

Diagramming the Topology of Technology and Architecture in the 21st Century

Asude YOKUŞ^{1*} , Tolga SAYIN² 

ORCID 1: 0009-0006-4017-6387

ORCID 2: 0000-0002-8128-7255

¹ Mimar Sinan Fine Arts University, Graduate School of Architecture, Institute of Science, 34421, Istanbul, Türkiye.

² Mimar Sinan Fine Arts University, Faculty of Architecture, Department of Architecture, 34421, Istanbul, Türkiye.

* e-mail: asudeyokus@gmail.com

Abstract

The research aims to address the existence of neoliberal policies in contemporary architectural production from an onto-political perspective. In Deleuze's ontology, the movement between the self and the other is established between the architect-subject and the ideological other. This relation is explored through the technique's being the object or subject of thought. In this context, the choices made by the architect-subject within the ethical framework are evaluated as active and passive and read through the symbolic plane it externalizes. The active and passive positionings of architectural thought reconstruct the professional boundaries of architecture. The surface formed by the movement of the relationship between the architect-subject and the ideological other on the temporal axis establishes the topology of technology-architecture thought.

Keywords: Diagram, topology, technology, architecture, neoliberalism.

21. Yüzyılda Teknoloji ve Mimarlık Topolojisini Diyagramlaştırmak

Öz

Araştırmanın amacı, güncel mimarlık üretiminde neoliberal politikaların varoluşunu onto-politik bir bakış açısıyla ele almaktır. Deleuze'ün ontolojisinde Kendi ve Öteki arasındaki devinim, mimar-özne ve ideolojik Öteki arasında kurulur. İçselleştirme ve dışsallaştırma döngüsü üzerinden okunan bu hareket teserakta diyagramlaştırılır. İçselleştirme; mimar-öznenin alışkanlıklarını bozulduğu, anlamı ürettiği ve pasif kendilikte düşüncüyü sentezlediği süreçtir. Dışsallaştırma ise mimar-öznenin ideolojik Öteki ile kurduğu onto-politik ilişkiyi edimselleştirmesidir. Bu ilişkilendirme, tekniğin düşüncenin nesnesi veya öznesi oluşu üzerinden araştırılır. Bu bağlamda mimar-öznenin etik çerçevede yaptığı seçimler aktif ve pasif olarak değerlendirilerek dışsallaştırdığı sembolik düzlem üzerinden okunur. Pasiflik, sistemi olumlayarak sistemin sınırları dahilinde reaksiyon göstermektir. Mimarın bu anti-entelektüel tavrı neoliberalizm mimarlığı olarak karşılık bulur. Aktiflik ise sistemin karşısında bir aktör olarak, Ötekinin belirlediği sınırları ihlal edip kendi içkinliğinde aksiyon göstermektir. Mimarlık düşüncesinin aktif ve pasif konumlanışları mimarlığın mesleki sınırlarını yeniden inşa eder. Mimar-özne ve ideolojik Öteki arasındaki ilişkinin zamansal eksenindeki hareketi ile oluşturduğu yüzey, teknoloji-mimarlık düşüncesinin topolojisini kurar.

Anahtar kelimeler: Diyagram, topoloji, teknoloji, mimarlık, neoliberalizm.

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1. Introduction

The objective of this study is to reveal the impact of neoliberal policies on current architectural production. Recent turns in political theory provide the theoretical basis for the neoliberal era, viewed through the lens of complexity. Deleuze's political ontology, as a philosophy, has the potential to deconstruct neoliberal chaos politics. It can make compelling assertions without relying on metaphysical or transcendent foundations and generate uncertainty without resorting to clear-cut discourse. The philosophy eliminates boundaries and is based on affirming both meaning and meaninglessness, as well as determination and indeterminacy (Direk, 2021).

Gilles Deleuze's metaphysical framework prioritizes 'becoming' over 'being', 'difference' over 'identity', and 'event' over 'substance'. He describes nature as a plane of immanence where forces, flows, movements, parts, intensities, becomings, machines, and desires are articulated. This metaphysical perspective challenges the prevalent capitalist economy and reshapes Western philosophical understanding. It has evolved into a form of resistance that champions the unrestrained affirmation of life (Direk, 2021). However, neoliberalism adopts Deleuze's philosophy of affirmation and twists it into a justification for violence of positivity (Spencer, 2018). Critiques of neoliberalism have often focused on its surface-level features, rather than delving into the underlying manipulative dynamics. To gain a deeper understanding of neoliberal strategies, it is necessary to examine their intricate interplay with Deleuzian philosophy. This will reveal the true nature of these strategies and their manipulative effects.

Deleuze's conceptual framework assigns significant importance to the concepts of 'Identity' and 'otherness'. In the realm of architecture, the concept of 'otherness' is intricately intertwined with the prevailing ideology of the era. The meaning of architecture's otherness cannot be understood through terms or concepts related to identification or opposition with ideology. Deleuze argues that otherness carries a unique significance or sense. Therefore, architecture's existence or meaning is determined by its relationship with the other. Identity and representation can only capture architecture's superficial dimensions of meaning, failing to fully express its essence (Widder, 2012, pp. 28-35).

In architecture, the relationship with the ideological otherness serves as the foundation for an ontological-political or onto-political interplay, shaping the societal context within which architects operate. Architecture's immanence is characterized by a tendency towards fragmentation and division, stemming from the 'violence' that emerges as a consequence of architecture's external function. This immanence is characterized by a tendency towards fragmentation and division, which arises as a result of architecture's external function. However, in architecture, the term 'exteriority' does not refer to an unknowable transcendence or a thing-in-itself in the Kantian sense (Widder, 2012, pp. 38-40). According to Deleuze's ontology of meaning, the other of architecture is not an absolute fullness or an absolute lack in an ideological context. Instead, it emerges as an 'immanent one', a 'fold' in which the relations of distance and proximity change. These relations structure differences in ways that transcend the terms identity-opposition and interiority-exteriority.

2. Method

The research diagrams a tesseract, which is a four-dimensional hypercube, to represent the folded movement of the strong ontology of uncertainty. This movement establishes the immanence of architecture through internalization-externalization. The word 'tesseract' is derived from the Greek words téssara (τέσσερα 'four') and aktís (ἄκτις 'ray'). The fourth dimension (ray) allows movement in time. When two parallel cubes are connected along this time axis, they form eight cubes (Figure 1). Because the human mind cannot conceive of four-dimensional space, the perception of a tesseract is challenging. However, we can illustrate the relationships between the cubes by representing their perspectives on a two-dimensional surface. One way of imagining a tesseract is to imagine a folding movement, similar to a three-dimensional network of eight cubes (similar to a two-dimensional network of the six faces of a cube).

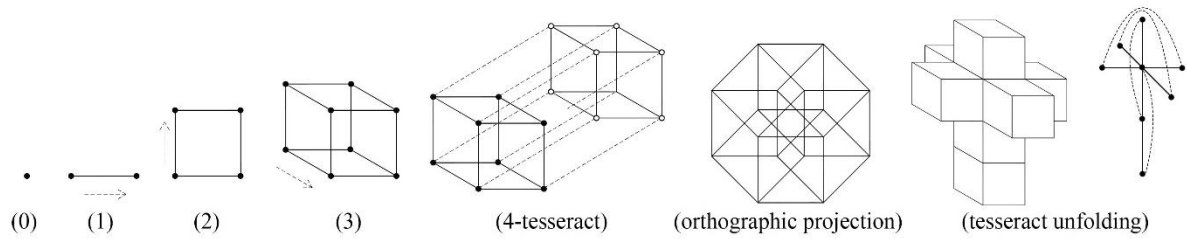


Figure 1. Formation diagram and expansion of tesseract.

The relationship between the self and the other, delineated by the concept of the tesseract, provides a legitimate framework. Embodied along the x , y and z axes, the self relates to the other along the temporal axis (w) and moves intertwined in the spatio-temporal dimension (Figure 2). Temporal space refers to the influence of the passive and the influence of the active. Only the present exists in time; it unites past and future, dissolves them in itself and divides every present infinitely (Deleuze, 2015).

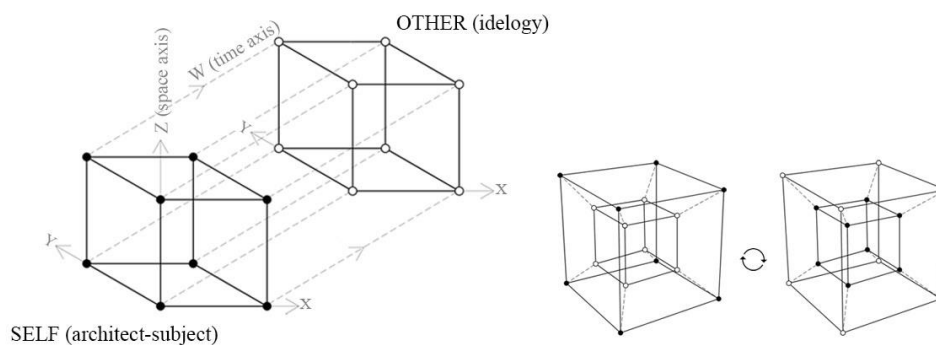


Figure 2. Diagram of onto-political relationship: unfolding of tesseract.

In the context of research, the relationship of temporal difference between the self and the other is established between architecture and ideology; the architect moves forward in time to externalize, or goes back in time to internalize, the previously established structure. The otherness of architecture is differentiated by distancing in both 'reactive' and 'non-reactive' architectural actions, defined as 'exteriorized interiority' or 'interiorized exteriority'. This critical stance, with the intention of metamorphosis, is a product of immanence that suspends identification, rather than a split or fragmentation that indicates transcendence. Identification arises from the need for transcendence as a temporary condition. Thus, architecture remains unsplit or unfragmented. The architect has the power to actively update her/his struggle with her/his awareness of the liberation of the social. The potential flexibility of this possessed plasticity constitutes the immanence of architecture within the architect's agency. The architect-subject, under his profession, internalizes and externalizes himself, in the context of this research in the neoliberal system, as an actor, actant, agent, and sometimes as an assemblage of things that come together in any process. On the one hand, she/he moves in the context of academic intellectualism, in the context of the architecture of her/his being active and the architecture of her/his being reactive.

3. Findings and Discussion

The temporary establishment of the passive self through the synthesis and storage of the architect's emotions in memory and their apprehension in the present within an abstract conceptual framework of relationships does not pose a problem at this stage. The problematization arises in the movement between passivity and activity in the process of internalization-externalization. In the process of externalization, extensity and Intensity find their structural counterparts as twins. At the molar level, each experience of subjectivity is mediated by different architectural subjects. Architects move from chaos to order within a complex and dynamic interrelationship, generating the neoliberal system. The internalization of this order-generating structure emancipates the architect from passive affections. The importance of the architect's name diminishes as she/he becomes an actor. The stage changes,

the actors remain the same, but in the eyes of those who assign roles (authority), the agents change. Within each actor, an external agent is involved/coordinated. Therefore, within the neoliberal order, the architect, while remaining within the system, seeks emancipation in terms of both knowing/learning (praxis) and knowing/how to do (techne) while doing.

The liberation of 'praxis' and 'techne' ignites creativity. In this context, architects not only function as agents, but also operate and interpret actively. The ontology of meaning, situating itself within the robust aesthetic dimension of Deleuze's philosophy as identified by Hughes (2012), establishes connections in various allegories (which can be seen as extensions of the tesseract or staged surfaces within the scope of the research), opens a dynamic space of perception and disrupts habits. The movement of thought is represented in the context of this study as a conventional 'tesseract', at the level of representation where concepts are invented. In addition to the architect's obligation to submit to the system, this tesseract also represents the dilemma of the architectural agenda as to how architecture can be managed in a professional and intellectual context.

3.1 The Problematics of Active and Passive Synthesis in the Strong Ontology of Uncertainty

In Deleuze's ontology, the power of the passive self lies in the problematization style of synthesis. The inability to comprehend activities is passivity in the sense that perception cannot reach the intellectual level. Within the linguistic framework, it means a passivity aimed at establishing rules of synthesis for concepts and formulating a new principle of synthesis without recourse to pre-determined concepts. In this scenario, experience emerges from an intuitive understanding that refuses to focus on the sources of real experience through pre-existing concepts, free of a priori and categorical notions. In this context, the experimental facet of experience discovers a new principle of synthesis independent of the existing conceptual framework, based on an intuitive understanding called a posteriori, and ascends to a conceptual level. In the process, the impersonal flow of matter is observed within a non-conceptual 'assemblage'. Thus, instead of adhering to the given verbal limits of legislative concepts and the constraining and debilitating nature of categorical logic on thought, it is situated within the foundational finitude of 'producer-product' that moves with life. The genetic turn, dramatized (in the Kantian sense, schematized) as a tesseract in the flow of life, continues as a dynamic and static genesis between sensibility and understanding, as an experience of subjectivity in the process of self-transcendence (Figure 3).

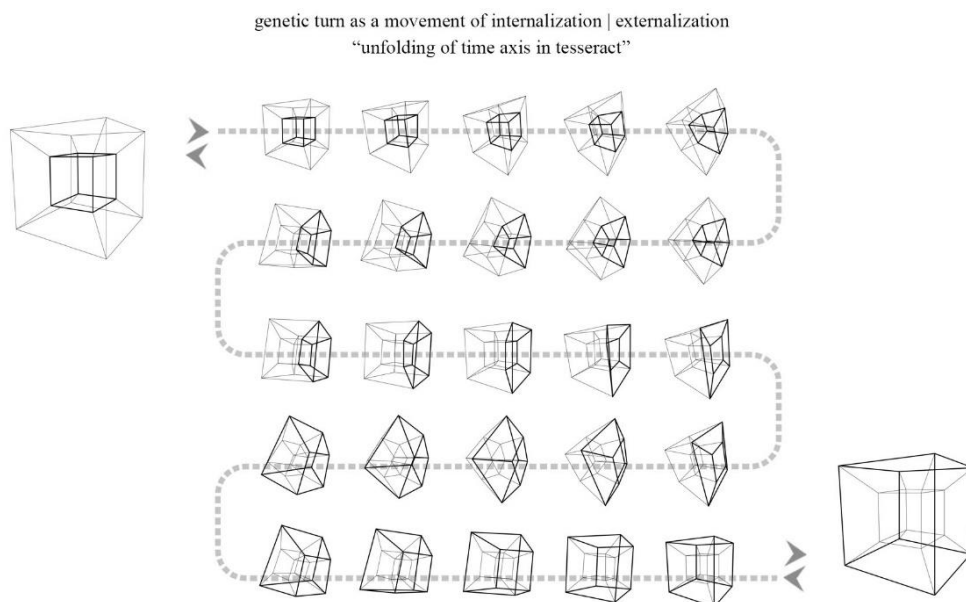


Figure 3. Topological structure of the genetic turn in the tesseract.

Deleuze defines unformed matter, or the 'plane of immanence', as a presupposition of the movement of thought, characterized by dynamic and static genesis. This material plane is complex and in constant

flux, devoid of subjectivity and objectivity; life within it is impersonal, undefined, and singular. The dynamic genesis occurring within the plane of immanence generates a progressive series of syntheses from sensibility to understanding. This synthesis establishes the living present by compressing successive and independent moments; time is unfolded here, with the dimensions of future and past belonging to the living present. Deleuze refers to this synthesis as a passive synthesis because it is not carried out by the mind but takes place within the mind prior to all memory and thought. It is constitutive but not effective (Deleuze, 2017, pp. 105-106). Passive syntheses establish the habitus of movement as imagination, perceptual gaze, and automatic repetition so that it is no longer intelligible. It is the synthesis that compresses moments and retains them only in memory, guided by the unconscious (Hughes, 2012, p. 58).

The first passive synthesis is the 'synthesis of apprehension', which unites multiplicity by compressing moments in flux and bringing them into the living present, creating a stationary center within the chaotic plane. It is both primordial and immanent. Time cannot escape the present, but it constantly leaps within the present. The paradox of the present is that while it constructs time, it also exists within the time it constructs. Therefore, another synthesis is necessary that operates within the framework of the first synthesis (Deleuze, 2017, p. 117). The second passive synthesis is the 'synthesis of reproduction', which records and reproduces multiplicity. It takes elements from the first synthesis and records them on its level, in memory. Moments/elements compressed and reproduced in memory are combined/stored in a kind of 'grid of disjunctions' for future use (Hughes, 2012). Memory constitutes the existence of the past as the fundamental synthesis of time. Every past exists together with the now, which is more past than itself. The totality of life is a different manifestation of what preceded it; all degrees coexist and present themselves to the subject's choice (Deleuze, 2017). The third passive synthesis is the 'synthesis of recognition', which brings multiplicity to a concept. As the final synthesis of time, it establishes the present and the past as dimensions of the future. It moves towards a new element, produces meaning, describes a new dimension that is not identical to the immanent plane where the passive self arises. It transitions outwards. All three syntheses reveal the now, the past and the future in different modes of repetition; the now is repetition itself, the past is the repetition of itself, and the future is repetition (Deleuze, 2017, p.139-140). Here, habits are disrupted to allow for the production of meaning, and the creative essence to be used to give meaning, namely 'thought' (idea), is discovered (Hughes, 2012, p.55-74).

According to Deleuze, the body consists of extended parts. The composition of these parts is determined by the violence of the outside, and the body can act to the extent of its capacity to be affected. The body is therefore not static but subject to affectivity. It is influenced by affects, it internalizes them, it is shaped by them, and it either adapts to them or diverges from them. If the body cannot control these affects, it is passive. In contrast, Deleuze describes the process of active becoming as a temporal return. It has the power to intervene in affects and encounters by returning to the level of encounters and passive affects (perception) (Hughes, 2012, pp. 82-86).

The encounter with something that forces one to think is necessary to awaken the absolute necessity of the act of thinking. The contingent nature of the encounter deconstructs an assumed thought and produces thinking in the act of thinking itself. The primary element in thinking is violence; it captures and educates what is perceptible in perception (Deleuze, 2017, p.191). Deleuze labels this movement with the concept of 'eternal return', which he borrows from Friedrich Nietzsche. The concept of eternal return marks the transition from dynamic genesis to static genesis. At this moment, when the boundaries of perception collapse, the combined moments (subjected to external violence) and habits, trapped and stored in memory, are revealed; the personal-non-personal, pre-individual, metaphysical singularities emancipate themselves through dissolution.

Static genesis, defined as the process of activation, is described as a formative synthesis; it consists of two active syntheses, namely good sense and common sense. Good sense is a movement of territorialization towards subjects and objects, setting limits. It individualizes an uncertain object, connects it to the outside and transforms it. But it is not enough to establish the object. This is where common sense intervenes, associating diversity and multiplicity with an individualized subject and an

object that serves as the purpose of our actions. This objectacle relationship defines an active synthesis. Unlike passive syntheses, which cannot work together, active syntheses (good sense and common sense) concretize ideas and function integratively. The harmonious relationship between common sense and good sense assigns 'roles' that allow them to express the processes of enactment and individualization by associating thought-related stimuli with object forms during the dramatization process (Hughes, 2012, p.78).

At the genetic turn stage, individuals are faced with a choice. They can either be active and respond or remain passive. Responses are based on already-established patterns of behaviour. However, during a crisis, when the appropriate response is unclear and cannot be resolved using pre-established patterns, individuals turn to ethics. Ethical principles help individuals decide which principles to prioritize or reevaluate during crises.

The study considers the recent turn in political theory as a crisis and examines the ethical decisions made by architect-subjects in response to this change. It uses these crises as opportunities to explore new ways of organizing the body, embracing the crisis as a catalyst for change (Hughes, 2012, pp. 98-104). Actualizations that occur intentionally and consciously in this stage of experience of self do not indicate a transcendent or metaphysical dimension. The metaphysical dimension is represented on the topological surface, known as the plane of immanence, through projection, specifically diagrammatic folding. This representation occurs at the point where the relation established with the other/outside in Deleuze's ontology of meaning confirms the event's inherent self. Acting involves balancing the external and representational aspects of the mask/persona with its social and ethical aspects. Each act of thought staging/dramatization involves depersonalizing ideas that are inherent to events in life and actualizing them in life and the body.

Bernard Stiegler (2012) critiques Deleuze's process of actualization (the third passive synthesis), as interpreted through the lens of 'thought', in parallel with his reading of Edmund Husserl (1859-1938). Stiegler expands on Husserl's primary and secondary retentions by introducing the idea of 'tertiary retentions', which involve the externalization of memories stored during the second passive synthesis. However, any externalized element at this stage continues to exist in a world (the other) previously described by tertiary retentions and contributes to the ongoing construction of this world. This cyclical process, which occurs within the stage of eternal return, constructs the other through technique (Stiegler, 2012). Architecture actualizes through 'technique', shaping its existence and becoming integrated into the other as the pre-existing ideological framework into which it is born.

The direction of the relationship established with the ideological framework is determined through the ethical choices made by the architect-subject. The architect-subject can either affirm the system by developing an alternative that is still bound by its limitations or act creatively within its immanence without being restricted by external boundaries. In both options, actualization refers to the static genesis itself, which involves a movement from understanding to sensibility. In this process, Kantian synthesis is replaced by Kantian schematism (Deleuzian dramatization) as the passive self is reorganized to meet the requirements of the Idea. This results in a return to the body and a redirection of the syntheses of the body (Hughes, 2012, p.76). Schemata concretize conceptual relationships or territorialize them in spatio-temporal coordinates through technique. The genesis of thought culminates in representation that corresponds to both the material or perceptible and the purpose of actions (Hughes, 2012, pp. 50-73).

Deleuze's approach to the ontology of uncertainty through the genetic turn explores rich ontological depths by defining the limits of political and ethical formulations as a strong ontology. The relationship between architecture and the ideological other is unconditionally interconnected through the process of internalization and externalization, without reference to an external plane (Figure 4). In this context, the other is not in a transcendent position but is on the same plane as architecture. The ethical choices of the architect-subject are determined by the interplay between sensibility and understanding. These choices can affect or be affected by the thers. Deleuze's 'strong ontology of uncertainty' highlights the architect-subject's power to define the ethical boundaries of their relationship with the ideological other.

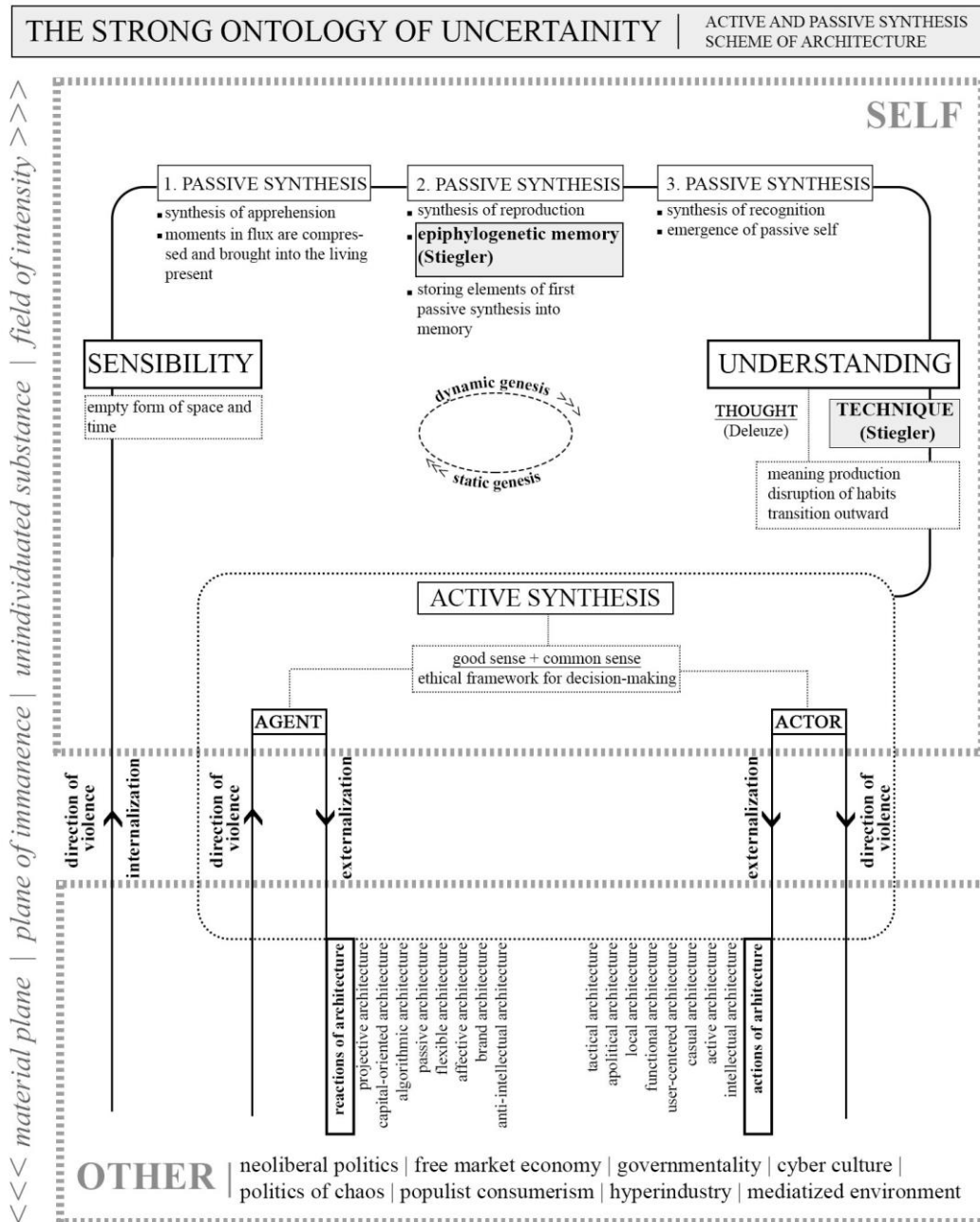


Figure 4. The active and passive synthesis diagram of architecture in the strong ontology of uncertainty.

Architectural thought aims to establish architecture's relationship with the external by intervening from within. It also takes an external position to understand the interdisciplinary network of architecture. This paradoxical positioning continuously reconfigures the disciplinary boundaries of architecture. This line of genetic thought leads to a material and perceptible representation that corresponds to a purpose of actions. The representation that emerges here is the object of both sensibility and understanding, which can be territorialized qualitatively and spatially (Hughes, 2012, 79).

The meaning and existence of architecture are established in relation to the other. Deleuze (2015) does not associate meaning with an essence or depth, unlike classical forms of thought. In Plato's philosophy, everything suppressed and buried emerges to the surface through a Stoic intervention. However, Deleuze considers meaning within an unstable and constantly changing flow, rather than seeking a fixed and stable meaning. According to Deleuze (2015, p.147), meaning lies in the multi-layered surface and is constantly changing. It is not fixed but rather a limitless becoming that occurs and spreads on the surface. Deleuze's thought is topological and cannot be explored with Euclidean

(Platonic) forms, as it is a non-Euclidean formation. The research explores the meaning of architecture in the topology created by the event/violence between architecture and the other.

Han (2016) refers to the different forms (isotopes) of violence, apart from its immutable aspect, as the 'topology of violence'. Violence involves activating neutral power by different forces, serving a purpose by drawing its power from external sources and applying it to alter and reshape the target entity. The spatial domain affected by violence transforms the violence itself. While exploring this transformation through political, ethical, and anthropological complexities between the self and the other, there is a risk of failing to address a problem with clearly defined boundaries. Han (2016) effectively conveys notions of continuity, flexibility, and transition through this approach.

Han (2016) explains the anonymization of brute force and its transformation into a force inherent to the system in our age, which he defines as late modernity, as the violence of positivity, and describes the transformation of violence as 'the shifting of the center from outside to inside'. A new dimension of violence is directed against the self; it simultaneously generates a force from inside to outside, alongside the movement from outside to inside. Thus, all forms of force make inside and outside simultaneously visible on a surface (like a Möbius strip). Topology can therefore serve as a mediator to contemplate the different dimensions of force; while the form changes, the essence remains the same. Force, the essence of violence, delineates the topology produced by the visible and invisible relations between the self and the other (Öner, 2019).

The research depicts the movement of dynamic and static genesis through a diagram that is both qualitative and spatial. The diagram gains elasticity as a 'composition of finite modes' and is embodied by defining a moving surface and topology. This process explains conceptual relationships and the spatio-temporal dimension using a four-axis structure. According to Kuratowski's theorem, binary force sets with more than two elements cannot be represented on a sphere without intersecting edges (Hammack & Kainen, 2021). However, a torus surface can accommodate binary graphs without intersecting edges (Figure 5).

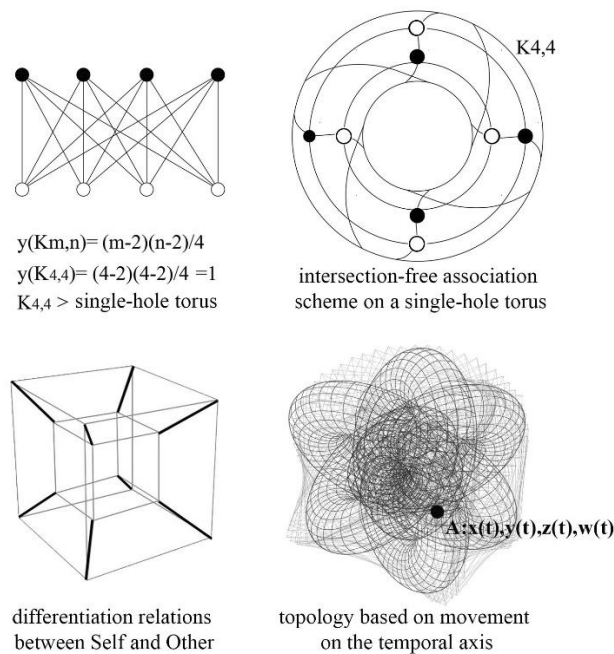


Figure 5 Formation of tesseract topology through the association scheme of binary graphs.

In this dynamic formation, the architect-subject actualizes on topological surfaces and is subject to affects beyond their control. The capacity to experience affections gives way to the faculty of thought, transitioning from sensibility to understanding. This results in a new dimension defined by the plane of immanence, where the passive self finds release. The individuation process occurs as the architect-subject acquires spatio-temporal coordinates (A: x(t), y(t), z(t), w(t)). Thus, by revisiting the realm of sensibility (moving from understanding to sensibility), it generates schemas. These schemas, which

reflect the architect-subject's interactions with the ideological other, encompass the decisions made within ethical frameworks, activities undertaken, and intensities experienced, extending beyond personal emotions and perceptions (Deleuze & Guattari, 2001, pp. 140-149). These active and reactive architectures embody externalized affects, perceptions, and onto-political reactions. Within the scope of the research, these architectures describe the topology of the genesis of the thought-body-technology relationship in the mind in the uncertainty of technology-architecture onto-politics in the context of 21st-century neoliberalism. The study aims to reveal the genetic characteristics of non-reactive, strong, liberated, and genuine architecture, as well as the individuals who create it.

3.2 Outside / Other of Architecture

Han (2016) argues that violence was a common occurrence in pre-modern times but became less prevalent in modernity. However, spaces of violence such as gas chambers, prisons, and concentration camps were still in operation, albeit removed from urban areas and kept out of sight. Han explains that post-modern violence has undergone a topological shift and now permeates every aspect of life. Pre-modern physical violence has been replaced by internalization techniques. This is demonstrated by Foucault analysis of governmentality and Rouvroy and Berns analysis of algorithmic governmentality. Power enables society to internalize authority by automating habits. Foucault's discourse on power argues that since the 17th century, power has been established not through execution but through biopower and discipline. The objective is to expose and regulate power. With the rise of industrialization, technologies of discipline that once dominated every aspect of life have become a pervasive social practice. In the 21st century, the subject is no longer that of a disciplinary society, but rather that of a society focused on success and performance, under the violence of positivity (Han, 2016, pp. 88-94).

In contemporary society, the negative perception of those who are different is gradually being discarded over time, with a focus on promoting positivity and eliminating boundaries. While this decrease in negativity does not completely eradicate violence, it can actually strengthen it. This is because the power of positivity operates independently of power. According to Han (2016, pp. 54-56), violence can be internalized/spiritualized and made invisible through an individual's narcissistic self-reference, which severs direct contact with power and self-inflicts violence. Neoliberal power constructs strategies of governmentality through the individual because it can be effortlessly implemented through the indirect manipulation of internal violence. The topological transformation enables the subject of late modernity to become a project that is performance and success-oriented, without any coercion. The process of liberation from external violence is presented as a form of freedom. This process is directly related to neoliberal policies. It is easier for individuals to exploit themselves than for others to exploit them (Han, 2016, p. 20). Han (2016) argues that violence can arise not only from negativity but also from positivity. The demands and expectations placed on individuals from external sources can lead to internal violence, as individuals strive to prove themselves and achieve success. This internal violence is normalized by the labor exploitation imposed by external violence.

The impact of positivity's violence on society foregrounds individualization, while the era's ideologies remain in the background. The absolute focus on oneself is interpreted as the death of the other. According to Han (2022), ideology is not dead; today's ideology is the 'dataism ideology.' Information determines everything. The most important aspect of dataism is its paradoxical presentation of the death of the other. Algorithms determine and present only the most superficial and simplistic aspects. By reducing society to mere affect, they obscure the marginal other. This reinforces the dominant neoliberal ideology.

The architect-subject adapts to the violence/power of the other by internalizing it to sustain their professional existence. Power mechanisms operate as an external force of violence, developing totalitarian, directive, and manipulative strategies in decision-making processes. These strategies externalize as spatial policies in the field of architecture.

The study considers the development of neoliberalism up to the present day as significant from an onto-political perspective. This helps to define the outside/other with which architecture constantly

interacts. The marginalization of the other is explained through the analysis of governmentality as a critique of capitalism by Foucault, followed by Rouvroy and Berns' explanation of algorithmic governmentality based on the ideology of dataism (derived from Foucault's reading).

3.2.1 Governmentality and architectural space / opportunity

Foucault (2015) explains the concept of constructed subjects by referring to them as a disciplinary society, drawing on Bentham's theory of the panopticon. According to the disciplinary model manifested in the panopticon, power controls society directly through the material body, rather than through ideology (Akay, 2013). The space serves as the formative envelope of social relations. According to Tanyeli (2016), practices of othering necessitate spatial practices that enable the subject's surveillance and isolation from society.

Foucault argues that human behavior is shaped by space, and therefore spatial configurations emerging with liberating aims will be effective. However, for subjectivity to have a significant impact, it must compete within the free market. Spencer (2018) objects to this policy's inclusion in the market, as the market economy governs by managing the individual, whereas democratic systems establish social order. The distinction between capitalism and democracy is blurred by the neoliberal system, which makes the concept of freedom dependent on the market.

Alongside globalization, technological advancements have become essential as technical tools of neoliberal governmentality. Venugopal (2015) notes that optimization technologies concentrate on adapting architecture to the market and creating market-sensitive subjectivities. This situation indicates a significant development in the interaction between technology and the market within architectural practice. The impact of technology on architectural processes is now encompassed by governmentality. The use of digital modelling tools and computer-aided design allows architects to efficiently design complex structures and organize construction processes. Sustainability is also improved through project performance monitoring, energy efficiency, and resource management via big data analysis. Smart building technologies aim to optimize building functionality and improve user comfort. This interaction between technology and architecture involves architectural processes becoming part of algorithms. Therefore, the relationship between architecture and governmentality is viewed similarly to the relationship between algorithms and governmentality.

3.2.2 Algorithmic governmentality

The term 'information regime' refers to the dominance established by the decisive influence of information on economic, political, and societal processes through the use of artificial intelligence and algorithms. This differs from the disciplinary regimes analyzed by Foucault, which exploit the body and energy, as it focuses on information. The main distinction between disciplinary and information societies is the management of behavior. The acquisition of power involves access to information for psycho-political monitoring, prediction, and behavior control. The transformation of disciplinary regimes into information regimes creates open networks based on topological principles. Discontinuities are eliminated, transparency replaces closure, and communication networks replace isolation. Individuals voluntarily expose themselves with a demand for transparency. Thus, individuals create both conscious and unconscious maps. Surveillance becomes easier as more data is generated, and communication is established. The intersection of freedom and surveillance can lead to flawless domination (Han, 2022).

In the 21st century, the integration of digital technologies into every aspect of daily life is bringing about profound changes in the social, cultural, economic, and political spheres. The physical infrastructure of society is being transformed under control based on mobile devices such as smartphones, home appliances such as internet-connected smart TVs, residential areas designed according to smart home and smart city concepts, and transport systems based on internet-connected vehicles (Stiegler, 2016). The hyper-synchronization brought about by digital technologies means living in harmony with multiple machines (Şan, 2022a). Everyday life is, in a sense, becoming industrialized. With the recent rise of digital networks, a new sociality is emerging based on personal data, metadata, tags, and other tracking technologies. The technological transformation of social structures and

economic systems, and the resulting understanding of governmentality, is referred to as 'algorithmic governmentality' (Berns & Rouvroy, 2013). By analyzing the functioning of algorithmic governmentality, Berns and Rouvroy concretize a new digital reality regime that focuses on outcomes and potentials without the need for material reality within automated systems that rely on big data (Rouvroy, 2011).

Anderson (2008) highlights a shift towards a science based on correlation rather than hypothesis testing and model-based understanding in the era of algorithmic governmentality. Rather than developing cause-and-effect relationships within the framework of theoretical knowledge, it is considered sufficient to analyze the relationship between two variables and convert them into data, i.e. to be in correlation. This process is object-oriented because it is independent of reasoning. The simplest example is the way Google Translate works. None of the languages defined in the system are analyzed in terms of semantics and grammar. The data collection method is based on the statistical properties of the language. Therefore, causal relationships are not taken into account (Şan, 2022a).

The main strategy of algorithmic governmentality is to treat the masses merely as a resource through algorithmic machines, initially without the aim of deceiving or neutralizing them (Stiegler, 2016). It then takes, transcribes, and manipulates the physical world, its inhabitants, their tragedies, behaviors, actions, choices, preferences, and attitudes. However, algorithm-based management appears fundamentally benign and objective. It relies on the existing digital reality without any subjective, individual, or social will. It observes it from the outside by distancing itself from subjects and events. This characteristic of algorithm-based governmentality gives rise to the notion of flawless governance (Berns & Rouvroy, 2013). Delegating decision-making power to machines renders the oppressive dimension invisible (Şan, 2022a). The processes of classifying and managing the subject no longer depend on the will of power. The subject itself becomes less distinct or less effective within these automated processes. This situation represents a transformation towards a kind of 'machinic objectivity' (Rouvroy & Stiegler, 2016).

The main strategy of algorithmic governmentality is to treat masses merely as a resource through algorithmic machines, initially without the aim of deceiving or neutralizing them (Stiegler, 2016). Subsequently, it takes the physical world, its inhabitants, their tragedies, behaviors, actions, choices, preferences, and attitudes, transcribes and manipulates them. However, algorithm-based management appears fundamentally harmless and objective. It relies on the existing digital reality without displaying any subjective, individual, or societal will. It observes them from the outside by distancing itself from subjects and events. This characteristic of algorithm-based governmentality brings about a notion of flawless governance (Berns & Rouvroy, 2013). Delegating decision-making power to machines makes the oppressive dimension invisible (Şan, 2022a). The processes of classifying and managing the subject are no longer dependent on the will of power. The subject itself becomes less distinct or less effective within these automated processes. This situation represents a transformation towards a kind of 'machinic objectivity' (Rouvroy & Stiegler, 2016).

3.3. Internalization

The process of transitioning from sensibility, which is defined as the dynamic genesis in the movement of thought in Deleuze's philosophy, to understanding involves internalizing the other (that which is in flux) (refer to Sections 1.1 and 1.2). In summary, the synthesis of thought, along with the production of meaning, describes the external passage. The process leading up to the emergence of thought in understanding consists of a series of passive syntheses. The first passive synthesis consolidates the material plane within its complex and continuous flux. The second passive synthesis records this multiplicity in memory, consolidating it for future use. The third passive synthesis is the recognition synthesis, which produces a passive self. In this stage, meaning is synthesized, and 'thought' is discovered, reaching a new dimension distinct from the material flux in which it resides (Hughes, 2012). Stiegler (2012) argues that the subject of thought that arises through internalization is 'technique', which is also subject to internalization. The multiplicity stored in memory by the second passive synthesis is shaped by the tertiary retentions, which existed much earlier and form the technical world. In addition to externalizing what is recorded in memory by the first and second passive syntheses as

thought, these tertiary retentions (technical world) also externalize in technical memory. Therefore, Stiegler argues that technique is the subject of thought, not its object. It is a founding element (prosthesis) that creates humans as humans (Stiegler, 1998).

The concept of 'techne' encompasses all activities related to making, producing, and creating, in the sense of craftsmanship and skill. It derives from the old Greek term 'tekhne' and includes both the science and craft aspects. Architectural creation is considered a technical matter that requires the integration of thought and action, similar to the fields of mathematics, mechanics, electricity, and geology, which require both knowledge and construction skills to bring a building to life (Haşlakoğlu, 2020). The transformation of technique reflects a crisis in economic, social, and political contexts, forming the foundation of contemporary philosophical discourse. The distinction between 'techne' and 'episteme' poses a problem. In Western philosophy, technique is often treated as an object of thought that is separate from thought itself. Knowledge is believed to come from within and is therefore not influenced by external factors such as technique. However, contemporary philosophy views technique as a constitutive element of thought, language, and episteme. According to Stiegler (1998), it is uncertain who or what constitutes the subject or object, and humans cannot be viewed as solely producing technology, nor can technology be viewed as solely produced objects.

Leroi-Gourhan argues that technique is the primary prosthesis of humans, shaping intergenerational material culture and determining learning activities (Leroi-Gourhan, 1964). Stiegler builds upon Gourhan's arguments and conceptualizes technique as a prosthesis of the mind. In this context, the term 'prosthesis' does not imply something replacing an organ's function, but rather a foundational support integral to the human body. Stiegler's approach differs from that of other philosophers (Şan, 2022b). According to Stiegler, technique plays a constitutive role in human existence, and human temporality is aligned with technique. Technique serves as the foundation of the mind through its relationship with memory (Stiegler, 1998).

Stiegler (2012) develops the argument of 'tertiary retentions' based on Husserl's theory of retention and protention discussed in 'The Phenomenology of Internal Time-Consciousness'. According to Husserl, the consciousness of time can be determined by retention and protention. The primary retention is the flow of time itself and the passing present moment. The secondary retention involves the reacquisition of the past present as a memory stored in the mind. Described as a technique of remembrance, tertiary retention, as expressed by Stiegler, signifies the materialization of experience as technique and the spatialization of conscious time beyond consciousness. Tertiary retentions involve the externalization of secondary retentions through remembrance. It transforms individual time into collective time by spatialization. Stiegler (2012) argues that tertiary retentions have a significant impact on primary and secondary retentions. It is important to maintain a clear and logical structure when discussing complex concepts such as these. Technical individuation is the process of internalizing tertiary retentions, which are established in a pre-existing technical world.

Technical production involves externalizing memory, while technical individuation involves internalizing memory. With technique, mental life is externalized, and individuals then internalize the externalized knowledge. This cycle of internalization and externalization brings together both the entity creating the world and the entity coming into the world (Stiegler, 2012). The relationship established by humans with technique reveals 'epiphylogenetic memory.' Epiphylogenetic memory does not refer to genetic or somatic memory. Stiegler (1998) defines it as the memory of all externalized technical objects resulting from the internalization of tertiary retentions. Therefore, humans begin to think with technical memory, surpassing genetic limitations and inheriting an unexperienced past.

3.4. Externalization

Individuals externalize their experience of the world, socialize, and establish their symbolic plane through their relationship with technology. Stiegler (2012) examines the processes of grammatization, arguing that humans and technology co-constitute each other. Grammes serve as the particles of tertiary retentions, externalizing memory. This externalization of memory results in the separation of knowledge from the mind. The externalization of knowledge through memory has taken on a new

dimension with digital networks. As a result, individuals may feel powerless and proletarianized due to the overwhelming power and potential of digital networks. This is because memory is now dependent on machines and industrial mnemonic devices. The issue of externalizing memory can be traced back to the invention of alphabetic writing, which facilitated the transferability of information. The act of transforming thoughts into spoken or written language is an instance of grammatization as it disrupts the flow of time with a break in space.

Technology has brought about hyper-synchronization, which occurs when society is simultaneously attracted to and focused on industrial objects. Memory techniques are synchronized through tertiary retentions, which integrate perception with memory through recollection. Algorithmic governance manipulates collective orientations by controlling automated expectations, feeding on this synchronization (Şan, 2022b). The cultural issue has become increasingly central to the economy, industry, and politics. This is due to the production of the sensory society by technologies, which Deleuze refers to as 'societies of control'. The primary international economic struggle now takes place in this domain. Stiegler (2014) argues that society's interaction with symbols through technology and media can lead to symbolic misery. In societies of control, the functional circulation of energies produces consumers by controlling bodies and their effects, continually producing the new. This leads to the loss of symbolic participation. Symbols are both products of intellectual life, such as concepts, ideas, theorems, and knowledge, and emotional life, such as arts, skills, customs, and traditions. Stiegler argues that the current widespread loss of individualization could lead to a symbolic collapse or a collapse of desire.

3.4.1. Reactions of architecture

The architect's reactions are considered responses resulting from cognitive proletarianization. This is where the architect-subject recognizes their inability to alter the other or the external realm, which they engage with continually while maintaining their professional practices. This recognition arises from the externalization of their knowledge of construction into technical objects. Because she/he has externalized his knowledge about practicing in the technical object. According to the architect-subject, as they affirm and develop the external world, particularly the technical world formed by tertiary retentions, they simultaneously begin to fall under the control of the technical framework they have established. Neoliberal policies commodify architectural products and processes, drawing architects into the cycle of capital and requiring them to monitor contemporary technical changes. On the other hand, technological advancements may alleviate certain practical challenges, but they also continuously drive towards the creation of the new and different.

The computer has evolved beyond its traditional role as a tool for statistical analyses, mathematical modeling, and quantitative measurements in pre-designed buildings. With the advancement of digital technologies, it has become a technical object that translates the language of design into algorithms, thereby extending architecture beyond its conventional boundaries. While this transformation expedites and streamlines architectural processes, it also shifts the creative agency from the architect-subject to the technical object, resulting in a cognitive dependence on it. Additionally, this evolving relationship with the technical object broadens the architect-subject's perspective by fostering increased engagement with the other as a critical and cultural 'agent/actor'. Alongside the development of knowledge areas outside of architecture through digital technologies, interdisciplinary approaches are beginning to integrate into architecture. This integration necessitates the formation of collective intelligence through the design process, which accelerates the process (Hight & Perry, 2013). All design is the product of connection techniques, specifically interdisciplinary relationships. To ensure comprehensibility across knowledge domains in architecture, data must be presented in a way that does not require separate expertise. This is where representational methods become crucial in finding common ground. The representational domain of architecture, instead of being a mere representation of architectural thought and practice, evolves into a model of interdisciplinary knowledge (Ponzo, Stoppani & Themistokleous, 2017).

The study considers the architect's externalizations as reactions within the architectural context. These reactions are undertaken as an anti-intellectual affirmation of the other and externalized as **'anti-**

intellectual architecture'. The tesseract diagram depicts the unfolding cycle between reactions and the other (Figure 6). The cube positioned inside (internalized) is characterized by concepts related to the other, while the cube outside is defined by the reactions of the proletarianized architect. The diagram identifies the concepts within the study's framework and elaborates on them through architectural practices.

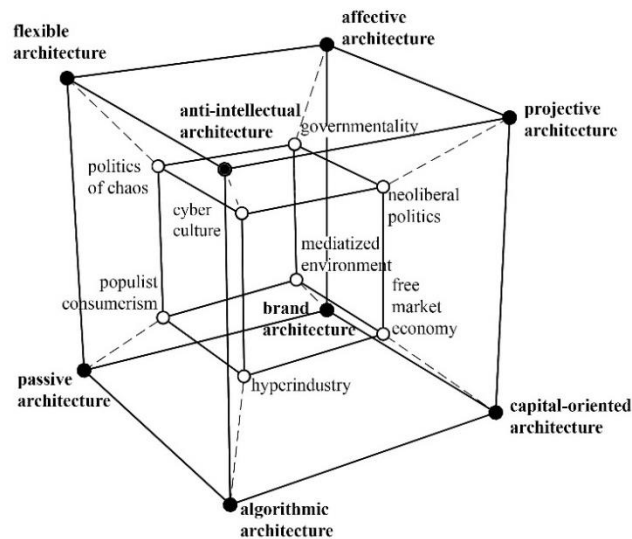


Figure 6. Expansion of the cycle between architectural reactions and the ideological other.

The tesseract diagram illustrates the surfaces that define the interactions between architectural reactions and the ideological other. The tension on each surface represents the violence/power dynamic between the associated concepts. The architect-subject is positioned on these surfaces and is influenced by the tensions on the surface through their reactions. They react to the force of the external and prefer affirmation, leaving responsibility to the other.

Commodification and brand value in architecture: According to Harvey (2015), commodification is the process by which processes, objects, and social relationships are transformed into commodities that can be bought and sold. Capitalist production relations are driven to constantly increase production quantity, potential, technique, and economic gain, making it imperative to increase consumption to maintain production continuity. To sustain demand for purchases, it is necessary to introduce variations in product quality and innovate by generating new products, techniques, fashions, and inventions. Therefore, practices such as innovation, diversification, and plurality are crucial for ensuring the sustainability of the capitalist system (Tanyeli, 2016).

When examining architecture, the process of commodification is associated with the emergence of the concept of the use value of spaces and objects. Neoliberal policies alter society's sentiments, habits, and preferences in their favor and commodify the service sector by incorporating them into the consumption chain. In the field of architecture, a component of the service sector, services are commodified, including their quality, meaning, value, and social identity. The concept of '**brand architecture**' objectifies architectural processes and products within capitalist economic relations. This includes the commodification of buildings, land, spaces, technical equipment, housing, labor, and the architect's name (Tanyeli, 2016).

The advent of digital technologies in the 1990s led to the establishment of universal communication networks and the ascendancy of multinational companies. The market created by the neoliberal economy is streamlined through branding policies. Emancipation is achieved through the subject's ability to adapt to every alternative. Therefore, the subject's preferences should be flexible. This legitimizes multiple alternatives in the new consumption market. The transformation of all aspects of life into consumer objects through branding has led to a shift in the understanding of innovation and difference in the world of architecture. This has resulted in a prioritization of popularity for the benefit of the market. In the context of the neoliberal idea of freedom, '**capital-oriented architecture**'

increases the dialogue between the architect and the client by guaranteeing capital continuity. However, this also creates recognition and power competition in order to maintain popularity. This situation gives rise to the phenomenon of branding in the context of architecture (Cestel, 2021).

In modern times, architectural processes involve concealing the constructional production. The architect's role is to express structures and concepts related to neoliberal capitalism, generate flexible formal and conceptual metaphors, and conceal capitalist production processes (Spencer, 2018). The concealment of labour in construction processes, the foregrounding of the structure's brand and aesthetic value, and the masking of difficulties and setbacks in construction and design processes are directly related to the concealment of the capitalist construction process and the commodification of labour.

Projective Architecture: Somol and Whiting refer to the strategies developed by architects to organize multiple systems as '**projective architecture**'. This strategy produces utilitarian practices through the analysis of reality, rather than positioning itself in resistance to the new world order. The term 'projective' is chosen because it refers not to a novel product, but to an approach and methodology (Somol & Whiting, 2017). While critique reflects on past arguments, projecting forward involves planning to actualize an idea. Therefore, critical architectural practice, which is both conceptual and narrative, gives way to projective practice. Projective practice is not derived from or opposed to criticism; it simply diverges from it. Therefore, it should not be considered as a critique of criticism.

Projective design acknowledges modern life and affirms it with a visionary approach. It predicts, develops aesthetic sensitivity, and transforms programs. Instead of supporting or opposing a political discourse, it exhibits a hyper-realistic attitude by remaining unresponsive to the political and theoretical. It is consciously indifferent to its system. Projective practices are therefore necessarily inspired by the ever-changing mutations of neoliberalism.

Spatial Organizations: Flexibility and Affect: The interactivity of new media allows for the simultaneous communication of multiple messages across different times and places. The rapid access to information has led to the emergence of new learning methods, innovative marketing strategies, increased political activism, changes in individual and social communication norms, diverse cultural activities, and changes in work culture due to the blurring of home-office boundaries (Oruç, 2021). In this evolving cultural milieu, neoliberalism directs individuals' focus toward capital. The physical environment must adapt to sustain various production methods. Architectural spatial arrangements serve as mediators of this reality, influencing individuals through their surroundings. Therefore, it is essential to prioritize a plurality of forms and self-organizing qualities. Contemporary architectural practice emphasizes complexity and affect to accommodate diverse relational dynamics and elicit varied effects in users. This is in line with neoliberalism's strategy to stimulate innovation in products, production methods, and needs, which finds expression in spatial flexibility within architectural spaces. These spaces are structured to facilitate uninterrupted production, aligning with neoliberal agendas. Internal contradictions are avoided, and flows are curved and organically contoured. To enhance comfort, efficiency, and overall performance, architectural forms aim to exhibit characteristics such as flexibility, fluidity, adaptability, and dynamism. This creates a '**flexible and affective architecture**' as a tool for shaping neoliberal organisational frameworks by minimising conflict, removing barriers and accepting spontaneous arrangements (Spencer, 2018).

Algorithmic Architecture: Architecture requires creativity, which is often associated with intuition and talent. In contrast, algorithmic logic involves a specific deterministic approach that prioritizes rationality, consistency, compatibility, order, and systematization. Its mechanical nature can lead to it being perceived as an anonymous and automatic procedure. Terzidis (2003) suggests that architects face challenges in algorithmic logic due to the need to balance artistic sensitivity and intuition in their practices. The designer enters the process that he or she has already formalized in his or her mind into the computer's system. The problem that this situation poses is that the designer does not benefit from the computational power of the computer. In this context, '**algorithmic architecture**' creates an alternative option that can avoid this problem (Terzidis, 2006).

Traditionally, designers own their ideas and retain full intellectual property rights to their designs on the assumption that they control them. This is not always the case with algorithmic forms. The hints or suggestions of an algorithm may be the intellectual property of the designer-programmer, but the results of these ideas, tangible or virtual representations, are not necessarily under the control of the designer. The use of multiple spatial criteria as input in architecture and the introduction of algorithm-based systems in order to rationalise decision-making processes, transfers many design stages from conceptual idea generation to structure organisation to the control of the machine. The generation of intermediate values that can represent the uncertainties between 1 and 0, especially with the 'Fuzzy Logic Systems' method that emerged in the last century, makes it possible to use artificial intelligence algorithms that can give the closest result to human intelligence (Baran Ergül, et al., 2022). In this context, the designer consciously relinquishes control to the machine, passivising and proletarianising himself. Because the dependence on the knowledge of the new technique transforms design and implementation process. Computerized processes replace hand, brain and eye coordination, the process is no longer dominated by the architect and is reduced to forms of '**passive architecture**'.

3.4.2. Actions of architecture

Tanyeli (2021) explores how architects can influence society by taking an intellectual stance. Rather than legislating or establishing laws, architects interpret the world to society. The intellectual has an interpretive and explanatory role, regulating the traffic between different fields of knowledge. This socializes and normalizes the architect's role, directing decision-making ability as an escape point. This process normalizes architecture, making it more integrated into society and less exclusive. The architect's interpretive power comes from their ability to perceive reality in a unique way. The term '**intellectual architecture**' refers to the actions and discourses of architects who transcend professional boundaries and interpret the external world without being limited by them. The primary direction of the 21st century is to move away from considering architecture solely within the field of architecture. Objectivity is key to expanding the known boundaries of architecture by responding to it both within and outside of the language of architecture.

Chavez, Walker, and Iturbe discuss the role of the intellectual architect in addressing societal issues, climate crises, political instabilities, and injustices (Chavez, et al., 2021). They argue for a new approach to an '**apolitical architecture**' that is independent of the capitalist order. Catling (2014) discusses the condemnation faced by architects when they fail to exhibit a moral stance in the context of professional ethics yet are deemed unrealistic when they do. This dilemma arises from the inability of activist discourses to find resonance in the realm of architectural action. To enhance their visibility within urban settings, architects should effectively integrate these activist ideas into their responsibilities and take initiative as actors, mediating between discourse and action.

Rouvroy (2016) highlights the use of critique and emancipation as a strategic position against oppressive and hierarchical structures. While adapting the critical tradition of the 1960s to the complexity of today is possible, finding direct solutions through this type of critique can be challenging. The intellectual/active architect can incorporate architectural techniques developed through action with the concept of freedom into their agenda (Chavez, et al., 2021). This power is attained by externalizing thoughts and putting them into action through practical implementation and constructive discourse.

This study examines how architecture engages with the other. The tesseract diagram (Figure 7) illustrates the cyclical relationship between architectural actions and the ideological other. The inner cube represents internalized concepts related to the other, while the outer cube is defined by the architect's actions as an actor. The diagram outlines the concepts identified through the analysis framework and clarified through architectural practices during the study's progression.

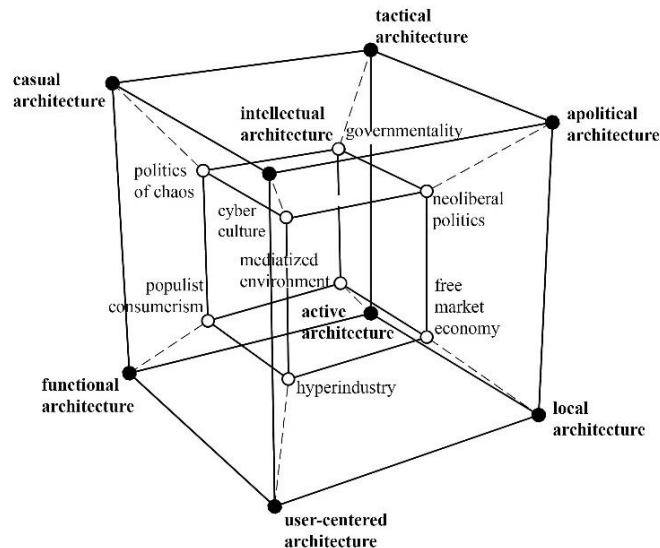


Figure 7. Expansion of the cycle between architectural actions and the ideological other.

In the tesseract diagram, surfaces are delineated that depict the interactions between reactions of architecture and the ideological other. The tension on each surface represents the violence/force between the concepts it is associated with. The architect-subject is situated on these surfaces and alters the tensions on the surface through their actions. They direct the flow and respond to the forces from the outside.

Architecture as Producer-Product: The concept of 'producer-product', introduced by Deleuze and Guattari in their 'Capitalism and Schizophrenia' series (1993), views life as a thinking process. According to Deleuze and Guattari, human actions originate from living labor within the plane of immanence rather than a plane of transcendence. Within this framework, nature and industry are not perceived as opposing forces but as interconnected entities. Contrary to common belief, nature and industry are not opposing forces, but rather synonymous. When humans and nature collaborate, they merge, and industry is no longer just a utilitarian external factor, but rather an integral part of nature. Therefore, the relationship between humans, nature, and industry is not one of conflict but rather reflects the same underlying principle of producer-product. Production is a cycle created by an internal principle (Deleuze & Guattari, 1977, pp. 1-8).

According to Tanju (2008), human makings are defined as 'production' due to their nature as cognitive actions that involve qualitative differences created by these actions. Tanju sheds light on the cognitive process and the resulting qualitative distinctions that emerge from practices within architectural contexts that eschew the notion of transcendence. The development of an idea involves creating subjectivity, where qualitative differences resulting from the production process are formed. The purpose of externalizing production is to make sense of the external world. The producer-product continually reorganizes the narrative and redefines time and space within the given construct of time-space, rather than being confined to its professional boundaries. If it adheres to the given construct of time and space, it remains within the boundaries defined by its professional limits (Tanju, 2008).

The essence of production lies in the possibility of an assemblage formed by the producer architect, the producer user, and the producer space. Production evolves without direct opposition to external forces, adapting to changing agendas and influencing them in turn. Although the architect-subject, acting as the producer-product, offers an alternative approach to creation, it remains constrained by economic factors. In response to the dynamics between architects, employers, and users enforced by neoliberalism and spatial practices, producer-product engages in critical analysis by exploiting small opportunities and employing micro-strategies in its practice. These micro-level actions serve as spatial agency, representing the active involvement of contemporary architecture. The productive architect shatters, alters and transforms the notion of fixity imposed on architecture by the outside world,

assigns a function to the space and the user experiences the function. **'User-centered and function-oriented architectures'** keep space in a state of constant construction and adapt it in such a way that it can be constantly experienced by the user.

Spatial agency as an alternative mode of making (agenda): Globalization is the fundamental driver for architecture to reinvent itself in the social, economic, and political context. It is considered a natural phenomenon that requires a shift in architectural paradigms rather than resistance. Architects find themselves constrained within the culture of acceleration fostered by neoliberalism, swept up in the rapid flow of change and exploring newfound formal possibilities. In this constantly changing landscape, architects must maintain a clear political or ethical intention. They should seize opportunities to uncover new societal potentials (Schneider & Till, 2011).

As posited by Schneider and Till, architects demonstrate 'spatial agency' as an alternative mode of making within the critical practice environment. This concept refers to architects' ability to create a space of freedom within architecture by dismantling the restrictive structures imposed by external forces (Schneider & Till, 2009). Therefore, spatial agencies go beyond the concept of space defined by modernism. The idea of 'white spaces between black lines' is too abstracted and stripped of its social context. It is therefore necessary to draw attention to the concept of **'casual and local architecture'**, which can be realised on a vital and social level and which can respond to everyday problems and enable everyday relations (Schneider & Till, 2012). Architects must make micro-interventions across human, social, political, and cultural domains, fostering **'tactical architecture'** by exploring new avenues for action.

Agency refers to the ability to act tactically, free from societal constraints. However, societal structures can also restrict individual agency, despite the potential influence of individual actions on these structures. In the inherent tension between structure and agency, spatial agencies do not align exclusively with one side. The theory of actor-network posits the coexistence and equality of human and non-human entities, serving as the foundation for spatial agency. Therefore, structure and action coexist within the same framework (Schneider & Till, 2011). Spatial agency does not have an ideal solution, but there is a persistent desire to continue questioning. Spatial agency demonstrates that architects have a choice to produce **'active architecture'** and addresses an ethical gap seen in many professions (Schneider & Till, 2012).

4. Conclusion

The prevalence of neoliberalism in the current economic landscape contrasts with capitalism's rationalization process, which excludes unpredictable and incalculable factors from everyday practices. Neoliberalism, on the other hand, aims to increase market freedom by promoting national and international competition through strategies of uncertainty, flexibility, complexity, and privatization. Concurrently, the digital revolution has initiated a shift towards a post-industrial economy centered on information manipulation. In this transition, the production, dissemination, utilization, integration, and manipulation of information assume paramount importance as economic, political, and cultural activities. Consequently, information manipulation fosters a managerial paradigm aimed at controlling the productive and creative masses. According to Stiegler (2012), the unpredictable and incomplete nature of production inherent in creative activities makes it difficult to monetize or incorporate into the system.

The decreasing effectiveness of daily life due to capital's valuation process adversely affects both the urban context and the continuity of the architectural world. The integration of technologies into social life has transformed collective space into a realm of surveillance, reducing architecture's capacity for influence and decision-making. However, the digitization of the discourse of collective intelligence also raises ethical issues. Consequently, contemporary architecture is often overshadowed by technology and culture. This can cause architectural practice to become dominated by techno-science and techno-culture.

The study conducts an onto-political analysis of the changes occurring within the architectural environment alongside neoliberalism. It is observed that neoliberal policies often take an individual-

centered, libertarian approach that embraces uncertainty. The study problematizes the need to interpret neoliberalism differently from capitalism. Deleuze's ontology provides an inherent/internal formulation that can affirm the uncertainty and complexity created by neoliberal policies by eliminating boundaries. The structure and trajectory of the study progress through Deleuze's ontology.

Deleuze presents the 'strong ontology of uncertainty' as a path capable of generating ethical and political discourses without relying on transcendent foundations. He does not define the movement of his thinking between self and other as a strong or weak ontology. This text explores how the architect's thinking, and actions are influenced by the ideological other associated with architecture. It also discusses how architects can either assimilate or transform the ideological other by producing counterstrategies. Deleuze's ontology explains this process through active and passive syntheses, which establish a genetic turn between sensibility and understanding. Passive syntheses provide a framework that integrates the past, present, and future simultaneously. The text articulates inherent thoughts by defining the limits of political and ethical concepts. Active syntheses are formative and territorializing syntheses that embody this notion. They represent processes of realization and individualization, establish links to the external world, and assign roles.

The process of active synthesis involves making a choice. Ethics are invoked in moments of crisis that cannot be resolved with already-established patterns of behavior and where the appropriate response is unknown. This study examines the turn in contemporary politics, specifically the emergence of neoliberal policies based on the affirmation of uncertainty, as a crisis. It explores the potential choices that the architect-subject faces in response to this ideological turn. This text examines the interplay between choices and the other, which are mutually influential. The violence between architecture and the ideological other is schematized within a topology, and a topological reading makes the underlying thought visible.

Defining the twentieth and twenty-first centuries requires an examination of the concept of technology. The transformation of technique alongside the machine, and the societal relations imposed by this transformation, are also influenced by governmentality strategies. With neoliberalism, thinking practices extend beyond the sociality created by the production mechanisms of the machine. Presenting political strategies as technology, rather than mediated through technology, is seen as more legitimate (Figure 8). This approach avoids the perception of manipulating individuals' freedoms as solely a political matter, instead framing it as purely technical. The use of technique is often presented as apolitical, even when it is political. Therefore, this study examines neoliberalism, defined as the ideological other, through the lens of technology.

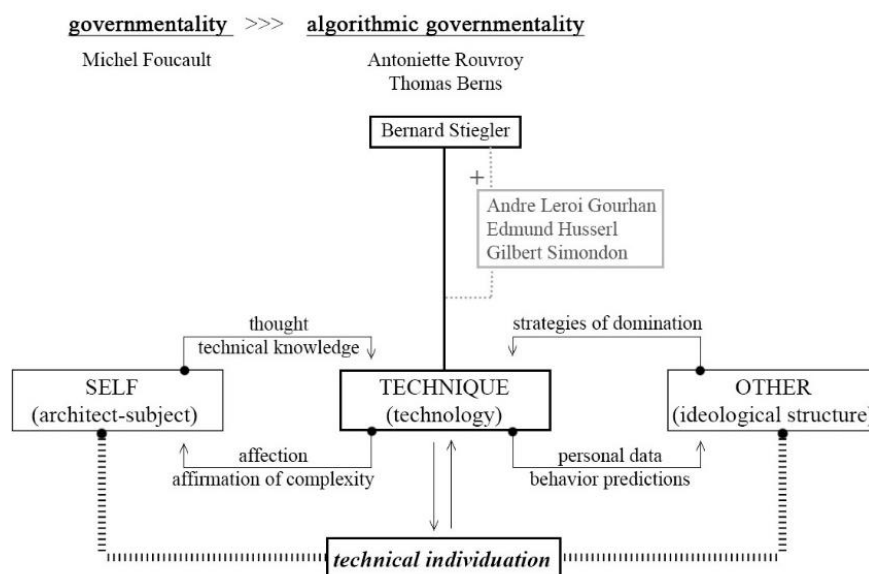


Figure 8. The relation of self, technique and other.

Stiegler (1998) argues that technique is crucial in the ontological turn. The ideological other employs technology to implement domination strategies, making itself invisible and inducing affect. Essentially, technology both internalizes and externalizes the ideological other. The tesseract diagram illustrates this process of internalization and externalization, clarifying the interactions between the architect-subject and the ideological other. The movement along the temporal axis determines the choices that the architect-subject will make within an ethical framework, influenced by the ideological other's power. The surfaces connecting self and other represent the tension between the concepts assigned to the corner points within the tesseract, which consists of two parallel cubes. This study interprets the architect-subject's choices regarding the role of technique as either the subject or object of thought as architectural actions and reactions. Furthermore, the diagram illustrates the surface expansions of the drawn topology.

The first option involves the architect accepting proletarianization by affirming the ideological structure they are in. They externalize their knowledge in the technical object by remaining within the system and surrendering it to the flow of the other. This anti-intellectual attitude results in externalizations that are considered architectural reactions within the scope of this study. The initial response involves accepting the commodification of spaces and objects, which leads to the commodification of architecture. Architectural processes ensure the continuity of capital while manipulating user emotions and preferences in favor of the system. In this context, the media can be an effective tool, integrated into the architectural environment to make user preferences visible and incorporate architectural processes into popular consumer culture. Consequently, architects strive to gain visibility in the media, reshaping their professional practice and identity through the narrative of being likable. The second reaction involves accepting the rapid flow of the new world order as inevitable. As an architect, it is necessary to respond to the demands of capital within the neoliberal order. This requires drawing inspiration from the variables of neoliberalism, developing a formal strategy while remaining loyal to the field of action, and offering a forward-looking, project-oriented architecture. Additionally, spatial organization must adapt to the complexity and plurality of the age. It is important to maintain objectivity and avoid biased language. Space is designed with strategies that allow for multiple functions, facilitating various relationships. User perception is diversified, and space undergoes continuous reproduction. The fourth reaction analyses algorithmic architectures that transfer traditional craftsmanship knowledge to algorithms, enabling the creation of an infinite number of functions. The architect limits their creativity to the machine's standards and aligns the representational language with that of the machine, resulting in a decrease in their competence in design processes and rendering themselves passive.

In the second choice, the architect transitions into a technical individual, reclaiming the knowledge they had previously externalized in technical objects. The intellectual/active and active approaches of the architect are interpreted as actions of architecture within the scope of the study. According to Deleuze, activity is linked to creativity, violating the boundaries of the other by operating within its inherentness. The architect, as a producer-product, transcends professional boundaries by interpreting the other beyond proletarianization and actively integrating it into their practice. The crucial point is for intellectual discourse to find its practical counterpart. In this context, the alternative modes of production they generate are interpreted as spatial agencies through the exploration of new possibilities for action.

When comparing intellectual and anti-intellectual architecture, many architects view architecture as a service for monetary gain, reducing it to a form of economic realism. In the twenty-first century, architectural practices are deeply intertwined with the economy, and architects must contend with economic constraints. When faced with this situation, it is unrealistic to expect the architect to not prioritize earning money. However, the architect should still consider ways to resist this prevailing condition. Historically, the intellectual profile was characterized by individuals who articulated principles and laws aimed at improving the world and possessed comprehensive knowledge. However, in modern times, this form of intellectualism seems to have shifted towards an intellectual architect profile that is capable of interpreting, normalizing, and socializing the world, albeit with limited

opportunities for large-scale intervention. In this scenario, architects must undergo socialization, perceive realities in new ways, and establish direct connections with the ideological other.

However, in today's technologically-driven environment, the architect-subject primarily engages with themselves, and as a result, the other becomes increasingly obscured. The violence of positivity as a neoliberal strategy is precisely this; it blinds the architect-subject to the other, redirecting them back to themselves. Even within this schizophrenic cycle, the intellectual/active architect, while sustaining their professional existence, is always in pursuit of the other. What will ultimately rescue them from being constantly engulfed in themselves (self-collapse) is this desire for the other. Responding to the other is the only way they can break free from their habits and reinvent themselves by reconnecting with their true essence.

Upon revisiting the tesseract diagram, each surface expansion represents the tactical transformation of tension between related concepts. The architect-subject acquires spatio-temporal coordinates on the surface of the cubic complex, which constantly folds over itself in the movement of temporal motion. At this point, the tesseract performs the lowest-dimensional motion possible for a Möbius strip. According to Deleuze (2015, pp. 27-28), the folds of the topology are formed by the continuous transformation of reverse and straight forms. The hyper-architect, diagrammatized within these coordinates, delineates the surface of the Möbius strip. They concurrently perceive the interior and exterior, the reverse and the obverse, the past and the future, the self and the other, from their perspective during the tesseract's movement (Figure 9). The agency of the architect involves executing actions while under the influence of external ideologies and disrupting this cycle to devise strategies, make the external influences visible, and acquire the ability to act by mitigating their aggression.

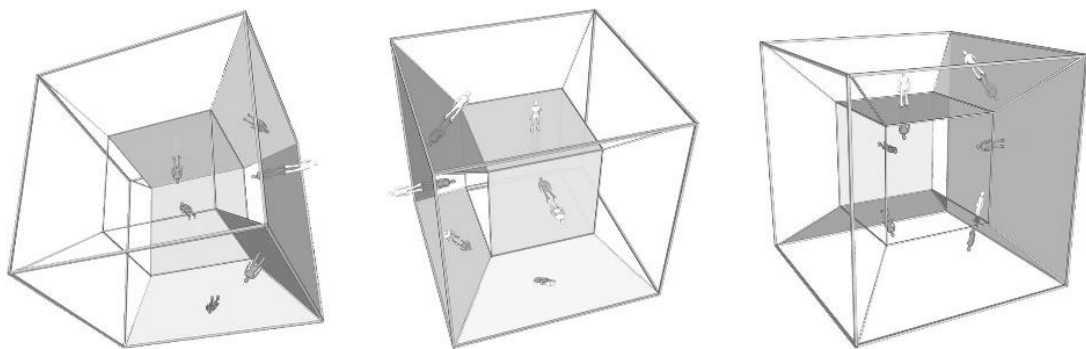


Figure 9: Möbius surface where the architect-subject (hyper-architect) simultaneously sees self and other at point A: $x(t), y(t), z(t), w(t)$.

The study acknowledges the limitations of the tesseract's hypercube series as a basic manifestation and focuses on the architect's position regarding topology and surface. The relationship between self and other in the topology cannot be determined by the architect's active and reactive architectures, which are created through dynamic and static genesis (the strong ontology of uncertainty). The violence/power of continuous 'formlessness' in motion only becomes apparent upon actualization at any given moment (state). The topology, which is constantly experiencing disruption, change, and transformation due to the potency and dynamism of violence/power, embodies the form of (non-existent) relationality between self and other, shaping itself as unformed, unstratified, unorganized, and continuously self-recreating (Figure 10).

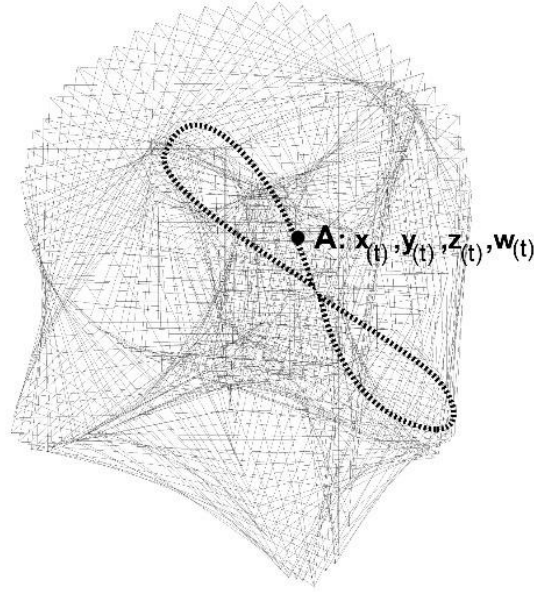


Figure 10. The coincidental position of the hyper-architect individuating by acquiring spatio-temporal coordinates ($A:x(t), y(t), z(t), w(t)$) at a coincidental moment.

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References

- Akay, A. (2013). Foucault ve Biyopolitika. In Z. Direk & R. Güremen (Eds.), *Çağdaş Fransız Düşüncesi* (pp. 76–87). İstanbul: Minör.
- Anderson, C. (2008). The End of Theory: The Data Deluge Makes the Scientific Method Obsolete. *Wired Magazine*.
- Baran Ergül, D., Varol Malkoçoğlu, A. B. & Acun Özgünler, S. (2022). Use of artificial intelligence based fuzzy logic systems in architectural design decision making processes. *Journal of Architectural Sciences and Applications*, 7 (2), 878- 899. Online ISSN: 2548-0170. doi:<https://doi.org/10.30785/mbud.1117910>.
- Berns, T., & Rouvroy, A. (2013). Gouvernamentalité algorithmique et perspectives d'émancipation. *Réseaux*, n° 177(1), 163–196. Online ISSN: 0751-7971. doi: 10.3917/res.177.0163. Access Address (08.04.2024): <https://www.cairn.info/revue-reseaux-2013-1-page-163.htm?ref=doi>
- Catling, C. S. (2014). Damned if You Do, Damned if You Don't: What is the Moral Duty of the Architect? *The Architectural Review*.
- Cestel, T. (2021). *Marka Mimarlığın Kökenleri*. İstanbul: YEM.
- Chavez, A., Iturbe, E. & Walker, E. (2021). Agency in Architecture. In E. Fang (Ed.), *Agency in Architecture*. Columbia GSAPP.
- Deleuze, G. (2015). *Anlamın Mantığı* (H. Yücefer, Trans.). İstanbul: Norgunk.

- Deleuze, G. (2017). *Fark ve Tekrar* (E. Koyuncu & B. Yalim, Eds.). İstanbul: Norgunk.
- Deleuze, G., & Guattari, F. (1977). *Anti-Oedipus: Capitalism and Schizophrenia*. University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1993). *Kapitalizm ve Şizofreni 2: Bin Yayla, Kapma Aygıtı* (A. Akay, , Trans.). İstanbul: Bağlam.
- Deleuze, G., & Guattari, F. (2001). *Felsefe Nedir* (T. Ilgaz, Trans.). İstanbul: Yapı Kredi.
- Direk, Z. (2021). *Çağdaş KıtaFelsefesi: Bergson'dan Derrida'ya*. Ankara: Fol.
- Foucault, M. (2015). *Biyopoltikanın Doğuşu, College de France Dersleri (1978-1979)* (A. Tayla, Trans.). İstanbul Bilgi Üniversitesi Yayınları.
- Hammack, R. H., & Kainen, P. C. (2021). A New View of Hypercube Genus. *The American Mathematical Monthly*, 128(4), 352–359. doi: doi.org/10.1080/00029890.2020.1867472. Access Address (08.04.2024):<https://www.tandfonline.com/doi/full/10.1080/00029890.2020.1867472?scroll=top&needAccess=true>
- Han, B.-C. (2016). *Şiddetin Topolojisi* (D. Zaptçioğlu, Trans.). İstanbul: Metis.
- Han, B.-C. (2022). *Enfokrazi: Dijitalleşme ve Demokrasinin Krizi* (M. Özdemir, Trans.). İstanbul: Ketebe.
- Harvey, D. (2015). *Neoliberalizmin Kısa Tarihi* (A. Onacak, Trans.; 2nd ed.). İstanbul: Sel.
- Haşlakoğlu, O. (2020). *Sanat ve Felsefe Söyleşisi*. In Bursa Düşünce Akademisi. Access Address (08.04.2024): <https://www.youtube.com/watch?v=k14c20Ap9fE&t=2527>
- Hight, C., & Perry, C. (2013). Introduction to Collective Intelligence in Design. In M. Carpo (Ed.), *The Digital Turn in Architecture 1992–2012* (pp. 188–200). John Wiley & Sons Ltd.
- Hughes, J. (2012). *Dleuze'den Sonra Felsefe* (F. Ege, Trans.). Ankara: Bilim ve Sosyalizm.
- Leroi-Gourhan, A. (1964). *Le Geste Et la parole: Technique et Langage* (22nd ed.). Albin Michel.
- Oruç, M. S. (2021). *Post-Truth Durum: Soyal Medya Çağında Bilgi ve Doğruluk*. İstanbul: Mahya.
- Öner, Y. (2019). Şiddetin Topolojisi, yazar Byung-Chul Han. *Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi*, 47, 605–615. Online ISSN: 2587-1854. doi: <https://doi.org/10.17120/omuifd.610327>. Access Address (08.04.2024): <https://dergipark.org.tr/pub/omuifd/issue/50704/610327>
- Ponzo, G., Stoppani, T. & Themistokleous, G. (2017). *This Thing Called Theory*. Ponzo, G., Stoppani, T. & Themistokleous, G. (Ed.), *This Thing Called Theory içinde* (ss. 1-6). New York: Routledge. Access Address (20.03.2024): www.ahra-architecture.org
- Rouvroy, A. (2011). *Technology, virtuality, and utopia*. In M. Hildebrandt & A. Rouvroy (Eds.), *Law, Human Agency, and Autonomic Computing*. Routledge.
- Rouvroy, A. & Stiegler, B. (2016). *The Digital Regime of Truth: From the Algorithmic Governmentality to a New Rule of Law*. *La Deleuziana – Online Journal of Philosophy*.
- Schneider, T., & Till, J. (2009). *Beyond Discourse: Notes on Spatial Agency*. *Footprint*, 97–111.
- Schneider, T. & Till, J. (2011). *Spatial Agency: other Ways Of Doing Architecture*. Routledge.
- Schneider, T. & Till, J. (2012). *Invisible agency*. *Architectural Design*, 82(4), 38–43. doi: 10.1002/ad.1426. Access Address (08.04.2024): https://www.researchgate.net/publication/260745328_Invisible_Agency
- Somol, R., & Whiting, S. (2017). *Doppler Etkisi ve Modernizmin Öteki Ruh Halleri Üzerine Düşünceler*. In A. K. Sykes (Ed.), *Yeni Bir Gündem inşa Etmek, Mimarlık Kuramı 1993-2009* (pp. 175–188). Küre Yayınları.

- Spencer, D. (2018). Neoliberalizmin Mimarlığı, Çağdaş Mimarlığın Denetim ve İtaat Aracına Dönüşme Süreci (A. Terzi, Trans.). İstanbul: İletişim.
- Stiegler, B. (1998). Technics and Time, 1: The Fault of Epimetheus (R. Beardsworth & G. Collins, Eds.). Stanford University Press.
- Stiegler, B. (2012). Politik Ekonominin Yeni Bir Eleştirisi İçin (E. Koytak, , Trans.). İstanbul: Monokl.
- Stiegler, B. (2014). Symbolic Misery, Volume:1, The Hyper-industrial Epoch (B. Norman, Ed.; Vol. 1). Polity Press.
- Stiegler, B. (2016). Automatic Society, Volume 1: The Future of Work (D. Ross, Ed.). Polity Press.
- Şan, E. (2022a). Bernard Stiegler'in Teknoloji Felsefesi Problemleri: Algoritmik Yönetimsellik ve Bilişsel Proleterleşme. *ViraVerita E-Dergi*, 15, 105–135. Online ISSN: 2149-3081. doi: <https://doi.org/10.47124/viraverita.1103061>. Access Address (08.04.2024): <https://dergipark.org.tr/pub/viraverita/issue/70302/1103061>
- Şan, E. (2022b). Felsefe Seminerleri: Düşünmek Ne Yapar? In Akbank Sanat. youtube (erişim linki: <https://www.youtube.com/watch?v=kKBBeu2tPjw>).
- Tanju, B. (2008). Zaman-Mekân ve Mimarlıklar. In A. Şentürer, Ş. Ural, Ö. Berber, & F. U. Sönmez (Eds.), Zaman Mekân (pp. 168–185). YEM Yayınları.
- Tanyeli, U. (2016). Yıkarak Yapmak: Anarşist Bir Mimarlık Kuramı İçin Altlık. İstanbul: Metis.
- Tanyeli, U. (2021). Bugünkü Mimarlık Ortamı: Entelektüalizm ve Antientelektüalizm. Dokuz Eylül Üniversitesi Mimarlık Fakültesi. <https://www.youtube.com/watch?v=swjgYyBYFlg>
- Terzidis, K. (2003). Expressive Form: A Conceptual Approach to Computational Design. Spon Press.
- Terzidis, K. (2006). Algorithmic Architecture (1st ed.). Elsevier.
- Venugopal, R. (2015). Neoliberalism as concept. *Economy and Society*, 44(2), 165–187. Online ISSN: 0308-5147. doi: <https://doi.org/10.1080/03085147.2015.1013356>. Access Address (08.04.2024):<https://www.tandfonline.com/doi/citedby/10.1080/03085147.2015.1013356?scroll=top&needAccess=true>
- Widder, N. (2012). Deleuze'den Sonra Siyaset Teorisi (F. Ege, Trans.). Ankara: Bilim ve Sosyalizm.

