

Strategic Design and reality levels: scenarios as prisms for creating possible futures

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ABSTRACT

Strategic Design, when seen as a metaprojectual methodological approach, continuously expands its meaning effects, creating projects that intervene in systems for sociocultural transformation. It carries an open vision of design, permeated by the reflexive dominion (BENTZ, 2014), which welcomes the arbitrary character and the multiplicity of interactions, uncertainties, indeterminations and random phenomena (MORIN, 2015). Such intervention allows the creation of scenarios as a process guided by the imagination of other possible realities and contemplate the systems in the perspective of their openness. In this sense, the epistemological vision that integrates open systems, as well as the perspective of Strategic Design, joins the Transdisciplinarity method to discuss the elaboration of scenarios from the different reality levels. Guided by an abductive reasoning this method considers the existence of an invariable set of systems under the action of several General Laws, which constitutes more than one reality, without necessarily having a discontinuity separating them (NICOLESCU, 1999). Called the Principle of the Included Third, this conception permeated by the interdependence of simultaneous realities, leads to the elaboration of prismatic scenarios by their spectral character, and brings light to different but complementary perspectives, as well as the colors reflected in optical dispersive prisms.

Keywords: Strategic Design, Scenarios, Open Systems and Transdisciplinarity.

INTRODUCTION

This paper takes off from the perspective of Complexity and Open Systems (MORIN, 2015) to establish a dialogue with the concept of Strategic Design in the metaprojectual dimension, guided by the proposal of Franzato (2014) and Bentz and Franzato (2016), aiming to comprehend how scenarios can be conceived using the method of Transdisciplinarity (NICOLESCU, 1999).

This is an initial discussion, which seeks an understatement on a new way of imagining possible realities, which contemplates the simultaneity of realities. The transdisciplinarity that composes the Strategic Design approach, exercises the transversal and cooperative dialogue between areas, organizations, and individuals (BENTZ, 2014), and contributes to the understanding of the present world. It happens, essentially, because it considers the unity of knowledge — the non-separability — expressed by the prefix “trans”, which indicates at the same time “between disciplines, through different disciplines and beyond any discipline” (NICOLESCU, 1999, p.2). In addition to opposing the temporal linearity present in scenario constructions.

In the first section, the concept of Strategic Design, complexity and Open Systems are discussed, and the epistemological basis that guides the discussion is presented. The characteristics that integrate the vision of complexity and brought the concept of open systems are listed (MORIN, 2015).

In the second section, the attributes for scenario design are discussed and the Transdisciplinarity method is described (NICOLESCO, 1999). As an analogy to exemplify the elaboration of the scenarios in this perspective, the concept of dispersive optical prisms and the interconnection of its color spectrum, as the possible existing and interdependent realities, is brought.

This study still has an embryonic discussion about the union of different approaches to create critical visions, which can contribute to renew the processes of scenario design. The preliminary considerations express the need not only to conduct more in-depth discussion but also to experiment on the topic for methodological elaboration.

1. STRATEGIC DESIGN AND STRATEGIC DESIGN AND OPEN SYSTEMS

From a perspective that contemplates all the elements of a system and integrates processes, subjects, and artifacts, in continuous inseparable and interdependent interaction, Strategic Design enables a dialogical dynamic between the actors (ZURLO, 2010), fundamental for the design of new processuality, that is, “articulates meanings, interpretations, scenarios, methods or projects” (BENTZ, 2014).

Design as a metaprojectual methodological approach allows strategic thinking and acts as a vector that guides the project articulations. With a view dedicated to the relations, interprets the processes of meaning present in systems, consisting of notions that influence each other, in a way that is both complementary and antagonistic. Both in interaction and constellation (MORIN, 2015). All the tangible and intangible elements constituting a system influence the procedural constructions, since they are also attributed meanings that shape the perception of the individuals involved and therefore, also define their performance.

When shifted to the meta-level, Design also needs to move towards an episteme that comprises its dialogical and translogical principles (MORIN, 2015). This way, complexity offers the necessary bases for the elaboration of a thought that escapes from dichotomies and advances towards a systemic vision, which welcomes differences and similarities as an integral and essential part of the evolution of its processes. The scenarios, in this sense, are processes inherent to the transcendence of levels, since the approach is permeated by the critical-reflexive and heuristic conception, which responds to the complexity of human thought and cultural production (BENTZ; FRANZATO, 2016).

In addition to an epistemological movement and level shift, the construction of scenarios that consider multirealities also demands a distinct approach to the concept of systems. This way, Open Systems emerge in their liveliness and dynamism to compose such a perspective. So-called living and self-regulating systems are anchored in an external power not only material-energetic but also organizational-informational. This means that it constitutes a channel that connects thermodynamics and life science. And that there is a new idea, opposite to the physical notions of balance-imbalance, which is beyond one and the other, in a certain sense containing both (MORIN, 2015). Energy movement, according to Morin (2015), is founded on

imbalance, which feeds the internal environment of cells and organisms. Without this flow, there is organizational disorder, which quickly leads to its withering.

For Morin (2015), the open and living system needs the notion of a closed system, so that its existence is based on the difference that unites them. Like the opposite nature of light and darkness. The flow of energy present in both dimensions allows the emerging of sensitivity to achieve a balance, without raising barriers to the dynamics present in the sociocultural web.

Initially, the imbalance allows the system to remain in apparent equilibrium, that is, in a state of stability and continuity. This apparent imbalance only degrades if it is left to itself, that is, if there is the closure of the system. The assured constant and fragile state — steady state — has a paradoxical characteristic because the structures remain the same, even if the constituents are mutant. As it happens with our organism, in which the molecules renew themselves without ceasing while the whole remains, apparently, stable, and stationary. The system closes to the outside world to maintain its structures and its inner environment so as not to degrade, while its opening allows closure (MORIN, 2015).

In open systems, there are two key issues. The first indicates the characteristics of the laws for organization of life, which are not of equilibrium but imbalance, recovering or compensating, in a stabilized dynamism (MORIN, 2015). The impermanence of social relations also expresses such movements and makes up the dynamic tone of the culture. Equilibrium stabilization could be an interruption of this energy flow, or ultimately, the standardization of fluency since it suggests a non-disturbance or variation in the system.

The second question, intelligibility, must be found not only in the system itself but also in its relation with the environment (MORIN, 2015). It constitutes the system and the process of evolution towards the path of transformation, that is, advances towards the renewal of the system. The interdependence between the layers is permeated by a liquid network based on a myriad of connections (JOHNSON, 2011), which acts as a cloud of elements in constancy for the transition between a current circumscribed system and its redefinition, that is, the expansion into an emerging system. The reality is, since then, both in the link and in the disjunction between open system and its environment (MORIN, 2015).

In the same way that movements open a spectrum of possibilities to advance and expand the horizon of systems, Design, by its innovative nature, reinvents itself, acquiring a characteristic of “auto redesign”. Such a perspective is the axis that initiates the constant transmutation of systems, according to the view of the scenario. The constancy concerning the change is what causes the discontinuity of the systems and opens space for other systems to emerge in the only existing context, that of uncertainty.

The flexibility and porosity of open systems are fertile ground for the projection of scenarios with several possible realities, and start from the premise that uncertainty, change, and randomness integrate reality — therefore, they are also part of the projection.

2. SCENARIOS, TRANSDISCIPLINARITY AND OPTICAL PRISMS

The ability of Strategic Design to redefine meanings and relations in the systems where it operates, that is, in the sociocultural dimension, contemplates different perspectives and systemically analyzes the connections that are imbricated in the creation of alternative realities, expressed in the process of scenarios.

By the creative nature of its processes, Design must create visions that inspire and contribute to the imagination about how reality could be radically different from what it is today and then arouse the belief that we can progress toward that imaginary world (DUNNE; RABY, 2013).

According to authors the Dunne and Raby (2013), “design speculations can act as a catalyst to collectively redefine our relationship with reality.” With this, it is also necessary to conceptualize the term to move forward with the proposal. According to Nicolescu (1999, p.5), the reality is understood as what “resists our experiences, representations, descriptions, images or mathematical formalizations”.

The projection of scenarios as a process integrates the logic that the project is a creative and exploratory activity in which it seeks multiple possibilities for the conception of new realities. His creation of narratives should contemplate mutant, timeless, and symbolic images to express values and visions shared by individuals. It is a process of dialogue, in which not only the designer interprets the existing symbolic attributes, but also assigns and updates the meaning itself, through its redefinition of meaning.

The point is that each scenario narrative must be permeated by a multiplicity of assumptions and ambiguities, which stress the boundaries between the probable, plausible, and possible towards the ruptures that open space for the creation of new visions. With that said, it is suggested a prismatic perspective for the construction of these scenarios, which connects the process to the Transdisciplinarity method proposed by Nicolescu (1999).

The projection of scenarios, based on Transdisciplinarity as a method, must be viewed from the perspective of three principles. The first is the Complexity, discussed earlier in this study during the topic of Open Systems.

The second, the so-called Levels of Reality is seen as a major sociocultural challenge for its acceptance, even though it's the easy explanation: it's the use of abductive reasoning to the idea that there is a set of systems invariant under the action of several laws, which is more of a reality, it is not necessarily that there is a discontinuity separating the two of them (NICOLESCU, 1999), therefore, it can be assumed that the Transdisciplinary approach just focuses on the look of the momentum generated by the action of several levels of Reality at the same time. It is not just a social construction, a consensus of a collective, an intersubjective agreement. Reality has a trans-subjective dimension (NICOLESCU, 1999, p.5), which means, it permeates the capacity of representation of the space in which culture puts its mark on the external world.

The third principle is entitled Included Third. In this one, the Representation of T has a multi-valuated and non-contradictory logic, because it is based on the idea that the tension between the contradictory promotes a unity, which includes the sum of the two terms, but also differs from both. Because it resides at the intersection between the two and its essence is in the distinct pairs, this principle is by nature self-destructive if completely separated from the other levels of Reality.

The propositions are interdependent in nature and converge towards the creation of scenarios as prisms due to their spectral, interdependent, and inseparable character because it illuminates different perspectives, which complement each other, even if they are distinct, as well as the colors reflected in the dispersive optical prisms. Some colored lights have longer wavelengths, as it is the case of the color red, and others have shorter wavelengths, as it is the

case of the color blue, but all the colors reflected in the rainbow of the prisms are dependent on each other, even if they are different from each other.

Lastly, even if still embryonic, this discussion seeks to bring into light the debate on the projection of Scenarios from a transdisciplinary perspective, in which it does not result in distinct possibilities or in the consolidation of a single ideal option, but rather a conception that allows simultaneous and interconnected realities to exist. These Scenarios, which navigate through a spectrum of possibilities, are guided by imagination and concretized in sociocultural transformations.

3. PRELIMINARY REFLECTIONS

Strategic Design as a metaprojectual approach carries with it an open vision of design, permeated by the reflexive dominion (BENTZ, 2014). When viewed from the perspective of complexity, the relation with the arbitrary character and the multiplicity of interactions and interferences in several units, uncertainties, indeterminations, random phenomena are illuminated (MORIN, 2015).

Complexity, according to Morin (2015), brings many contributions in different dimensions, because it opens space for creativity through freedom; it provokes new ways of perceiving systems, which are not in a plastered and centralized way, but dynamic and interdependent; it welcomes individuals in their entirety and not only in a fractional way; and it understands knowledge in a non-fragmented way, but rather, in its unity.

Open Systems (MORIN, 2015) bring the epistemic basis necessary to conceive the union of Strategic Design to Transdisciplinarity (NICOLESCO, 1999), for the conception of scenarios as a process that aims to break the existing systems.

It is evident the simultaneity of interdependent realities, as an opportunity to project scenarios that run away from models based on the concepts of plausible, possible, and feasible (MANZINI; JÉGOU, 2006), and are guided by imagination to unfold in sociocultural transformations. To this end, a new notion of temporality, and consequently of design, is also required.

Finally, it is understood that the discussion needs further deepening and experimentation to show concrete and fruitful results to the field of Design, and it is expected that from this seed, other visions can flourish and contribute to the evolution of the theme.

REFERENCES

- Bentz, I. (2015). Introdução [Introduction]. In: Reyes, P. *Projeto por Cenários: o território em foco* [Project for Scenarios: the territory in focus] (pp. 224-244). Porto Alegre: Sulina.
- Bentz, I. (2014). Processo de projeto: do ponto de vista aos efeitos de sentidos [The project process: from the point of view to the effects of meaning]. In: *11º CONGRESSO BRASILEIRO DE PESQUISA E DESENVOLVIMENTO EM DESIGN* (pp. 570-579). Gramado. São Paulo: Blucher. DOI: [10.5151/designpro-ped-01254](https://doi.org/10.5151/designpro-ped-01254)
- Bentz, I., Franzato, C. (2016). O metaprojeto nos níveis do design [The metaproject at design levels]. In: *12º CONGRESSO BRASILEIRO DE PESQUISA E DESENVOLVIMENTO EM DESIGN* (pp. 1416-1428). Belo Horizonte. São Paulo: Blucher. DOI: [10.5151/despro-ped2016-0120](https://doi.org/10.5151/despro-ped2016-0120)
- Benveniste, É. (1989) *Problemas de linguística geral II* [Problems in general linguistics II]. Campinas: Pontes.
- Dunne, A., Raby, F. (2013). *Speculative Everything: Design, Fiction, and Social Dreaming*. Cambridge, Massachusetts: The MIT Press.

- Franzato, C. (2011). O processo de inovação dirigida pelo design: um modelo teórico [The process of innovation directed by the design: a theoretical model]. *Redige*, v. 2, n. 1, pp. 50-62.
- Franzato, C. (2014). O princípio de deslocamento na base do metadesign [The principle of displacement at metadesign base]. In: *11º CONGRESSO BRASILEIRO DE PESQUISA E DESENVOLVIMENTO EM DESIGN* (pp. 1187-1196). Gramado. São Paulo: Editora Edgard Blücher. DOI: [10.5151/designpro-ped-00178](https://doi.org/10.5151/designpro-ped-00178)
- Morin, E. (2015). *Introdução ao Pensamento Complexo* [Introduction to complex thought]. Porto Alegre: Editora Sulina.
- Morin, E. (2016). *O método 1: a natureza da natureza* [Method: the nature of nature]. Porto Alegre: Editora Sulina.
- Morin, E. (2006). *A cabeça bem-feita: repensar a reforma, reformar o pensamento* [The well-made head: rethink reform, reform the thought]. Rio de Janeiro: Bertrand Brazil.
- Nicolescu, B. (1999). *O manifesto da transdisciplinaridade* [The manifest of Transdisciplinarity]. São Paulo: Triom.
- Zurlo, F. (2010). *Design Strategico* [Strategic Design]. In: XXI Secolo: Gli spazi e le arti. Roma: Enciclopedia Treccani v. 4.