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The Role of Aporia in the Production and Reading of Architectural Texts

دور الأبوريا في إنتاج وقراءة النص المعماري

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Text reading.

ABSTRACT

The concept of Aporia has been explored from various perspectives and epistemological frameworks in critical and rhetorical studies, particularly in analyzing and theorizing architectural texts. This research delves into Aporia and its related aspects across various fields of knowledge, examining how it can be employed as an intellectual framework for both producing and interpreting architectural texts. It is closely tied to the concept of the creative text and its perception through a series of semiotic processes aimed at understanding and interpreting meanings, enhancing knowledge, and uncovering latent meanings within the text. The research adopts a qualitative, descriptive, and analytical methodology involving the collection and analysis of data from previous studies to build a theoretical framework and apply it to selected architectural works as practical case studies. The study concludes that Aporia can be understood as an active intellectual system governing the text and its various levels through the utilization of mechanisms, strategies, and elements employed by both the designer and the audience, ultimately achieving compatibility in architecture.

الكلمات المفتاحية

الممارسة المعمارية، الأبوريا، إنتاج
النص، قراءة النص.

الملخص

تعددت الرؤى والمنطلقات المعرفية حول مفهوم الأبوريا في الدراسات النقدية والبلاغية، وكيفية تعاملها مع النصوص المعمارية تحليلاً وتنظيراً، إذ طرح البحث مفهوم الأبوريا والجوانب المرتبطة بها في الحقول المعرفية المتنوعة وكيفية توظيفها كمنظومة معرفية فكرية بإمكانها إنتاج وقراءة النص المعماري، ارتبطت بمفهوم النص الإبداعي وإدراكه ضمن سلسلة من المتواليات الدلالية المرتبطة بفهم المعاني وتأويلها، بهدف تعزيز المعرفة والكشف عن الدلالات الكامنة في النص، اعتمد البحث منهجاً نوعياً، وصفيًا تحليلياً تمثل بجمع البيانات وتحليلها من دراسات سابقة لبناء الإطار النظري وتطبيقه على بعض الأعمال المعمارية كدراسة عملية في البحث، توصل البحث إلى تمثيل الأبوريا كمنظومة فكرية فاعلة تحكم النص ومستوياته عبر استثمار آليات واستراتيجيات وعناصر متبناه من قبل المصمم والمتلقي والتي تحقق بدورها تحقيق التوافقية في العمارة.

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1. Introduction:

Architecture is a creative text that generates various architectural forms, comprising physical components representing its tangible presence and non-physical elements embodying the hidden aspects of the text, reflecting its creative ideas and significance. It emerges through its interaction with other texts that may intersect with it, thus becoming a space for intersections with other texts (Al-Yousif et al., 2019, p120). Numerous texts have emerged with infinite connotations, varying and converging across different fields of knowledge (Durmuset et al., 2017). It involves uncertainties representing a set of contradictions and paradoxes that constitute the text (Al-Zein, 2008, P 227).

To achieve the research goal represented by (The role of Aporia as an epistemological system capable of producing and interpreting architectural texts according to a philosophical framework that endows the text with creativity), the following steps were adopted:

- Revealing the concept of Aporia and its associated aspects across various fields of knowledge, followed by an exploration of its action and the levels at which it operates.
- Applying the theoretical framework indicators to selected global projects that have gained significant recognition in poststructuralist architecture, followed by developing a conceptual model aligned with the research objective, leading to results, conclusions, and recommendations.

Definitions of Aporia vary across studies due to its inherent ambiguity and connection to both intellectual and practical dimensions. Perspectives on the concept of Aporia differ depending on the theoretical frameworks employed to acquire knowledge. These perspectives will be categorized as a fundamental step in clarifying the concept and building a comprehensive knowledge base for the research. The term 'aporia' is derived from the Ancient Greek (ἀπορία), meaning a lack of passage or a dead end. In English, 'aporia' is defined by (Merriam-Webster (as a state of doubt, a logical impasse, or a contradiction. (Merriam-Webster). Cristina defined Aporia as a rhetorical device that involves questioning the very claim it seeks to present, thereby revealing the internal contradiction within the text. It is used in speeches to manipulate the audience's thinking and to convince them of a truth derived from textual evidence, presenting a paradox or contradiction in the meaning of the text (González, 2009, p. 99–100). (Derrida) described it as a set of textual paradoxes that engage with difference and its effects, addressing blind spots within the text, which exhibit deconstructive characteristics: the text deconstructs itself or undermines its rhetorical foundations (Rythoven, 2019). (Rahman) defined Aporia as a creative force embodied in both the artist and their art, engaging with an endlessly open text or artwork (Rahman, 2011). (Sears) characterized it as a state of confusion that arises when prior assumptions are challenged, leading to new understandings that stimulate progress. This occurs with the emergence of 'epistemic jolts' that enable researchers to remove contextual constraints and shed light on more advanced concepts (Sears, 2016, pp. 2–3). Anani defined Aporia in theatre as a concept used by critics of theatrical semiotics when areas of anxiety or uncertainty arise, referring to the gaps accompanying texts that require emotional or psychological movement to bridge those gaps (Anani, 2003, p. 172).

The concept of Aporia has evolved through the engagement of philosophers and thinkers applied in various contexts. Aporia originated in Ancient Greek philosophy, where Socrates used it as part of his philosophical method, serving as a tool for achieving understanding and self-awareness through dialectical dialogue. Aristotle, on the other hand, viewed it as a mental state arising from the equality of opposing arguments (Kosti, 2018, p. 138). In modern times, the concept evolved through Descartes' method of skepticism, which is seen as a development of Aporia, as he began by doubting everything to reach certainty. Kant further developed the idea of Aporia through his critique of reason. In postmodern thought, it became a means of questioning certain knowledge (Gadamer et al., 2006), functioning as a methodological tool that advances knowledge verification. It also played a role in contemporary rhetoric (poststructuralist philosophy), such as in Derrida's approach, where Aporia was used to analyze and deconstruct texts and concepts, revealing the plurality of meanings and the impossibility of arriving at a final interpretation. Hermeneutics also employed Aporia in textual interpretation, asserting that every interpretation can lead to new and multiple interpretations, creating a perpetual state of questioning and reflection. (Derrida, 1967).

2. The action of Aporia:

Aporia interacts with underlying assumptions of knowledge, invoking reason in the formulation of judgments and understanding of facts, relying on a rational intellectual pathway. This process precedes thought (the mental state). It occurs when cognitive bias influences judgment, imposing a coherent, systematic framework that necessitates the analysis of a series of contradictions and oppositions that constitute the text (Karamanolis et al., 2017, p. 16). This is achieved by prioritizing the breaking of the weakest links, relying on rational arguments, and restoring coherence. Christof Rapp pointed out the relationship between dialectics and Aporia, considering Aporia to be an essential part of the dialectical process, while dialectics provides the boundaries for engaging with Aporia. He defined the dialectical problem as a directed conjecture toward truth and knowledge that necessitates the existence of hypotheses for its realization.

In contrast, Aporia embodies the characteristics of this problem and encompasses all the oppositions it carries (Karamanolis et al., 2017, p. 135). Consequently, dialectics enables Aporia to arrive at the resolution of puzzles and to recognize how a particular enigma precisely becomes the source of Aporia, which belongs to a significant dialectical capacity. Thus, Aporia is resolved through dialectical inquiry (Politis, 2006), as shown in Figure (1).

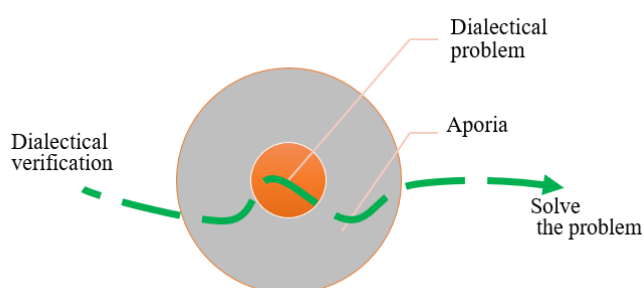


Figure 1. Aporia and its relationship with dialectics (Source: Authors).

Derrida indicated that Aporia relies on the philosophy of the transcendental signifier, employing principles of relation and difference based on the concept of the other as a fundamental factor in deconstructing texts. Its significance lies in forming the transcendental structure (Possibility and conditions of impossibility) and serving as a driving force for deconstructive thinking, termed as "organizational idea," through the application of the principle of self-reference. This principle suggests that the meanings of the text do not derive directly from independent external references but depend on a network of internal relations within the text itself across multiple contexts in an infinite process of semantic sequences. Here, the task of Aporia evolves from complexity and difficulty to impossibility, eventually leading to transcendent thought that guides conscious thought to deeper levels within ourselves (Ilyina, 2019, p. 5–7).

3. Aporia and Architecture:

Aporia represents a fundamental concept in architectural theory, with significant implications for architectural design practices. It exists at both the conceptual and practical levels, aiming to explore the possibility of resolving contradictions and inconsistencies through dialectical investigation, regarding them as puzzles surrounding the solution to the research problem. Its property is the attribute of coexistence between two parties (Kosti, 2022, p3-9). It seeks to uncover the truth and existence of architecture, beginning with the intellectual and research process, continuing through the design phase, and culminating in the final architectural product, accompanied by a network of questions, proposals, doubts, and narrative multiplicity, ultimately leading to a result as close to certainty as possible (Al-Yousif et al., 2018.p2069).

Aporia emerged intellectually in modern architecture through the adoption of explicit forms that pursued honesty in architecture (acceptance of the possible) and the potential to bring architectural designs into existence by being the concept of the different from the perspective of the design process (Al-Yousif et al., 2015, p581). Then, there was a shift in intellectual stance regarding architecture in the postmodern

era, characterized by semiotic manipulation and the prevalence of skepticism in the outcomes (Christopher, 2016, p113-114).

Following postmodernism came deconstructionism, which relied on absolute doubt and rebellion against all previous traditions, rejecting the previous reading method and advocating for the reader's unrestricted interpretation of the text as they please. Thus, the self-emerged in interpreting and relativizing every text and its role in constructing meaning. Aporia became the pivotal point from which familiar concepts diverged and deviated in meaning. As Derrida mentioned, any meaning of a text arises through the erasure of other possible meanings, which are themselves only deferred for potential activation in other contexts (Durmus et al., 2011, 1588). Figure (2) illustrates the intellectual foundations of Aporia according to architectural movements, which are associated with the understanding and verification of truths through a distinct intellectual system for each stage.

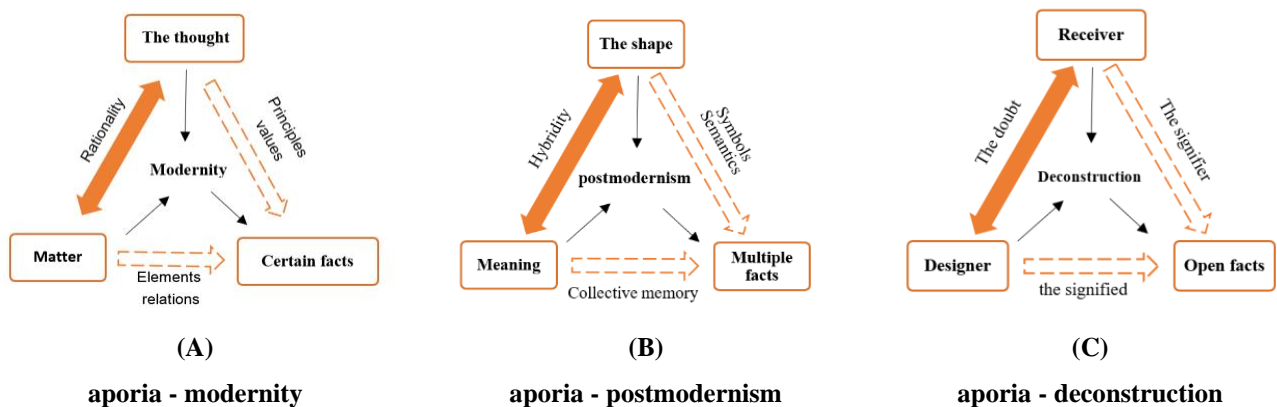


Figure 2. Aporia and the intellectual transformations of different architectures (Source: Authors).

Through a collection of architectural theses, we will attempt to explore the role of Aporia in architecture, whether directly or implicitly referenced. This will allow us to identify its manifestations, elucidate its concepts, and delineate the boundaries of its realization in architectural practice:

- Robert Venturi pointed out the necessity of understanding the existence and nature of architecture through the paradoxes and complexities associated with it, whether at the compositional or semantic level (Venturi, 2002).
- Korydon indicated that Aporia is implicitly embodied in architecture by posing several intellectual questions aimed at understanding the various pathways of architectural thought today and throughout history and activating the role of dialogue in architecture, linked to the concept of dialectics as an organizational structure adopting three parts (thesis, antithesis, and synthesis). The thesis represents the original theory or idea, the antithesis opposes the thesis, and the synthesis attempts to reconcile or transform the two former parts. This is done through flexible thinking capable of analysis and inference (intellectual flexibility) (Smith et al., 2013, p28).
- Tschumi pointed out that architecture is inherently contradictory, as architectural projects begin with a list of problems, being the cause of architecture, and end with a built form, being the effect of architecture. Tschumi allows the reader to navigate between the contradictions and complementary concepts deliberately juxtaposed, resulting in multiple meanings. Through text, images, and their independent arrangements, Tschumi aims to maintain contradictions and paradoxes within a dynamic framework to create a new relationship of difference, reciprocity, and conflict, thereby enhancing the inherent contradiction in space and architecture (Brown, 2014, p4). He also referred to the concept of intertextuality, where texts interrelate with each other as parts narrating sequential events termed "CINNEGRAMS" and the use of contextually opposed forms with multiple connotations (Francis et al., 2011, p38).
- Castillejos referred to the concept of Aporia in architecture and its impact on the urban context, specifically how architectural elements can create a state of confusion or apparent contradiction that leads to deep thought or reflection. He argued that architecture is full of aporias on various levels, allowing the observer to analyze and judge situations. Its purpose is to obscure and disguise the truth of architecture, highlighting its latent symbolic powers by creating multiple masks that define

architecture (concealing or transforming the functions and meanings of its constituent elements). These disguises employ several strategies, including the physical concealment of the architectural product, resulting in invisible architecture, camouflaging the product within nature, or presenting it as a promotional canvas (Castillejos, 2014).

- Al-Majdi and Al-Saadawi indicated the Possibility of text transitioning from one context to another and at different times, employing production and shaping strategies that achieve variation and contrast as critical methods, such as formal transformations, displacement, intersection, and others (Al-Majidi et al., 2018, p2211).
- Kostic clarified that Aporia has an integrative function in dealing with material entities related to reality (sensory), subject to empirical opinions, and others intellectually related to knowledge (Kosti, 2022, p139). He pointed out several types of Aporia, the first of which involves the formation and composition of design elements according to principles and regulations that have a transactional power among architects. Another type relates to the building's relationship with its context, and another pertains to the subject's relationship with the carrier, adopting contradictory thinking according to a system of possibilities and alternatives.
- Handy suggests that abstraction can be highly positive through exploring truly contradictory architecture and arguments supporting contradiction. (I aim to present products that generate tension and confusion, fostering creativity and work as a mental attempt to challenge logic and common thinking), (Ching, 2020, p7).
- Adnan and Saadoun indicated the significance of synthesis in architectural production as a form of integrative Compatibility between multiple texts, defined by formal and structural transformations within multiple meanings, and a set of similarities or contradictions, or both, intertwined within a system or context that brings them together (Nsaif et al., 2022).
- Al-Shammari and others indicated the importance of intellectual inquiries in contemporary architectural practice, stemming from awareness, dialogue, and curiosity, ultimately leading to cognitive conceptions based on the coexistence and interplay between real and imaginary worlds (Al-Shammari et al, 2023).
- (Colin) implicitly referred to the concept of Aporia through the strategy of coexistence by combining and juxtaposing opposites, where each retains its distinct identity while contributing to the whole. This approach aligns with the principle of equivalence, which allows for multiple interpretations and the simulation of symbolic references from the past (Colin et al., 1978, p. 181).

4. The Aporia of the Text in Architecture:

The text, as a creative component, represents a comprehensive structure consisting of a communicative system (sender, message, receiver, and code) within a specific temporal and spatial context, resulting in an interwoven set of textual images that contribute to its overall construction. (Al-Zahrani, 2012). It is linked to intertextuality, which addresses the differences between texts, as each text stands between two others, one preceding and one following it (Atiya, 2010, p. 164). These texts are interwoven with contradictions and oppositions that shape their structure, and the role of Aporia here is to uncover the truth of the text and its inherent contradictions (Al-Zain, 2008, pp. 227–228). The levels at which the Aporia of the text operates will be presented and discussed, along with the identification of key terms that contribute to the development of the research's theoretical framework, which in turn aid in the production and interpretation of architectural texts.

4.1. The Level of Text Production (syntactic):

(Kristeva) indicated that the text is a productive process arising from a creative interaction between both the creator and the receiver. "Every text engages in an interactive struggle with other contemporary texts, whether simultaneous or preceding it. (Zouari, Redha, 2018, p. 88)

(Krizol) referred to the structures that constitute the text (phenomenal and latent), clarifying that they represent a mental conception that is closest to abstraction. Their subject matter involves a perception that encompasses an unconscious truth indicated by its effects and outcomes. This truth resides in our conscious minds as an instantaneous reality that is formed in the present rather than over time, tending to be more

stable than dynamic. This instantaneous truth signifies its essence rather than its agent, as it emphasizes the displacement of the active self from the centre of the structure (Krizol, 1993, p. 413).

Shachto pointed out the contextual and structural relationships that form between the various elements in the text, which significantly influence the formation and multiplicity of meanings. These relationships may include temporal relationships that indicate the chronological sequence of events or ideas in the text, spatial relationships related to the location of the mentioned events, and interpretive relationships that clarify and explain meanings (Shachto, Ali, 2012).

The production of architectural texts relies on both the semantic and formal levels as a design methodology that draws on reading the project's potential and the nature of its constraints. Based on this, the design concept is formulated, reflecting the idea the designer aims to express. This process is shaped by a dialogic system that defines the core idea, identifies its references, and contrasts them. The concept is then fragmented through a system of semantic and intellectual representations, which are given formal manifestations to express the idea, with the concept itself adopting multiple intellectual perspectives. The formal representations that articulate these intellectual perspectives are determined after breaking them down through various design mechanisms such as displacement, abstraction, and paradox. The concept is then focused and hidden within the deeper semantic structure of the architectural text. This structure varies between designers and even for the same designer over time, depending on their previous experience and intellectual stance. (Hamza, 2018, p. 138).

4.2. The Level of Text Reading (Interpretive):

This level relies on how the text is perceived and the growing desire for communication. It is the moment when external structures are engaged, and the intricate framework of the text is explored, leading to the emergence of meaning that selects and affirms the worlds of the text and its reading tools (Hamza, 2018).

(Schleiermacher) views this level as an art of presenting and communicating ideas, considering the text as a medium between the thoughts of the creator and the interpreter. He identifies two aspects: the first is linguistic, which makes the process of understanding possible, while the second is psychological, reflecting the creator's thought manifested in their use of language. Neither aspect can be relied upon independently, as the relationship is a necessary complementarity (Friedrich Schleiermacher, 2012).

(Eco) perceives the text as a realm of potential interpretations that are continually renewed, creating a world filled with alternatives that allow the interpreter to access it, equipped with various tools that reveal its multiple meanings and significations. This includes reliance on textual intertextuality through its evocation in the mind to uncover the underlying intentions, which exist as possibilities. Thus, the interpreted text is built on two elements: (Ghanima, 2022, p. 168–169)

- Openness. which indicates the possible semantic additions in the context of the interaction between the text and its objective social and cultural extensions.
- Discovery arises from the act of interpretation, as the process is not limited to highlighting the hidden and implicit aspects of the text but also encompasses the discovery of the self and its presence.

Interpretation may manifest simply as an act of perceiving and representing meaning through understanding and explanation, seeking absent evidence that becomes the subject of the present evidence in consciousness or as procedural interpretation, which materializes in a mental process of reflective engagement between the perceived evidence and all that exists in the awareness of the perceiver concerning this evidence and its contemporaneous representations at the moment of perception. Finally, interpretation can be understood as a specific individual realization in which the recipient articulates their understanding and reading of a given evidence, thereby defining interpretation as a mental energy linked to the capacities of individuals and their interactions with the prior context, as well as the extent of their communication and alignment with it (Ghanima, 2022, p. 170).

The act of interpretation transforms reading from a consumptive act into a productive one, as it elevates the reading process to levels of experiential engagement with the text's contents and a deep representation of its nuances. Consequently, the relationship between the reader and the text becomes reciprocal, yet it varies according to the recipient's objectives. Some readings rely on a growing comprehension that moves from the part to the whole, while others depend on anticipating meaning based

on conjecture and initially grasping the generalities. Additionally, there is the interactive reading that constructs meaning neither before nor after the reading (Dandouqa, 2009).

5. The General Framework of The Application:

5.1. Research Methodology:

The study conducted in this research adopted a qualitative descriptive-analytical approach, which involved collecting and analyzing data from the literature review to formulate the theoretical framework and apply it to some architectural texts as a practical case study in the research, aiming to investigate the possibility of employing abductive reasoning as an intellectual system capable of producing, analyzing, and interpreting multiple architectural texts.

5.2. Theoretical Framework:

The theoretical framework of the research was derived from indicators in previous studies, categorized into the nature of Aporia's work, its application in architectural text production and interpretation, and the development of an intellectual model, as shown in Table 1.

Table 1. The Aporia of the Text in Architecture, (Source: Authors).

Main Item	Sub-Item		Code		
Action of Aporia X1	Restoration of coherence X1.1		Linking the previous text to the next and forming a textual relational unit that may be apparent or latent X1.1.1		Formal
					Semantic
			Identifying the underlying relationships between the parts of the text and its context X1.1.2		Opposite
					Contrast
	Mutual dependency X1.2		Deconstructing the text and reconstructing it based on the latent meanings and implications X1.2.1		
			Displacing textual meanings by relying on the aggregation of opposites X1.2.2		
	Self-reference X1.3		The textual invocation of interrelated concepts within the discourse itself traverses numerous contexts in an unending continuum of semantic chains. X1.3.1		
Levels of aporia action X2	The level of text production (syntactic)	Production steps X2.1	Basic idea X2.1.1	Textual potentials and the nature of its contextual determinants (symbols, references)	
			Intellectual perceptions X2.1.2	Combining and synthesizing ideas and opposites	
			Formal perceptions X2.1.3	The actual image and presence	
			Semantic Focusing X2.1.4	The designer's experience and intellectual positions	
		Contextual relationships X2.2	Temporal relations X2.2.1	The chronological sequence of events or ideas in the text	
			Spatial relations X2.2.2	The location of the events mentioned in the text	
			Interpretive relationships X2.2.3	Latent meanings and implications	
		Production mechanisms X2.3	Abstraction X2.3.1	Simplification, reduction, and condensation of the elements that constitute the text	
			Displacement X2.3.2	Violation of rules and the separation of the signifier from the signified	

			Paradox X2.3.3	Textual difference and its conflict with the other
			Illusion X2.3.4	Disguise /Multiple masks overlay the text
			collage assembly X2.3.5	Collecting and forming opposites with each other as labels, where each has its distinct identity that contributes to the whole
	The level of text reading (Interpretive)	Interpretation of the text X2.4	Objective X2.4.1	The principles and rules that govern the text
			Subjective X2.4.2	The psychology of both the creator and the interpreter
		Interpretation patterns X2.5	Merely X2.5.1	The act of meaning perception and the search for absent evidence
			Procedural X2.5.2	A mental process of thinking
			Verified X2.5.3	Summary of understanding and reception
		interpretation mechanisms X2.6	Textual synergy X2.6.1	The text's stimulation of the mind/the implicit intentions that exist in a state of potential
			Growing comprehension X2.6.2	The part and then the whole
			Anticipation of meaning X2.6.3	The whole and then the part

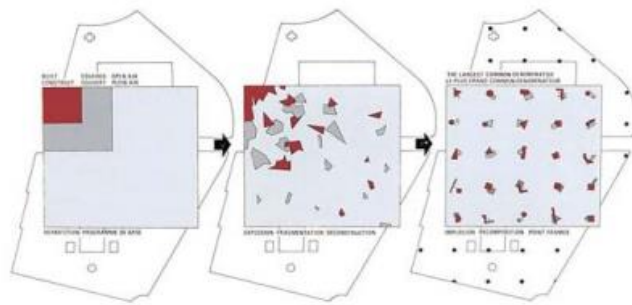
5.3. Practical Framework:

The study adopted a descriptive-analytical methodology, which involved gathering and analyzing data from previous research to build a theoretical framework and apply it to various architectural projects across different temporal and spatial contexts. Some of these projects fall within Postmodern and Deconstructivist architecture (such as Parc de la Villette and the Guggenheim Museum), while others pertain to contemporary architecture (such as the Guangzhou Opera House and the Tate Modern Expansion), serving as case studies in the research. The aim was to explore the potential of employing aporetic reasoning as a conceptual system capable of producing and interpreting innovative architectural texts.

5.3.1. Parc de la Villette / Paris/ Bernard Tschumi /1982 ... (A1):



(a) Folly form (Barrera et al., 2014).



(b) Design concept (Brown, 2014).

Figure 3. Parc de la Villette.

The designer relied on separation and fragmentation by creating contradictory forms (folly) that diverge from their context, resulting in texts that are more indicative than being architectural signifiers, with multiple levels of connotation, generating ambiguity and perplexity (Brown, 2014), as shown in Figure (3).

5.3.2. Guggenheim Museum/ Spain/ Frank Gehry/1997 ... (A2):



(a) Building form, (Riccobono, 2018).



(b) Design concept, (Riccobono, 2018).

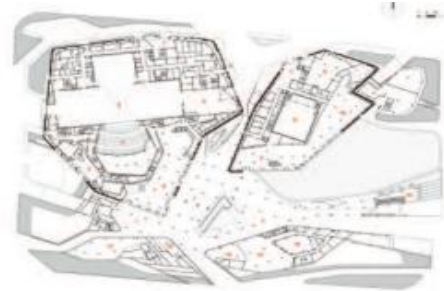
Figure 4. Guggenheim Museum.

The design relied on assembling and shaping complex, twisted, and visually appealing forms that respond to a complex program and an industrial urban context by adopting a computer program (CATIA), which allows for intricate designs and calculations that were impossible (Riccobono, 2018), as shown in Figure (4).

5.3.3. Guangzhou Opera House /Chinc/ Zaha Hadid/2010 ... (A3):



(a) Guangzhou Opera House (Riccobono, 2018).



(b) Design concept, (Riccobono, 2018).

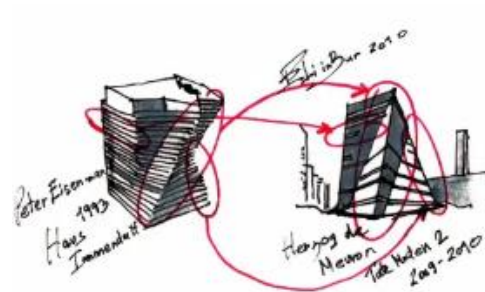
Figure 5. Guangzhou Opera House.

The design of the Opera House represents the latest achievement in exploring Zaha Hadid's unique architectural approach to contextual urban relationships, combining the cultural traditions that have shaped the history of Guangzhou. It is dynamically designed in three dimensions, drawing inspiration from the pebble shapes found on the riverbanks (the Double Pebble), with the fluidity in the exterior design inspired by the effects of wind and water on rocks, as shown in Figure (5).

5.3.4. Tate Modern Expansion / London/ Herzog & de Meuron/ 2016 ... (A4):



(a) Building form (Taylor-Foster, 2015).



(a) Building form (Taylor-Foster, 2015).

Figure 6. Tate Modern Expansion.

The designer relied on the fragmentation of a previous singular entity and the reassembly of its parts into a new entity, thereby losing its former form and meaning and creating an absence in its presence. This reliance is based on a system of probabilities that generates an architectural structure that differs from what preceded it (Taylor-Foster, 2015), as shown in Figure (6).

6. RESULTS AND DISCUSSION:

6.1. Detailed Analysis:

The theoretical framework indicators were evaluated based on the case study, leading to the following results:

6.1.1. The First Main Item (Action of Aporia):

- **The First Sub-Item (Restoration of Coherence).**

The results revealed that the percentage of the aporia act, based on the restoration of textual coherence through identifying the underlying relationships between the text's components and its context for cases (A1, A2, A3, A4), was 40% in case (A1), 80% in case (A2), 90% in case (A3), and 50% in case (A4).

- **The Second Sub-Item (Mutual Dependency).**

The results revealed that the percentage of the aporia act, based on Mutual dependency of the text through its deconstruction and reconstruction according to latent meanings and displaced significations by synthesizing opposites in cases (A1, A2, A3, A4), reached 90% in case (A1), 90% in case (A2), 60% in case (A3), and 70% in case (A4).

- **The Third Sub-Item (Self-Reference).**

The results revealed that the percentage of the aporia act, based on the self-referentiality of the text through the invocation of internal relationships within the text itself across multiple contexts via an infinite process of semantic sequences in cases (A1, A2, A3, A4), reached 20% in case (A1), 30% in case (A2), 60% in case (A3), and 60% in case (A4).

6.1.2. The Second Main Item (Levels of Aporia Action):

6.1.2.1 The Level of Text Production (Syntactic):

- **The First Sub-Item (Production Steps).**

The results revealed that the percentage of the Aporia acting at the syntactic level of the text during the stages of production in cases (A1, A2, A3, A4) reached 65% in case (A1), 70% in case (A2), 75% in case (A3), and 60% in case (A4).

- **The Second Sub-Item (Contextual Relationships).**

The results revealed that the percentage of the Aporia acting at the syntactic level of the text within the contextual relationships in cases (A1, A2, A3, A4) reached 93% in case (A1), 60% in case (A2), 53% in case (A3), and 46% in case (A4).

- **The third sub-item (production mechanisms).**

The results revealed that the percentage of the Aporia acting at the syntactic level of the text within the mechanisms of production in cases (A1, A2, A3, A4) reached 72% in case (A1), 64% in case (A2), 68% in case (A3), and 72% in case (A4).

6.1.2.2 The level of text production (syntactic):

- **The First Sub-Item (Interpretation of The Text).**

The results revealed that the percentage of the Aporia acting at the level of text interpretation in cases (A1, A2, A3, A4) reached 40% in case (A1), 50% in case (A2), 60% in case (A3), and 60% in case (A4).

- **The second sub-item (Interpretation patterns).**

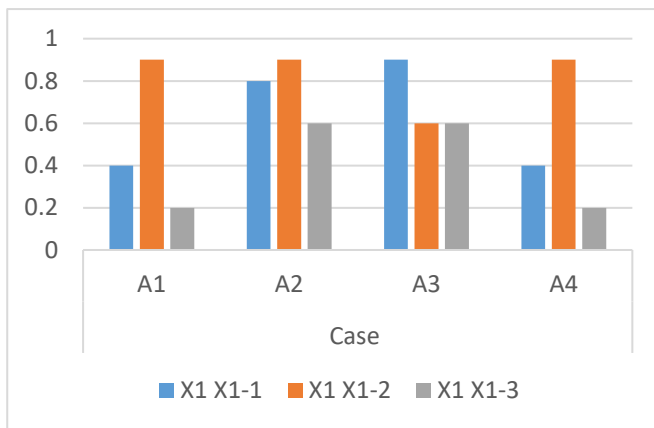
The results revealed that the percentage of the Aporia acting at the level of text reading within the interpretive mode in cases (A1, A2, A3, A4) reached 46% in case (A1), 60% in case (A2), 66% in case (A3), and 35% in case (A4).

- **The third sub-item (interpretation mechanisms).**

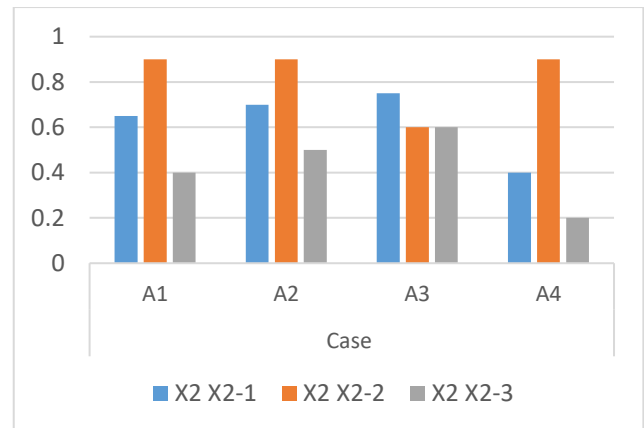
The results revealed that the percentage of the Aporia acting at the level of text reading within the mechanisms of interpretation in cases (A1, A2, A3, A4) reached 66% in case (A1), 73% in case (A2), 73% in case (A3), and 66% in case (A4).

6.2. General Analysis:

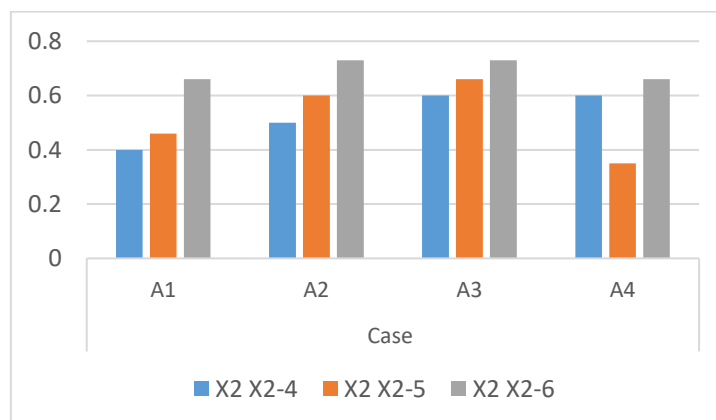
Overall, based on the theoretical framework and analysis results, it is evident that the act of Aporia, from text production to interpretation in the case studies (A1, A2, A3, A4), relied on an integrated conceptual system involving both the designer's production and the recipient's perception, albeit to varying degrees. In case (A1), Aporia highlighted how to engage with the set of contradictions that shape the text (the event), where the designer gathered these contradictions within a specific context, deferring meaning across multiple levels of ambiguity and uncertainty. This approach stimulates the principle of interdependence in deconstructing the text and displacing its meanings, guiding the recipient through a search for the latent meaning by understanding the particulars to reach the whole (progressive comprehension). In case (A2), Aporia illustrated how to address the overlap of formal compositions, which generated a sense of questioning and duality in interpreting the building. The designer aimed to produce a text with multiple meanings, distancing it from its context and the familiar. The production mechanisms (displacement, abstraction, and paradox) were employed in the form and composition, seeking new forms of architectural meaning. In case (A3), Aporia relied on invoking meanings related to the context, where the designer engaged with contextual urban relationships, attempting to restore coherence by employing relationships of opposition and contradiction to achieve harmony. In case (A4), Aporia addressed how to engage with the formal and contextual deviation of the text, as the designer sought to produce a text based on a system of possibilities for the cubic form and incorporating elements from outside the field of architecture (the isolated river wave phenomenon).



(a) Ratios of verification of the act of Aporia.



(b) Ratios of verification of the act of Aporia at the level of text production.



(c) Ratios of verification of the act of Aporia at the level of text reading.

Figure 7: Results of case study analysis (A1, A2, A3, A4), (Source: Authors).

7. Conclusion and Recommendations:

- Aporia is a directed and organized creative intellectual process associated with logic and reasoning, which is the ability to perceive things, construct truths, and verify them. It involves effective

communication and problem-solving skills and is linked to the concept of the creative text and its perception within a series of semantic sequences related to understanding the underlying meanings and implications of the text.

- There is a distinction between classical and contemporary philosophical thought regarding the concept of Aporia. Classical thought utilized Aporia as a means to overcome and solve problems, whereas contemporary thought, particularly in Derrida's work, views Aporia as a medium for thought itself rather than a guide. It is seen as a temporary transitional state that must be navigated, linked to the potential and creativity of thought.
- Aporia facilitates the designer's dialectical thinking process by synthesizing and coexisting opposites. For the recipient, it aids in uncovering the hidden aspects and intricacies of the text through its study, examination, and understanding of how it is artistically and linguistically constructed.
- Achieving coherence in the realized text depends on the designer's approach, sensitivity, and knowledge of the context, as well as their ability to reference texts by establishing a dialogue between the text and other texts, which activates the system of semantic relationships.
- Aporia represents the production of the text, which supports and is responsible for the process of textual composition by establishing logical connections (interference and formation) between the compositional elements of the text at both the manifest and latent structural levels. The designer postulates an idea governed by intellectual and formal perceptions that control the degree of obscurity and concealment of the text's semantic meanings, synthesizing them through various mechanisms (abstraction, displacement, paradox, Illusion) to produce an architecturally multi-layered text characterized by ambiguity and Illusion.
- Aporia refers to the reading of the text, which supports and is responsible for the process of textual interpretation by searching for absent evidence and implied intentions and uncovering the complex and obscure structures of the text. This aims to enhance knowledge through growing comprehension and anticipating the meaning of the other.
- The Actin of the aporia system varies in the presented projects depending on the symbolic and contextual nature of the project, which stimulates both the designer's thought and creativity in production, as well as the recipient's thought and perception in interpretation.
- The research recommends adopting Aporia as an integrated epistemological framework that offers new insights into architectural theory and practice in general and advances the architectural text in particular. Through its diverse and multifaceted mechanisms, Aporia enables designers to produce creative architectural texts at various levels while facilitating recipients' understanding and interpretation of these texts. This approach aims to achieve Compatibility in architecture and urban design, as shown in Figure (8).

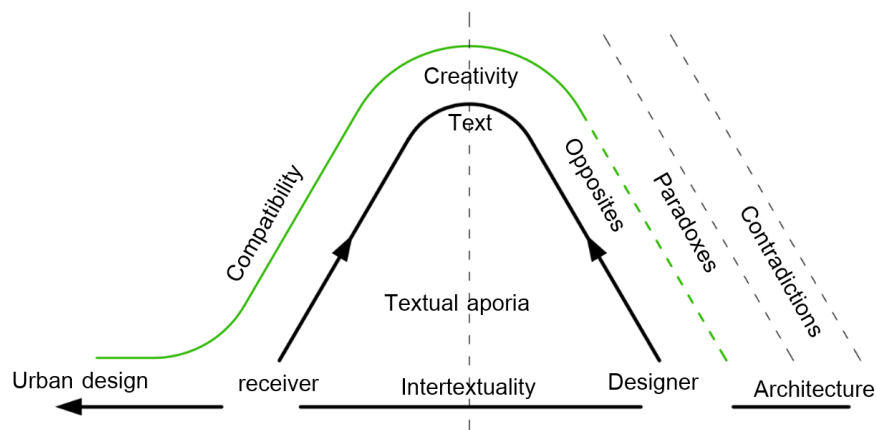


Figure 8. Intellectual model aporia text (Source: Authors).

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