up by a crack that determines how the abstract machine [the diagram] performs.” The seeable and sayable are not contextually given forms but rather spaces of emergence inextricably linked to historical discourses, which they also help to organize [31].

6 Spatial Palimpsests

This section follows Bottà, G. (2012) “Berlin as urban palimpsest.” A phenomenology of space is also a phenomenology of time. I will utilize the palimpsest as spatial metaphor in a variety of historical contexts and in connection to a range of disciplines (for instance history, architecture, literature, urban studies and musicology). This is an attempt to gain a transdisciplinary understanding of it as a viable instrument for all research dealing with issues of space. The palimpsest is able to mediate the complex relation of time, space and memory, which so strongly influence Western societies. All places have

layers of history, some visible, some hidden, some partly erased, some still visible, some easy to find, some impossible to decipher. It is something to be discovered in each city around the world and which explain the enormous fascination that cities have for human beings.

It thus emerges that palimpsest is a product of two contrasting actions: the first consists in erasing, deleting, scraping, making a text invisible; while the second is to re-write, re-use, assert a new meaning; to make something else visible. These actions result in an intricate and multilayered artefact. This complexity becomes even more poignant if we translate it into an urban spatial metaphor. The palimpsest has been a crucible in cultural research about cities for a long time. Among the first to use the concept (but not the term) in relation to the city, we find Sigmund Freud; in *Civilization and its Discontents* he builds a parallel between the layering of memory in the human psyche and in urban archaeology [32].

The historian Karl Schlögel observes that in space we are able to read time. This is what I tried to do when analyzing the way different time layers deposited themselves on certain specific spots of Berlin.

Nonetheless, time doesn't leave a neat stack of clearly sequenced layers; rather, it 'flows' and therefore also the opposite statement is true: in time we read and make sense of space. Looking at a city through time and understanding the memory flow on some of its expressions enables us to fully comprehend the operations of erasing and re-writing, which define urban palimpsests. Examining a palimpsest should always be an action which accounts for different streams moving through it in different directions, pointing artificially or naturally to diverse historical constellations [33].

The Potsdamer Platz presents a very fascinating example of an architectural palimpsest. Under National Socialism the square lost much of its appeal. In fact, for the Nazi ideology, it represented the nest of all evils: Americanisation, Semitic degenerate culture, cosmopolitanism and urbanity in

their most hysterical expressions. Its function, in the short-lived Nazi experience, was restricted to the functional purpose of central transportation junction and therefore it was heavily bombed. Throughout a good portion of second half of the XX century, due to its being in close proximity to the Wall, it became a wasteland, partially taken over by nature. Elkins and Hofmeister (1988) describe the condition of the western part of the square in the 1980s, in these interesting terms:

The section of the Wall fringe from the Potsdamer Platz (once the bustling 'Piccadilly Circus' of Berlin and now within the Berlin Wall system of obstacles) to the southern Friedrichstrasse is an extraordinary spectacle. One block near the Potsdamer Platz is reserved for the training of guard dogs, another is the permanent headquarters of a circus, yet another muddy area is the scene of a regular Saturday market; to some extent this land on the approaches to the former Potsdam Station has remained unoccupied because, until recently, it has belonged to the Deutsche Reichsbahn, which is based in East Berlin [34].

7 Concluding Remarks

Phenomenological transurban space starts by accepting the "being-in-the-world" of the knowing subject, that is, the lack of an external, privileged perspective from which the knowing subject can know the world – except by heuristically bracketing out this phenomenological perspective in order to objectivize reality, as done in scientific realism, both rational and empirical. From "being-in-the-world" the notion of space acquires new meanings and dimensions, always pointing towards the idea of lived and experienced space. We have examined six of those dimensions:

1. Merleau-Ponty describes *position* and *situation* as two dimensions of space, which is the universal power enabling things to be connected, or the setting of "co-existence." From the absolute space of nature to capitalist abstract space, finally reaching utopian differential space Lefebvre highlights the potential for ordinary users of space to seize new rights to urban space and pro-

duce differential space from abandoned abstract space.

2. Thirdspace is the space we give meaning to. A rapidly, continually changing space in which we live. It is the experience of living First space is space seen from the top of a skyscraper. It is the mapping and compartmentalization of a space. It gives a wide, rational perspective. Secondspace is the conceptualization of Firstspace. We represent the space we live in by art, advertisements or any other medium. Any human being works with First and Secondspace.
3. The notion hybridity or third space of Homi Bhabha is a floating metaphor for a critical historical consciousness that privilege spatiality over temporality; but the privileging of spatialization is not ahistorical and timeless rather he tries creatively to spatialize temporality. The beyond is neither a new horizon, nor a leaving behind of the past; we find ourselves in the moment of transit where space and time cross to produce complex figures of difference and identity, past and present, inside and outside, inclusion and exclusion, for there is a sense of disorientation, a disturbance of direction, in the “beyond”: an exploratory, restless movement caught so well in ... here and there, on all sides, ... hither and thither, back and forth.
4. Foucault is concerned with how the apparatus of power and knowledge configures a domain of visible matter (the “seeable”) that is shaped by the articulable functions (organized utterances and discourse, or the “sayable”) into various disciplinary forms like the panopticon. In his study of Foucault, Deleuze focuses on the relation of the visible (which is not reduced to a thing seen but comprises “multisensorial complexes,” processes, actions, and reactions) and the articulable (or discursive formation), rendering their interaction as an agon of Kantian sensibility and conceptuality. Between the visible and the articulable we must maintain all the following aspects at the same time: the heterogeneity of the two forms, their difference in nature or anisomorphism; a mutual presupposition between the two, a mutual grappling and capture; the well-determined primacy of the one over the other.
5. The schematic centers, territorializes, and pat-

terns sensation in accordance with categories and concepts already present (even though they can be known only retrospectively), whereas the diagrammatic draws the center of the assemblage together with peripheral force fields and operations exterior to the assemblage proper; the diagrammatic is concerned with deterritorializing and reterritorializing. If the schema is a template, the diagram is a frame and a connector. The diagrammatic imagination comprises functions that trace and map a region captured from a larger field, thereby also creating an outside. Deleuze resorts to prose poetry to define the outside: the outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside – that is, an inside of thought.

6. Spatial palimpsest is a product of two contrasting actions: the first consists in erasing, deleting, scraping, making a text invisible; while the second is to re-write, re-use, assert a new meaning; to make something else visible. These actions result in an intricate and multilayered artefact. This complexity becomes even more poignant if we translate it into an urban spatial metaphor. The palimpsest has been a crucible in cultural research about cities for a long time.

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References

- [1] Werner Heisenberg, cited in Nicolescu, Basarab, (2010). “Methodology of Transdisciplinarity: Levels of Reality, Logic of the Included Middle and Complexity” *Transdisciplinary Journal of Engineering and Science*, 1(1), 19-38.
- [2] Merleau-Ponty, M. (2013). *Phenomenology of Perception*, London: Routledge, p. 43. This section follows the discussion by Shengli Liu, The 3rd BE-SETO Conference of Philosophy.
- [3] Ibid. p. 69.
- [4] Ibid. p. 87.
- [5] Ibid. p. 118.
- [6] Ibid. p. 143.
- [7] Ibid. p. 171.
- [8] Ibid. p. 205.

- [9] Lefebvre, Henri, (1991). *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell, p. 62.
- [10] Ibid. p. 83.
- [11] Ibid. p. 121.
- [12] Soja, E. (1996). *Thirdspace. Journeys to Los Angeles and Other Real-and-Imagined Places*, London: Blackwell, p. 85. This section follows the discussion by anonymous author found at: http://shodhganga.inflibnet.ac.in/bitstream/10603/184562/14/9_chapter3.pdf.
- [13] Ibid. P. 123.
- [14] Ibid. P. 125.
- [15] Ibid. p. 126.
- [16] Ibid. p. 145.
- [17] Ibid. p. 172.
- [18] Ibid. p. 194.
- [19] Bhabha, H. (1994). *The Location of Culture*, New York: Routledge, p. 56. This section follows the discussion by anonymous aithor found at: http://shodhganga.inflibnet.ac.in/bitstream/10603/184562/14/9_chapter3.pdf
- [20] Ibid. p. 73.
- [21] Ibid. p. 96.
- [22] Ibid. p. 132.
- [23] Ibid. p. 148.
- [24] Kant, I. (1987). *Critique of Judgment*, New York: Hackett Publishing.
- [25] De Quincy, Q. (2012). *Encyclopédie Methodique*, Paris: Hachette.
- [26] Tafuri, M. (1979). *Architecture and Utopia. Design and Capitalist Development*, Cambridge, MA: The MIT Press; Hays, K. Michael. "Architecture's Appearance and the Practices of Imagination." *Log*, vol. 37, 2016, 205-213. <https://www.anycorp.com/store?category=Log>
- [27] Hays, K. Michael. "Architecture's Appearance and the Practices of Imagination." *Log*, vol. 37, 2016, 205-213. <https://www.anycorp.com/store?category=Log>; Foucault, M. (1980) *Power/Knowledge. Selected Interviews and Other Writings*, New York: Vintage
- [28] Hays, K. Michael. "Architectures Appearance and the Practices of Imagination." *Log*, vol. 37, 2016, 205-213. <https://www.anycorp.com/store?category=Log>; Foucault, M. (1980) *Power/Knowledge. Selected Interviews and Other Writings*, New York: Vintage; Deleuze, G. (1986) *Foucault* Minneapolis, MN: University of Minnesota Press, p. 54.
- [29] Ibid. p. 72.
- [30] Ibid. p. 89.
- [31] Ibid. p. 113.
- [32] Freud, S. (2010). *Civilization and Its Discontents*, New York: Martino Fine Books. This section follows Bott, G. (2012) Berlin as urban palimpsest, in *Villes invisibles et critiques de la modernité*, Ed. Chon, Aurelie (Mulhouse: rizons), pp. 43-54.
- [33] Schlögel, K. 2003. *In Space We Read Time. The History of Civilization and Geopolitics*, Chicago: University of Chicago Press, p. 65.
- [34] Elkins and Hofmeister (1988). *Berlin: The Spatial Structure of a Divided City*, London: Routledge, p. 134.

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