

THE “PINK PANTHER” IN ARCHITECTURE: THE TRANSDISCIPLINARY APPROACH AND THOUGHT WITHOUT IMAGE

Esen Gökçe Özdamar¹


Abstract: As a form of *in vivo* knowledge, the transdisciplinary (TR) methodology suggests going beyond disciplines. According to Nicolescu, this methodology occurs at different levels of reality (ontological), different levels of perception (complexity), and within the logic of the included middle (logical) axioms that exist simultaneously. In addressing these levels, the researcher is the interlocutor between the external world of the Object and the internal world of the Subject. In architecture, this knowledge emerges through a variety of disciplines that need to be fused with an approach that is rhizomatic and nomadic, leading to thought without an image as characterized by Deleuze and Guattari. By following their “Pink Panther” metaphor for an imageless thought and approach (which does not imitate or reproduce something else) in TR, this article aims to understand the relationship between the TR methodology and the theory of thought without an image – an approach which can enable the comprehension of ambiguous architecture and urban design problems.

Keywords: Pink panther. Transdisciplinary approach. Rhizome. Nomadic thought. A thought without image.

INTRODUCTION

This article does not illustrate a concrete approach to developing a particular transdisciplinary (TR) method, but instead represents a step towards understanding the close relationship between TR methodology (NICOLESCU, 2002, 2005, 2006; VOLCKMANN; NICOLESCU, 2007; POHL; HIRSCH HADORN, 2007, HIRSCH HADORN *et al.*, 2008; DOUCET; JANSSENS, 2011; OSBORNE, 2015), the metaphor of the “Pink

¹ Professor in Tekirdağ Namık Kemal University, Department of Architecture, Tekirdağ – Turkey.

 orcid.org/0000-0001-7189-3633, gokceozdamar@gmail.com.

<https://doi.org/10.1590/0101-3173.2022.v45n2.p127>



This is an open-access article distributed under the terms of the Creative Commons Attribution License.

Panther” and rhizomatic thinking, and thought without an image (DELEUZE; GUATTARI, 1987) in architecture. The article aims to demonstrate that understanding this close relationship can help to create new perspectives within architectural design and thought in both theory and practice. The article also states that understanding the relationship between the “degrees” of the TR approach defined by the quantum physicist Basarab Nicolescu (2002, 2005, 2006) can help us to understand and improve experimental patterns and non-linear design approaches in both architecture and urban-related research. The TR approach can be considered both “rhizomatic” and nomadic, leading to an understanding of an “image without thought” as theorized by Deleuze and Guattari (DELEUZE; GUATTARI, 1987).

In developing a non-linear design strain of thought, or in other words, a “rhizomatic thinking” (DELEUZE; GUATTARI, 1987) in architecture, we are confronted with another Deleuzian and Guattarian term – the “Pink Panther”, which paints the world in color and is “imperceptible” (DELEUZE; GUATTARI, 1987, p. 11). Therefore, it can be stated that immanent approaches to architecture/urban design problems using certain methods or within certain contexts can similarly paint the design problem in its own color in a unique way. This helps the design subject and object – namely the researchers, designers, experts, and the design itself – evolve towards an indissoluble subject-object fusion, as in the TR approach.

As complex disciplines, architecture and urbanism possess the intrinsic characteristic of “being-in-the-worldness” since they require “a broad range of disciplinary and practical forms of knowledge” (including art and science), and operate in an in-between state of individual agency (i.e., “creativity, authorship, ideology”) and “work for a client” (DOUCET; JANSSENS, 2011, p. 2).

Therefore, this article is a search for an approach that leads to an imageless way of thinking – especially in addressing complex urban planning and architectural design or research problems – in terms of Deleuze and Guattari’s “Pink Panther” metaphor (DELEUZE; GUATTARI, 1987, p. 11). Applying or rethinking TR approaches in architecture in close relationship with the notion of imageless thought can provide new horizons in architectural and design approaches, both in terms of non-hierarchical and non-linear modes of problem-solving and participation, as well as the complex architectural and urban problems of today.

1 PINK PANTHER AND RHIZOMATIC THINKING

In *A Thousand Plateaus: Capitalism and Schizophrenia*, Deleuze and Guattari mention the Pink Panther as an example of a thought that follows its own pattern. They mention the Pink Panther as something that paints "the world its color" – which they name the "becoming-world" – and creates their own "line of flight" (DELEUZE; GUATTARI, 1987, p. 11). They explain the Pink Panther in detail as follows:

Mimicry is a very bad concept, since it relies on binary logic to describe phenomena of an entirely different nature. The crocodile does not reproduce a tree trunk, any more than the chameleon reproduces the colors of its surroundings. The Pink Panther imitates nothing, it reproduces nothing, it paints the world its color, pink on pink; this is its becoming-world, carried out in such a way that it becomes imperceptible itself, asignifying, makes its rupture, its own line of flight, follows its "aparallel evolution" through to the end. The wisdom of the plants: even when they have roots, there is always an outside where they form a rhizome with something else – with the wind, an animal, human beings (and there is also an aspect under which animals themselves form rhizomes, as do people, etc.). (DELEUZE; GUATTARI, 1987, p. 11).

A Pink Panther has its own identity and we don't judge the reason for its color. As Petersen also argues, "[...] the panther paints the world pink and disappears in the pink color." Additionally, as an alliteration – "a repetition of consonants (p-p), [whose] juxtaposition of vowels are core poetic devices... such as Mickey Mouse..." – the Pink Panther is an "abstract machine of consistency" (PETERSEN, 2005).

Similar to the "imperceptible" Pink Panther, a rhizome, to Deleuze and Guattari, has "no beginning or end; it is always in the middle, between things, interbeing, intermezzo"; in contrast to the arborescent tree-structure that "imposes the verb 'to be'," the rhizome is a "conjunction" (DELEUZE; GUATTARI, 1987, p. 25) that gives birth to multiple possibilities. According to Deleuze and Guattari, "[...] any point of a rhizome can be connected to anything other... A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, social sciences, and social struggles." (DELEUZE; GUATTARI, 1987, p. 7). Rhizomatic thinking is a methodology that facilitates disrupting "[...] linear and layered thinking" (HONAN, 2007, p. 535).

A rhizome can be observed everywhere; in weeds and potatoes, in rat burrows, in “[...] semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles” (DELEUZE; GUATTARI, 1987, p. 6-7) and in cities (DELEUZE; GUATTARI, 1987, p. 15). It has been also been linked to networks in which different spatial fragments can exist. The rhizome represents a transition between “smooth space” and “striated space,” which has the potential to create infinite roots (DELEUZE; GUATTARI, 1987, p. 477-478). The “smooth space” is a “vectorial, projective, or topological” space that is “occupied without being counted,” while the “striated space” is a “metric” space in which space is “counted in order to be occupied” (DELEUZE; GUATTARI, 1987, p. 361 – 362). An example of the “smooth or nomad[ic]” space” that “lies between two striated spaces” is given by Deleuze and Guattari as “[...] that of the forest, with its gravitational verticals, and that of agriculture, with its grids and generalized parallels, its now-independent arborescence, its art of extracting the tree and wood from the forest. (DELEUZE; GUATTARI, 1987, p. 384). Invoking Virilio, Deleuze and Guattari also describe the sea as a smooth space, “[...] the place of *the fleet in being*, where one no longer goes from one point to another, but rather holds space beginning from any point: instead of striating space, one occupies it with a vector of deterritorialization in perpetual motion.” (DELEUZE; GUATTARI, 1987, p. 387).²

The six constitutive principles of the rhizome are; 1) connection and 2) heterogeneity: a rhizome can be connected from any point to anything else, 3) multiplicity: a multiplicity has “[...] only determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing in nature”, 4) an asignifying rupture: a rhizome can start establishing new lines or resurface its older lines from its broken points, 5) cartography: refers to a map rather than a tracing, and, 6) decalcomania: the tracing transforms the “[...] rhizome into roots and radicles” and also organizes, stabilizes, and neutralizes the “[...] multiplicities according to the axes of significance and subjectification belonging to it.” (DELEUZE; GUATTARI, 1987, p. 7-13).

Furthermore, a rhizomatic city is a space that flows, changes, and has the potential to be transformed from its indeterminate roots. Rhizomatic terminology underscores the imageless city as a philosophical term as well as a physical object or urban pattern. In contemporary cities, different political

² “The nomad – the intermezzo – follows established paths, such as going from one point to another, and is aware of the points in its pattern, possessing “both an autonomy and a direction.” (DELEUZE; GUATTARI, 1987, p. 380).

and socio-economic layers shape urban spaces. A rhizome can be seen through the variations, networks, flows, “[...] transgressions, conflicts, probabilit[ies] and unpredictabilit[ies]” that occur simultaneously across lateral hierarchies.” (VALENZUELA-AGUILERA, 2008). Hence, in order to understand the complex nature of today’s urban models, we need an approach to evaluate the intertwined, complex relationships and networks surrounding parts of the city, especially in terms of urban housing.

In order to understand rhizomatic structures and their self-organized patterns, we need to evaluate the latter using a different approach. This approach can be implemented by replacing the role of the researcher or expert with a more flexible role, thereby transforming the nature of the research into a dynamic process that can address the uncertainty in a design problem. The process needs to be analyzed by different experts who wish to identify not only a concrete solution but also understand the process of blending disciplinary boundaries.

However, throughout such a process, disciplinary boundaries and approaches merge into each other. This trope is characteristic of the transdisciplinary approach (TR), which has been developed as a philosophical term and which is explained in the second section of this article. In the TR methodology, disciplinary boundaries are evaluated by being superimposed onto each other. This methodology does not include a step-by-step method as the degrees need to be evaluated relationally, with all degrees merging into one another. The outcomes of the process are relative when dealing with ambiguity in design issues. The difficulties of the TR approach may arise at the beginning of the process, while the design of the research problem can appear at the process’s end. In this context, what can imageless thinking that paints its own color express in architecture? From this perspective, the TR approach closely resembles both Deleuze and Guattari’s “Pink Panther” metaphor and the rhizome.

2 THE TRANSDISCIPLINARY APPROACH IN THE SOCIAL SCIENCES

2.1 THE TRANSDISCIPLINARY APPROACH

The TR approach extends back to the explanations of the philosopher Jean Piaget, the astrophysicist Erich Jantsch, and the mathematician André Lichnerowicz in the 1970s. According to Nicolescu, Piaget characterized

interdisciplinarity as a super or hyperdiscipline and also as the “science of sciences,” addressing “across” and “between” and “eliminating the meaning beyond.” (NİCOLESCU, 2006, p. 1). Meanwhile, Jantsch defined transdisciplinarity as “[...] the coordination of all disciplines and interdisciplines of the teaching system and the innovation on the basis of a general axiomatic approach.” (NİCOLESCU, 2006, p. 2). Finally, Lichnerowicz defined TR as a “transversal play,” with a “non-ontological character” in which “being is put between parentheses.” (NİCOLESCU, 2006, p. 2). The philosopher and sociologist Edgar Morin used the term interdisciplinarity in the human sciences to denote “[...] a kind of messenger of the freedom of thinking, a go-between discipline.” (NİCOLESCU, 2006, p. 3).

Meanwhile, Peter Osborne has briefly classified the development of the TR approach into three areas: 1) “[...] a systems-theoretical approach to producing ‘an integral education/innovation system’,” 2) “[...] a sociological science-policy approach to new forms of knowledge production,” and 3) “[...] a literature about research methodology in the collaborative solution of ‘life-world’ problems of environmental sustainability and health”. Similarly, Osborne mentioned the secondary discourses of the TR approach as 4) “[...] a cosmological conception of transdisciplinary knowledge, based on a notion of ‘levels of reality’ as found in Basarab Nicolescu’s studies in quantum physics”, and 5) “[...] a periodizing discourse in the philosophy of science, which is in various respects also post-disciplinary.” (OSBORNE, 2015, p. 9).

From these approaches and his experience with quantum physics, Einstein’s relativity theory, dissipative structures in thermodynamics, and chemical engineering, Nicolescu constructed a methodology in his book *Manifesto of Transdisciplinarity* (NİCOLESCU, 2002). For this reason, TR can be defined “[...] not via a new discipline, but via a new methodology” and “[...] not with a new discipline, but with a new knowledge – knowledge about what is in between, across, and beyond disciplines.” (VOLCKMANN; NİCOLESCU, 2007, p. 82). Unlike Piaget’s previous definition, Nicolescu redefined TR as a new area of knowledge involving science and art in 1985 (VOLCKMANN; NİCOLESCU, 2007, 84). He defined it as a fusion of disciplines rather than a meta-theory (VOLCKMANN; NİCOLESCU, 2007, p. 79). Here, the word “trans” refers to something which is in “between, across, and beyond” any discipline (VOLCKMANN; NİCOLESCU, 2007, p. 78),³

³ Nicolescu summed up this paradox in his book *Nous, la Particule et le Monde* (1985) as follows: “In our world, the cat will be alive or dead. In the quantum world, the superposition is dead and alive at the same time. The Principle of Superposition is the origin of all that is called paradoxes in

while "beyond discipline" denotes an "immense space of new knowledge." (NICOLESCU, 2006, p. 5).

An approach based on separate disciplines examines phenomena within a defined framework. By contrast, the multidisciplinary approach suggests that approaching a phenomenon from different disciplines and evaluating it from a single perspective is insufficient. Indeed, multidisciplinary examines other disciplines separately from the main discipline, too. In this way, multidisciplinary can evaluate a phenomenon that deals with different perspectives using a strong synthesis and can be limited to the framework of disciplinary research. Unlike multidisciplinary, interdisciplinarity is about transferring methods between different disciplines. In interdisciplinarity, disciplinary boundaries can transgress each other, but the aim lies within the context of disciplinary research (NICOLESCU, 2006, p. 5).

As a type of *in vivo* knowledge, the TR methodology proposes going beyond disciplines. According to Nicolescu, this methodology occurs at different levels of reality (ontological), different levels of perception (complexity), and within the logic of the included middle (logical) axioms that exist at the same time (NICOLESCU, 2005, p. 7). In addressing these respective levels, the researcher/expert is concerned with various disciplines that need to be dealt with using a new approach that emerges through the correspondence between the outer world of the Object and the inner world of the Subject.

Nicolescu's definition of TR methodology does not put an end to former multi or interdisciplinarity approaches, but rather goes beyond them in order to understand the nature of the phenomenon. It is the fusion of scientific and artistic knowledge that transgresses boundaries and methods. The TR methodology addresses "[...] problems concerning agency, power, as well as structure." It is non-linear, "[...] rhizomatous and interconnected in a non-continuous manner." (SCHNEIDER, 2011, p. 98). It is more than defining a problem, as its nature – rather than a predetermined set of values – has driven the research process. It not only brings together experts and professionals but also requires some kind of transcendence. The sum of all ideas is not concluded upon, but rather, a new meaning emerges in between the cross-readings that

quantum physics...which is defined as the second axiom of transdisciplinarity. This is expressed by the famous paradox of Schrödinger's cat. In quantum physics, you have a cat that is dead and alive at the same time. You put it in a cage, you put poison nearby, and if the cat is hungry, it will eat the food with poison and will die. If she is clever, she will not eat and will remain alive." (VOLCKMANN; NICOLESCU, 2007, p. 821).

occur. The TR methodology “[...] deals with problem fields in such a way that it can a) grasp the complexity of problems, b) take into account the diversity of life-world and scientific perceptions of problems, c) link abstract and case-specific knowledge, and d) constitute knowledge and practices that promote what is perceived to be the common good.” (POHL; HIRSCH HADORN, 2007, p. 37). This approach articulates a new methodology and an interactive framework for ambiguous problems. Thus, it can develop tactical and flexible strategies for design-oriented problems and the built environment.

In relationship to paradoxes, Nicolescu defined TR as a form of knowledge that transgresses the boundaries between self and phenomenon, connecting three axioms simultaneously and engaging them not through a prism of hierarchical levels but in a paradigm where every level exists at the same time. As such, TR knowledge (TK) is “[...] a new type of knowledge – in-vivo knowledge” (NICOLESCU, 2005, p. 7) which is “[...] concerned with the correspondence between the external world of the Object and the internal world of the Subject.” (NICOLESCU, 2005, p. 7).

According to Edmund Husserl, there are three levels of Reality that derive from “[...] different levels of perception by the subject-observer” (NICOLESCU, 2005, p. 9). The TR approach examines knowledge not as a degree, but as a growth that develops through overlapping layers or levels (VOLCKMANN; NICOLESCU, 2007, p. 82). Unlike the classical disciplinary approach, the TR approach consists of three degrees: 1) a degree of application, 2) an epistemological degree, and 3) a degree of the generation of new disciplines (NICOLESCU, 2002, p. 43). It also contains three axioms: 1) levels of reality (ontological), 2) different levels of perception (complexity), and 3) the logic of the included middle (logical) axioms. These levels exist at the same time (VOLCKMANN; NICOLESCU, 2007, p. 80-82).

The first axiom represents the ontological axiom and the “[...] *existence of levels of reality.*” As Nicolescu has stated, this axiom is related to “being” and concerns the comprehension of a being between the observer, the object, and the reality (VOLCKMANN; NICOLESCU, 2007, p. 80). Nicolescu was inspired by Husserl’s transcendental phenomenological approach to reality and philosophy (VOLCKMANN; NICOLESCU, 2007, p. 80). The second axiom is *included middle logic*, which can be understood using paradoxical and “non-classical logic” (VOLCKMANN; NICOLESCU, 2007, p. 81). Finally, the third axiom is the complexity axiom, which accepts that reality has a complex structure (VOLCKMANN; NICOLESCU, 2007, p. 81). TR

is not neutral and includes values produced by the interaction of these three axioms – that is, values directed towards humans.

Based on Nicolescu's ideas on TR, we can assume that this methodology may present an alternative to the level of participation between the researcher and the research object as well as top-down research, in which researchers approach issues from a set of predetermined rules. When applied to architecture and complex urban problems to help understand the knowledge that arises from design issues, the perceptions of participants or experts, or different understandings in qualitative research, this approach can help distribute power across multiple actors in the research by creating a horizontal plateau – in line with Deleuze and Guattari's terminology.

2.2 A THOUGHT WITHOUT IMAGE AND TRANSDISCIPLINARY APPROACH

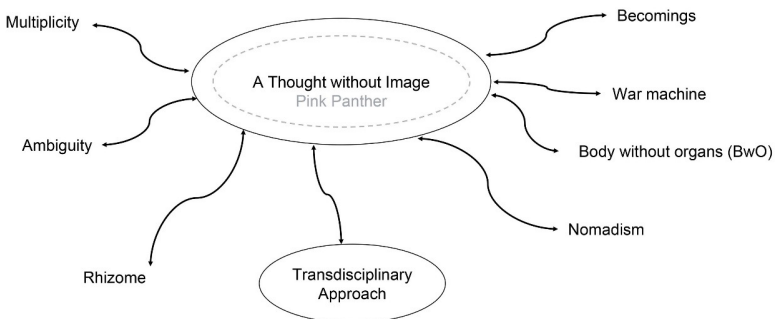
Deleuze mentions image of thought in *Difference and Repetition* (1994). Image of thought is not a correct image (*pas une image juste*), or no correct ideas (*pas d'idées justes*), but "just an image" (*juste une image*) or "just ideas" (*justes des idées*) in the sense of Godard's filmic formulas. (DELEUZE; PARNET, 1987, p. 9). Image of thought is an "encounter", "a becoming", a "theft" and a "nuptial", "between-two" of solitudes." (DELEUZE; PARNET, 1987, p. 9). Deleuze and Parnet relate "the history of philosophy" as "the agent of power in philosophy, and even in thought", a repressor of thoughts. Philosophy for them is an image of thought; however, it has it "effectively stop[ped] people from thinking." (DELEUZE; PARNET, 1987, p. 13). A thought without image has many extensions – such as "nomadism," "the war machine," "becomings," "nuptials against nature," or "minor languages," etc. (DELEUZE; PARNET, 1987, p. 13 – 14). It is the opposite of the image of thought, resembling a rhizome or grass that is propped against the trees (DELEUZE; PARNET, 1987, p. 34).

A thought without image has its roots in the molecular level and the processes of resistance and deterritorialization/territorialization. Guattari coined the term "integrated world capitalism" (IWC) with Eric Alliez as a theory of globalization to help understand and outline today's mechanisms of deterritorialization. The IWC has "no single center of power;" it forms its own internal democracy (GUATTARI, 2016, p. 4; GENOSKO, 2012, p. 151). Also noted by the Brazilian philosopher Peter Pál Pelbart in his book

Cartography of Exhaustion: Nihilism inside Out, present-day capitalism controls subjectivity at molecular levels serving for biopower (PELBART, 2013, p. 82).

The thought without image and transdisciplinary approach both display similarities in terms of the formation and processing of an idea and the existence of disciplinary transitions and infiltrations, superpositions, and overlapping. The inner knowledge that appears as a light in the origins of thought and its implicit nature, and the effort to be discovered by researchers or thought developers, shed light on the possibilities that lie in between things, resembling a rhizome. Figure 1 shows the concepts that appear in the relationship between a thought without image and the TR approach.

Figure 1 - Concepts emerging in-between a thought without image and TR approach



The TR methodology can be associated with the idea of imageless thought. A “thought without image” was described by Deleuze in *Difference and Repetition* (1994), as well as its interaction with Bergsonian thought: “Things are luminous by themselves without anything illuminating them: all consciousness is something...” (BAINS, 2002, p. 107). Deleuze placed consciousness in something that illuminates objects or sheds light on things, which can also be considered a theory of thought without image (BAINS, 2002, p. 107). According to Deleuze, a thought without image is a “[...] thought which is born in thought, the act of thinking which is neither given by innateness nor presupposed by reminiscence but engendered in its generality” (DELEUZE, 1994, p. 167).

For Deleuze, “[...] we live with a particular image of thought, that is to say, before we begin to think, we have a vague idea of what it means to think, its means and ends. And then someone comes along and proposes another idea, a whole other image...” (DELEUZE, 2002, p. 139). Deleuze additionally states, “[...] thinking has a natural ability to recognize the truth” and “[...] we attain a ‘thought without image’” – a thought always determined by problems rather than the latter’s resolution (STARR, 2017, p. 125). An imageless thought can also be associated with nomadic thinking and rhizomatic approaches. Nomadic thinking in Deleuze and Guattari’s terminology is a dynamic process “[...] in which planning and hierarchies are in constant tension with flows, dynamics, and alternative ‘nomadic’ structures.” Nomadic thinking is related to the “body without organs” (BwO), which “[...] is not a body from which the organs are removed, but a body in which that which functions as organs are divided as multiplicities.” (SAP, 2002; DELEUZE; GUATTARI, 1987, p. 30). The BwO is a fragmented whole, in which different parts actively work simultaneously together – without decreasing their value – to form the whole.

From this idea, it can be derived that the multiplicities in a design problem are not single-organ-oriented, created by a point situation, but are instead an anti-structure formed by many rhizomatic components that are in line with it. Therefore, such an approach to design problems helps to steer clear of a problem-solving action that develops step-by-step in particularly complex problems, focusing solely on an organ. Particularly in the perception of the environment, in the designer’s approach to research as a subjective body, the BwO overthrows the autonomous position of the subject looking at the research or design. This, in turn, can help the process evolve into a more holistic and imageless process that does not focus on the image of the part or the part itself. Transferring this idea to architecture and urban-related design-thinking processes, the BwO can be related to the active role-sharing of different experts in a transdisciplinary approach, in which the development of different perspectives enables them to understand one another. In this way, it enables urban phenomena to be handled with a creative perspective by bringing attention to the potentialities within the process.

With “nomadic thought”, Deleuze means a thought which “[...] is not enclosed by the rigid categories of the dogmatic image” nor “[...] is restricted to [a] fixed location but wanders and roams, restlessly following the problematic...” (BROWN, 2005, p. 38). It “[...] embraces the positive problematic character of thinking and accepts no dependence upon principles

of identity or resemblance. Thought without image is pure affirmation, repudiating the reactive ‘no’ with an active ‘yes’.” (BROWN, 2005, p. 38). Indeed, as Brown notes:

Thought without image will exhibit difference as pure difference, i.e., difference freed from the category of mere negation. It will not only reject the general but will also embrace the singularity of the diverse. It will embrace multiplicity as pure multiplicity, not multiplicity merely as opposed to unity. (BROWN, 2005, p. 38).

Meanwhile, Deleuze and Guattari write:

Where are you going? Where are you coming from? What are you heading for? These are totally useless questions. Making a clean slate, starting or beginning again from ground zero, seeking a beginning or a foundation – all imply a false conception of voyage and movement (a conception that is methodical, pedagogical, initiatory, symbolic...) ... they know how to move between things, establish a logic of the AND, overthrow ontology, it is where things pick up speed. (DELEUZE; GUATTARI, 1987, p. 25).

From this definition of the thought without image, we arrive at how it can be implemented in architecture. The TR methodology can also be summarized as a non-arborescent system. Unlike hierarchical or arborescent systems, which have signified and subjectified centers through “pre-established paths” (DELEUZE; GUATTARI, 1987, p. 16), the nature of TR approaches needs a site-specific and non-linear pattern that is embedded in multiple diversities rather than similarities. TR research “[...] takes into account that knowledge about problem fields is uncertain and social groups’ stakes are high.” It also “[...] takes into consideration a large array of potential disciplinary paradigms and life-world perspectives, and it explicitly narrows down its focus to a few of them in the phase of identifying and structuring problems” (POHL; HIRSCH HADORN, 2007, p. 37). As described by Nicolescu (2002), “[...] disciplinary and transdisciplinary research are not antagonistic but complementary” to each other and do not transgress each other. The TR approach is necessary to produce knowledge in a “fertile way”. (NICOLESCU, 2002, p. 45). In TR, three important concerns gain importance: “The integration of discipline and profession (theory and practice) in knowledge production, the ethical dimension, and the importance of experimental, *designerly* modes of inquiry.” (DOUCET; JANSSENS, 2011, p. 2). As an internal part of the architectural process, these problems are defined as follows: TR research is needed in

uncertain socially-related research problems, "[...] when the concrete nature of problems is disputed, and when there is a great deal at stake for those concerned by [the] problems and involved in dealing with them." (DOUCET; JANSSENS, 2011, p. 2).

Deleuze and Guattari argue that TR "[...] can provide resources to critique and methodologically refine the often-unquestioned appropriation of their work by inter-, multi-, and transdisciplinary research." (COLLETT, 2019, p. 3). Guattari also states that TR can address social, urban, and ecological questions. Transdisciplinarity becomes a transversal subject between "[...] science, the socius, aesthetics and politics", he writes; it implies "[...] a permanent 'research into research,' an experimentation with new paths for the constitution of collective assemblages of enunciation." (GUATTARI, 2015a, p. 134-135). Transversality bridges relationships with different levels that create different meanings between a "pure verticality" and a "mere horizontality" of dimensions (GUATTARI, 2015b, p. 113).

3 UNDERSTANDING TRANSDISCIPLINARY METHODOLOGY IN TERMS OF A THOUGHT WITHOUT IMAGE IN ARCHITECTURE

A key point of the TR approach is the design of the research problem, which can evidently emerge at the end of the process. The design problem may be vague and blurry. Moreover, this point transcends the subject-object duality, resulting in the interaction between the subject and the object (VOLCKMANN; NICOLESCU, 2007, p. 83). The outcomes of the methodology can be relative because the methodology includes both objective and subjective approaches at the same time and can be applied to architecture, reducing borders between participants/dwellers and the authorities.

In this context, the TR approach, which does not aim to direct researchers to reach a solution, can be considered as a nomadic and imageless way of thinking in the context of Deleuze and Guattari's rhizomatic approach. In addition, the definition of the problem creates different interpretations of the reality that are to be considered (ITDNET, 2008); imageless thinking in architecture creates a non-hierarchical and rhizomatic way of thinking to express – through participatory processes – different disciplines, parts, and actors. In this way, an imageless way of thinking may be necessary in order to develop its own genetics and derivative perspectives in architecture.

Donald Schön developed the idea of “design as a discipline”, as a “reflective practice.” He proposed a search for “[...] an epistemology of practice implicit in the artistic, intuitive processes which some practitioners do bring to situations of uncertainty, instability, uniqueness, and value conflict.” (CROSS, 2006, p. 99). This idea differs from Herbert Simon’s (1969) idea of “design as a science,” which suggests the ability of “the science of design” to “[...] form a fundamental, common ground of intellectual endeavor and communication across the arts, sciences, and technology.” (CROSS, 2006, p. 99). Therefore, the discipline “[...] seeks to develop domain-independent approaches to theory and research in design,” accepting that “[...] there are forms of knowledge peculiar to the awareness and ability of a designer, independent of the different professional domains of design practice.” (CROSS, 2006, p. 100).

In architecture, as the boundaries between design-related disciplines become more embedded, TR as a form of research gains more importance compared to more conventional modes of research and design, as Hirsch Hadorn et al. have noted. Therefore, a better integration of disciplines is needed in these practices (HIRSCH HADORN *et al.*, 2008, p. 28). Jane Rendell explains TR in a manner similar to Homi Bhabha’s terms of interdisciplinarity – as they describe the encounter between disciplines in psychoanalytic terms – and Julia Kristeva’s “psychoanalytic understanding of interdisciplinarity.” (RENDELL, 2013, p. 129). Rendell uses the latter to describe projects for “critical spatial practices” that are located between art and architecture, between theory and practice (RENDELL, 2013, p. 130). This approach also recognizes that “[...] there is no such thing as ‘the region’” – that “this is a social construction” (ITDNET, 2008).

Reconsidering the “imperceptible” trait of the “Pink Panther” as an imageless, nomadic, and rhizomatic pattern as well as anti-structure in architecture can enable a more holistic understanding of the nature of the research problem – be it theoretical, practice-based, or both. Moreover, as design problems are mainly ambiguous and demand non-linear, cyclical patterns of thought in architecture, conventional or multidisciplinary problem-solving methods may not provide a deeper understanding of the dynamics of changing societies today.

As Deleuze (2002, p. 32) notes, determining

[...] the differences of nature between things: only in this way will we be able 'to return' to the things themselves, to account for them without reducing them to something other than what they are, to grasp them in their being. On the other hand, if the being of things is somehow in their differences of nature, we can expect that difference itself is something, that it has nature, that it will yield Being”.

Regarding the nature of a research problem in terms of its own luminosity – with reference to the re-reading of Bergson – the metaphors of the Pink Panther and thought without an image could yield the birth of an “imperceptible” Subject who becomes anonymous and fragmented among the distributed roles between multiple researchers, experts, actors, dwellers, participants, stakeholders, etc. However, in addition to the separation of the user and the architect in the participatory process, due to the relative and transient nature of architecture, this approach can also open up new, ambiguous issues and cause controversy in its ambiguous re-readings of architectural problems. As such, how can different disciplines fuse information and establish uninterrupted cooperation in architecture when there are too many rigid limitations? A transdisciplinary approach or shift defines both a methodology and an interactive framework for ambiguous problems. Thus, it can help develop tactical and flexible strategies for uncertainties in understanding the built environment.

CONCLUDING REMARKS

The TR approach offers a new way of understanding contemporary urban complexities. This methodology can illuminate complex urban aspects and build doors to transcend the borders of disciplines that are intertwined with architecture and urban social life. A paradigm shift, imageless thought, and the idea of the rhizome are closely related to this methodology. Thus, it can develop tactical and flexible strategies for uncertain issues in understanding the built environment. The TR methodology can precipitate discussions on ambiguous architectural re-readings of problems due to its relative and temporary nature. This methodology may also be related to an imageless theory that renders the invisible into different possibilities of the visible. Thus, it can help to make sense of the nature and underlying structures of architecture and urban-related design problems by involving the complex nature of rhizomatic cities.

However, the search for possible answers from the perspectives of policy-makers, housing authorities, architects, city planners, and residents can be understood on different levels; here, the researcher encounters the different degrees of knowledge of a research phenomenon. The complex structures of cities need to be evaluated with an imageless approach in which the participant is engaged. In architecture, the in-betweenness of the dweller and their relationship to their environment creates new forms of imageless relationships between the architect, the non-architect, and the researcher; these relationships are bound up in questions of authority, the distribution of power, and imaginative role-sharing between dwellers and designers. Therefore, this approach involves cultural approaches in design and the process of intrinsic coherence, and hence, can help develop nonlinear ways of thinking that are complex or rhizomatic in nature.

ÖZDAMAR, Esen Gökçe A “pantera rosa” na arquitetura: a abordagem transdisciplinar e um pensamento sem imagem. *Transformação*, Marília, v. 45, n. 2, p. 127-146, Abr./Jun., 2022.

Resumo: Como um conhecimento *in vivo*, a metodologia transdisciplinar (TR) sugere ir além das disciplinas. Segundo Nicolescu, essa metodologia ocorre em distintos níveis de realidade (ontológica), em diferentes níveis de percepção (complexidade) e na lógica do terceiro incluído, que existem simultaneamente. Ao abordar esses níveis, o pesquisador é a correspondência entre o mundo externo do Objeto e o mundo interno do Sujeito. Na arquitetura, esse conhecimento surge por meio de uma variedade de disciplinas que precisam ser combinadas e fundidas com uma abordagem rizomática e nômade, levando ao pensamento sem imagem, como tratado por Gilles Deleuze e Félix Guattari. Seguindo a metáfora da “pantera rosa” para um pensamento sem imagem e abordagem em TR, que não imita ou reproduz outra coisa, o objetivo deste artigo é compreender a relação entre a metodologia TR, a teoria do pensamento sem imagem – uma abordagem que pode permitir a compreensão de arquitetura ambígua e problemas de projeto urbano.

Palavras-chave: Pantera rosa. Abordagem transdisciplinar. Rizoma. Pensamento Nômade. Pensamento sem Imagem.

REFERENCES

- BAINS, P. Subjectless subjectivities. *In*: MASSUMI, B. (ed.). **A shock to thought: Expressions after Deleuze and Guattari**. London, New York: Routledge, 2002. p. 101-116.
- BROWN, J. W. Deleuze's Nietzschean revaluation: The image of thought / Thought without image. **Canadian Journal of Continental Philosophy/Revue Canadienne de Philosophie** Continental Symposium, Ontario, v. 9, n. 1, p. 31-46, Spring 2005. Available at: https://www.pdcnet.org/symposium/content/symposium_2005_0009_0001_0031_0046. doi: 10.5840/symposium2005913. Accessed on: 23 Oct. 2021.
- COLLETT, G. Philosophy, disciplinarity, and transdisciplinarity in Deleuze and Guattari. *In*: COLLETT, G. (ed.). **Deleuze, Guattari, and the problem of transdisciplinarity**. London, New York: Bloomsbury Academic, Nov. 2019. p. 1-14.
- CROSS, N. **Designerly ways of knowing**. London: Springer, 2006.
- DELEUZE, G. **Difference and repetition**. Trans. Paul Patton. New York: Columbia University Press, 1994 (originally in 1968).
- DELEUZE, G. Desert islands and other texts 1953 – 1974. *In*: LAPOUJADE, D. (ed.). **Semiotext(e) foreign agent series**. Cambridge, Mass. and London: MIT Press, 2002.
- DELEUZE, G.; GUATTARI, F. **A thousand plateaus: capitalism and schizophrenia**. New York: University of Minnesota Press, 1987.
- DELEUZE, G.; PARNET, C. **Dialogues**. Translated by H. Tomlinson; B. Habberjam. New York: Columbia University Press, 1987 (Originally in 1977).
- DOUCET, I.; JANSSENS, N. Editorial: Transdisciplinarity, The hybridisation of knowledge production and Space-related research. *In*: DOUCET, I.; JANSSENS, N. (ed.). **Transdisciplinary knowledge production in architecture and urbanism**. Towards hybrid modes of inquiry, urban and landscape perspectives. V. 11. Dordrecht: Springer, 2011. p.1-14.
- GENOSKO, G. Introduction: Félix Guattari in the age of semiocapitalism. *In*: GENOSKO, G. (ed.). Félix Guattari in the age of semiocapitalism. **Deleuze Studies**, Edinburgh, v. 6, n. 2, p. 149-169, 2012.
- GUATTARI, F. Transdisciplinarity must become transversality. **Theory, Culture & Society**, v. 32, n. 5-6, p. 131-137, September 2015a. doi: 10.1177/0263276415597045.
- GUATTARI, F. **Psychoanalysis and transversality: Texts and interviews 1955 – 1971**. Trans. A. Hodges. Los Angeles: Semiotext(e), 2015b.
- GUATTARI, F. **Integrated world capitalism and molecular revolution**. Text presented at the Conference on Information and/as New Spaces of Liberty (CINEL), Rio de Janeiro, 1981. Trans. A.T. Kingsmith, 2016. Available at: <https://adamkingsmith.files.wordpress.com/2016/10/integrated-world-capitalism-and-molecular-revolution.pdf>. Accessed on: 11 Nov. 2021.

HIRSCH HADORN, G. *et al.* The emergence of transdisciplinarity as a form of research. In: Hirsch Hadorn, G. *et al.* (ed.). **Handbook of Transdisciplinary Research**. Dordrecht: Springer, 2008. p. 19-39.

HONAN, E. Writing a rhizome: An (Im)plausible methodology. **International Journal of Qualitative Studies in Education**, v. 20, n. 5, p. 531-546, Aug. 2007. doi: 10.1080/09518390600923735.

ITdNet. **Workshop at the Td Conference 2008 on 27 November**. Available at: <http://www.uns.ethz.ch/translab/itdnet>. Accessed on: 13 May 2011.

NICOLESCU, B. **Manifesto of transdisiplinarity**. USA: Suny Press, 2002.

NICOLESCU, B. Towards transdisciplinary education. **TD: The Journal for Transdisciplinary Research in Southern Africa**, Cape Town, v. 1, n. 1, p. 5-16, 2005.

NICOLESCU, B. **Transdisciplinarity** – Past, present and future. 2006. p. 1-36. Available at: https://www.basarab-nicolescu.ciret-transdisciplinarity.org/Docs_articles/Worldviews2006.htm. Accessed on: 10 nov. 2020. OSBORNE, P. Problematizing disciplinarity, transdisciplinary problematics. **Theory, Culture and Society**, United Kingdom, v. 32, n. 5-6, p. 3-35, Jul. 2015. doi: doi.org/10.1177/0263276415592245.

PELBART, P. P. **Cartography of exhaustion: Nihilism inside out**. Trans. J. Laudenberger; F. Rebolledo Palazuelos. Minneapolis: Univocal, 2013.

PETERSEN, E. W. **Design as seven steps of deterritorialization**. In The making: Conference Proceedings Santa Anna IT Research Institute AB, 2005.

POHL, C.; HIRSCH HADORN, G. **Principles for designing transdisciplinary research**. Swiss Academies of Arts and Sciences. Oekom Verlag GmbH, München: Oekom Verlag GmbH, 2007.

RENDELL, J. Working between and across: Some psychic dimensions of architecture's inter- and transdisciplinarity. **Architecture and Culture**, United Kingdom, v. 1, n. 1, p. 128-140, Nov. 2013. doi: 10.2752/175145213X13756908698685.

SAP, H. A. **Neo-materialism and urban planning, A contribution to new metaphoric understanding**. Paper presented at the 2nd USO Build Conference. Lausanne, Swiss: Nov. 28-30 2002. Available at: <http://www.has-architectuur.nl/res/artikelneomaterialism.pdf>. Accessed on: 15 Nov. 2015.

SCHNEIDER, T. Discard an axiom. DOUCET, I.; JANSSENS, N. Editorial: Transdisciplinarity, The hybridisation of knowledge production and Sspace-related research. In: DOUCET, I.; JANSSENS, N. (ed.). **Transdisciplinary knowledge production in architecture and urbanism**. Towards hybrid modes of inquiry, urban and landscape perspectives. V. 11. Dordrecht: Springer, 2011. p. 97-115.

STARR, M. **Wells meets Deleuze: The scientific romances reconsidered**. North Carolina: McFarland and Company, 2017.

VALENZUELA-AGUILERA, A. **Random urbanism: A multidimensional strategy of cognitive mapping**, 2008. Available at: http://www.henrilefebvre.org/hlt/fls/Lefebvre_program2008.pdf. Accessed on: 12 Dec. 2019.

VOLCKMANN, R.; NICOLESCU, B. Transdisciplinarity: Basarab Nicolescu talks with Russ Volckmann. *Integral Review, A Transdisciplinary and Transcultural Journal For New Thought, Research, and Praxis, Ohio*, 4, 73 – 90, Jun. 2007. Available at: <https://integral-review.org/transdisciplinarity-basarab-nicolescu-talks-with-russ-volckmann/>. Accessed on: 07 Nov. 2018.

Recebido: 21/4/2021

Accito: 15/11/2021

