

Juxtaposition as a Cornerstone for Approaching Diversity in the Built Environment

Raya Atour Qatar University ra2010351@qu.edu.qa

Abstract

Arguably many contemporary architectural theories and movements have spout in reaction to Modernism, which made the architectural theory discipline branched and divergent. This paper examines a scenario of approaching contrasting built environments in which their identities are constantly changing and where the post-modernists fractural nature of intellectual reactions and criticism led to an arguable tension that needs intervention. The data - based on literature review, participant-produced visual phenomenological reflection are examined with a focus on investigating the role of juxtaposition in proliferating the concept of diversity in the built environment. Although the topic is originally theory-loaded, the analysis is hybrid and uses visual explorations as well as theoretical frameworks to produce multi-objective answers in which diversity in the built environment can be conceived, perceived, and lived. By taking the concept of juxtaposition as a cornerstone in this argument, this paper proposes an understanding of the overwhelmingly open world the modern human found themselves exposed to and suggests options and solutions to achieve diversity where abstract concepts can be cast into form in different architectural typologies.

Keywords: juxtaposition, Modernism, Post-Modernism, diversity.



Figure 1. View of Lusail towers seen from a window of a residential villa in Doha, Qatar. Image: Author, 2021.

Bill Hillier (2007) defines architectural theory to be a question of comprehending architecture as a system of possibilities and how these are constrained by rules that connect this system of possibilities to the spatial potentialities of human life. Architecture is similar to language at this level, and maybe solely at this level.

Introduction

Globalization has led to a rising interdependence of cities, with rapid circulation of people, goods, capital, identities, and images around the global space (Vranken, n.d.). Diversity had its existence in metropolitan areas, thus making 'Diversity' a concept that architects and planners are addressing in recent projects and research as it closely relates to concepts of identity and sense of being; concepts which need sensitive attention as they could be perceived as likely to be threatened and fade in the globalized world. Such concepts, when studied from the architectural and urban planning perspective are related to the human-social aspect of architecture, an intangible dimension that is difficult to be tested by pure scientific measurements and tools since the original conception of science from a positivist perspective is coined solely with what can be empirically documented (Hammersley, 2019). The emphasis on intangible values cast into form in planning, designing, and constructing buildings and cities has been affected by the redirections and shifts of the intellectual paradigms present in each era. The current approach in the field that tries to comprehend this intangible dimension has been through architectural theory. Bill Hillier (2007), who originated a set of theories and research methods named Space Syntax; a positivist research method for understanding the social logic of space, defines architectural theory to be:

"A matter of understanding architecture as a system of possibilities, and how these are restricted by laws which link this system of possibilities to the spatial potentialities of human life. At this level, and perhaps only at this level, architecture is analogous to language" (Bill Hillier, 2007, p.7).

This statement shows that architecture is similar to language as it is a system of possibilities restricted by laws. Postmodernist architectural theories did not come by chance, but due to the lack of explanation Modernist architecture offered to pressing issues related to the social dimension of space. An example illustrating this point would be when Charles Jencks stated in his book 'The Language of Post-Modern Architecture' that Modern Architecture has 'died' when Pruitt Igoe was demolished due to its social collapse (Major, 2017, 2021). Interestingly enough, researchers are now analyzing these Modernist building designs using Bill Hillier's methodologies to further investigate and 'excavate' (Major, 2021) the multiple dimensions involved in designing a building, a city, or space in general and its linkage to human behavior in general, and to its social dimension in particular.

It can be noted that scholars perceive architecture as a three-part system constituting the building, its image (photograph or drawing), and its accompanying critical discourse (Forty, 2004). What makes this definition interesting and of value is that it did not restrict architectural theory to its metaphysical, phenomenological, and experience-based dimension -although it partly is- nor did it cornered architectural theory in its intellectual debates. This multifaceted definition therefore offers the possibility to link rational concepts to "soft" ones. A soft quality in architecture comes from its perception as a cultural and social dimension, that is seen by contemporary scholars as an intangible quality, therefore of "soft" value (Boussaa, 2018). Intangible values in architecture are hard to capture and harder to theorize. Not being able to grasp a common ground in understanding architecture in its multifaceted dimensions -both scientific and social- has resulted in many sprouting theories that at times could be contradicting and overwhelming to understand. Finding a common ground and synthesizing divergent theories into clearly categorized themes is what this paper is aiming to achieve.

Cities are often described by urban theorists based on characteristics of the cities' physical form (Major, 2018) and eventually, theorists try to understand the social implications of such forms. Interestingly enough, Hillier (2007) argues that architecture can be seen as an inherently theoretical subject. He supports this view by arguing that the material world's form and its relationships and how we live within it are issues that are raised by the very act of building, and which are unavoidably both philosophical and scientific.

Paradigm Shifts

In recent years, the concept of 'sense of place' has been very important in architectural and urban studies, especially since the sector of urban planning has diverted from being a policy-making science into a sociological study of space in cities and built environments, and the paradigm shift in the current architecture industry has moved from specialized fields in engineering and pure science to multidisciplinary and interdisciplinary collaborations integrating a holistic approach that aims to optimize the multifaceted problems with interconnected solutions. And although the development of place-making is supported by phenomenological studies that seek to stress the importance of physical attributes of the built environment, in the realms of social science and urban planning, the link between significant architectural qualities in urban contexts and sense of place (SOP) has not been thoroughly explored (McCunn & Gifford, 2021).

Research Rationale and Research Methodology

While this paper is not intended to call for social change, nor is proposing a new jargon-loaded theory. The aim is rather to shed a light on the importance of understanding the current urban situation from a fresh visual-semantic perspective. This paper examines the scenario of approaching built environments in which their constraints are constantly changing and digs deep into how the post-modernists fractural nature of reactions and criticism led to an arguably intellectual tension that needs intervention. Starting as an observational research, the first problem observed had a large impact on determining the research rationale and problem. Additionally, through literature review on architectural and urban theories, there has been an important issue raised by the methodical manner of approaching theory as an intellectual discipline separate from what the impact the visual inputs have to offer to the conception, perception, and livable dimension of built environments, especially from a positivist modernist perspective, which its opposing reactions were specifically evident criticism books such as "The Death and Life of Great American Cities" (Jacobs, 1961), and "Learning from Las Vegas" (Venturi & Brown, 1972); focusing on issues that

It is not intended to call for social change, nor to propose a new jargon-loaded theory. The aim is rather to shed a light on the importance of understanding the current urban situation from a fresh visual-semantic perspective.

were usually dismissed as unworthy of concern (Golda, Heinb, Orillardc, & Oyarzun, 2019) such as everyday street life with its symbols and semantics that are evident in architecture and were emphasized as a postmodernist reaction (Venturi & Brown, 1972). Such intellectual attempts raised skepticism and a deconstructivist attitude and worldview toward Modernist theory and practice along with the positivist framework they were constructed in.

Visual language semantics as a research discipline is considered sporadic as there is no common framework available for the formal specification of visual languages (Erwig, 1997). Thus structuring the methodology of this paper relied mainly on theory analysis, where the use of visual semantics analysis is done as a complementary data set to support the arguments made in theory.

Architects use visual clues are commonly employed to enhance verbal information in their debates and communication about design ideas and concepts (Peltoniemi, Poutanen, Ahtinen, & Salonius, 2017), as the process of meaningmaking can be in text but also in other mediums such as images, making it both a multifaceted and multimodal medium (Lim, 2007). This paper will investigate the visual impact and meaning the language of architecture holds and finds ways to better understand them in emerging urban environments, where multiple factors and interests could be in conflict and diverse needs are to be met. The French philosopher Michel Foucault had previously stated that our era's concern is profoundly related to space, far more so than to time. The reason for choosing this method of data collection and analysis is to answer the pressing questions: How is Diversity conceived, perceived, and lived in urban spaces and the built environment? And how do abstract concepts, such as juxtaposition and change, affect people's understanding of diversity in places and spaces where they live. work and play? Therefore the paper's specific topic is to investigate cases of superimposition/juxtaposition and its impact on change and diversity.

Case Study: On Diverse Visual Languages in the Built Environment

The motivation for this research has started with an observation, an overview, and an image of the state of the built environment in diverse building typologies, as seen in Figure 1. This observation has led to a phenomenological reflection that I —as a researcher— found to be worth analyzing. The reaction experienced in this study illustrates a deep contrast in the production of the image of cities that are subject to constant change, where two or more different architectural typologies are simultaneously represented in the urban form.

A City-within-a-City

The observation that started this research was from Doha the capital of Qatar, where the view shown in Figure 1 illustrates a great difference in architectural language within the same city, in terms of scale, time, style, function, materials, and visual language and meaning. It can be noted that new developments in the city of Doha are categorized into 1) international style; and 2) inspired by local traditional style (Boussaa, Alattar, & Nafi, 2021). The juxtaposition found, as an abstract concept, is employed when contrasting objects are represented close or in relation to one another, in which they may not have been observed as juxtaposed in ordinary experience (Young, 2001), which is evident in Figure 1 previously mentioned.

Conducting unstructured pilot interviews further stressed the need to dig deeper behind this phenomenon. Undoubtedly, the challenges faced by such contexts are expected in any emerging city, where the speed of change can be higher than the speed at which the urban environment finds a way to react, recover and, adapt. Keeping in mind that Metropolitan Doha does incorporate resilient strategies to achieve a compact composition, both physically and administratively

Observation Recording visual Collection of images, notes, and functional and preliminary interviews of the case study patterns Analysis Classifying Observations that guide the literature review, differences and categorization of related categorizing the theories - Heterotopia, Space phenomena Production, and Polyvalence Relationships Linking the context-specific Finding links in observations to the theories. the different Synthesis of theories and its categories link to Juxtaposition Hypothesis Concluding to an Findings and conclusion that understanding solves the research problem of the

Figure 2. Research Methodology. Source: Author

phenomena

(Major, Atour, & Tannous, 2021). Taking this point into consideration, many theories have been written to document and theorize such extraordinary urban development, especially in the book 'Demystifying Doha: On Architecture and Urbanism in an Emerging City' by (A. M. A. Salama & Wiedmann, 2013), where the book illustrates how the challenge of steering Qatar's recent development boom into a functional urban structure has been tackled by urban planners (A. Salama & Wiedmann, 2016), and is analyzed using Henri Lefebvre's theoretical framework of Conceived, Perceived, and Lived Space, which will be further explained using Figure 5. It is worth noting that the concept of juxtaposition is evident not only visually in emerging cities but also in terms of land use. The conventional centralized system for determining land use has been substantially superseded by developer master plans for "city-within-a-city" projects, which frequently occupy a significant portion of emerging metropolitan areas (A. Salama & Wiedmann, 2016), as seen in what is named "gated communities", where due to fast urbanizing processes done in the Arabian Peninsula, the city could often result into a series of drivable enclaves operating strict zoning systems





(Carmona, Carmona, Heath, Oc, & Tiesdell, 2003).

The preliminary case study that guided this research question investigates how the juxtaposition found in Figure 1 shows two opposing architectural languages that goes deeper than a contrast of traditional style with a modern one. The contrast is not only in style, Figure 3 shows an example of the level of contrast noticed. Although in Figure 3 the left image illustrates a picture of one of Hassan Fathy's designs of villages in Egypt, the architectural language is similar to the low-rise residential villas seen in Figure 1. This juxtaposition raises many questions for architects and urban designers, on the perception of space within such contradicting forces within the same place, which at times is seen as 'psychologically appealing' (Cheesman, 1988), as it stimulates a dynamic movement through space that creates new avenues for discovery and constantly opens up (Cheesman, 1988).

Figure 3. Left: a small old village in Egypt. Right: high-rise buildings in Doha, Qatar, that are in the background of Figure 1. Images: egyptindependent.com, rcalmana.com

Drawing on the moment of juxtaposition in this observation, this paper argues that for such ideas to be grasped in practice, it needs a medium of physical form as well as intellectual framework in order to translate and better comprehend them less abstractly. Here is where the field of architecture and urbanism come into play, used as essential mediums that are understood by all segments of society, since everyone will equally use the spaces designed by architects, however, their level of interpretation could vary depending on their perception and background. How can a space be both traditional and contemporary, and does the placement of two opposites have an impact on our perception of space? The amount of post-modernist theories that have sprouted in reaction to Modernism is overwhelmingly huge and relatively hard to comprehend, especially

since the paradigm of knowledge accumulation and epistemology has changed (Hammersley, 2019), thus resulting in many interdisciplinary and multidisciplinary research that is broad but not deep. In this paper, prominent theoretical frameworks are visited and linked to the concept of juxtaposition, to understand how it could enhance Diversity in architecture and urban planning, based on a preliminary observation that has developed the research question. In this regard, a chronological theory analysis is done in the upcoming section to see how postmodern dialogue evolved, to what extent it is linked to juxtaposition, and what impact it has on conceiving Diversity in the built environment.

Theoretical Background and Discussion

A Continuous yet Tentative Superimposition

Knowing that architectural typology is defined as the classification of physical or other aspects of the built environment into discrete categories (Güney, 2007), we can realize how the concept of typology has evolved with time depending on current trends and its accompanying ideologies. The whole concept of classification is based on the Modernist's worldview, where human is in control of nature, thus in a position to give judgement and therefore 'control' the perception of the subject. With the post-modernist theories emerging and refuting the structure of Modernist's approach, in this case, architecture and urban planning, there had been a large debate on the concept of space and how it is conceived, perceived, and used/lived. This section of the paper navigates multiple prominent theories which changed how space is perceived and designed within the post-modernist era, and uses this analysis to find a theme between all these theories to cast on the concept of Juxtaposition and superimposition.

When we define superimposition as the placement of one thing over another, in a way that the existence of both is still evident, it is interesting to see its implementation in the built environment, especially with the fast growth of cities is a continuous process of superimposing an old object with a new different one. Resulting in making the change of systems a system itself. Finding ways to grasp this emerging system would help us tackle, grasp, and understand change while still acknowledging the existence and traces of previous complex systems in the built environment. What is interesting in the post-modernist and deconstructivist discourse is that it exposes the unfamiliar and the disturbing in a way that could be therapeutic at times. To illustrate this in a real case study, we can observe trends of the awkward superimposition of jarring, disparate grids in real-life situations using visual language (Curl, 2006) and find its impact on our perception of the space and to sense of belonging. Especially that the French philosopher Michel Foucault had once stated that our era's concern is profoundly related to space, far more so than to time (Foucault, 1984).

Perception of Space and Sense of Belonging

Dwellings, as the ultimate manifestation of individual identity, is also completely under the authority of the ordering power, which is determined by precise sets of coordinates, be it architectural, aesthetic, economic, urban, or other (Spanu, 2020). Starting with the concept of Heterotopia, as a disturbing tension-filled space, it is a concept closely related to the sense of belonging in a place, therefore has a relation to the existence of different typologies in one reality, and finding ways to belong to that same place. The work of architects lies in synthesizing factors that produce a new space, therefore theories concerning the production of space need to be understood by architects in a comprehensive manner (Wiedmann & Salama, 2012), that is to make the environment to become viewed as performative –through its ability to both describe and create reality as well as communicate encoded information (Spanu, 2020).

The postmodernist theories mentioned in the table below are shown to explain how a central theme related to Juxtaposition is found in them in one way or

When we define superimposition as the placement of one thing over another, in a way that the existence of both is still evident, it is interesting to see its implementation in the built environment, especially with the fast growth of cities is a continuous process of superimposing an old object with a new

different one.

another, as explained in the text section below. Starting with Heterotopia as a concept concerned with space in general and its relation to existence from a philosophical perspective, which is why it did not have its roots fully understood in the field of architecture and urbanism, however the same concept can

sometimes be explained using different termnologies, which is evident in the explanation of the theory section below.

Year	Concept/ Theory	Author/	Summary/ Main Contribution of the Theory to
		Theorist	the concept of Juxtaposition
1966	Heterotopia –	Michel	Understanding liminal spaces, comprehending
	Other Spaces	Foucault	contradiction in perceptions of space.
1966	Complexity and	Robert	Requisitioning the assumption that form follows
	Contradiction in	Venturi	function, which underpinned most of twentieth-
	Architecture		century architecture.
1972	What Time is This	Kevin Lynch	On the logical framework of scientific theory, as
	Place?		well as linguistic-logical interpretation and
4070	Dalamatanaa	11	emotional assessment of space (Scharf, 1974).
1973	Polyvalence –	Herman	On adaptation and change, generating an
	Making Space, Leaving Space	Hertzberger	identity of space by offering the freedom of perceiving the space and interacting with it by
	Leaving Space		the user.
1974	The Production of	Henri	Readjusting the understanding of space, from
1074	Space	Lefebyre	the duality of the mental-physical space to the
	opass .	20.021.0	conceived, perceived, and lived space.
1977	Multivalence and	Charles	In the book 'Meaning in Architecture', Jencks
	Univalence	Jencks	puts forward many untraditional linkages in
			criticism, including the concepts of Multivalence
			and Univalence as a way to classify and
			analyze architecture.
1984	The Social Logic of	Bill Hillier,	Introduction of a new research method to
	Space	Julienne	describe and analyze the spatial and social
		Hanson	functions of buildings, cities, and space in
1992	Non places:	Μοτο Αμαά	general.
1992	Non-places: Introduction to an	Marc Augé	On the concept of non-places, liminal spaces, and places of transition. Supermodernity and its
	Anthropology of		influence on space perception.
	Supermodernity		initidence on space perception.
2002	Junkspace	Rem	Places of no identity due to the lack of meaning
00	- Салмораоо	Koolhaas	and continuous emphasis on function as a
			result of high consumerism.
2021	Multiform:	Multiple	Seen as "a redeployment of postmodernist
	Architecture in an	Authors	approaches is the architectural attempt to
	Age of Transition		reflect, grapple with and make sense of the
			current political and economic situation"
			(Hopkins, 2021).

Figure 4. Table of Literature Review Summary in Chronological Order. Source: Author

On Heterotopia and Other Spaces

Contemporary researchers place heterotopia between the public and the private, a transitional area whose status is "often weakly or only partially determined" (Spanu, 2020). Although it is hard to 'construct' or design heterotopia in its real sense, because it originally is a mental manifestation, however, what architects can do to acknowledge this concept is to leave some spaces where juxtaposition is clear, where transitional areas that do not have a clear identity and function could be placed in the built environment, in order to keep the confusion of space perception fresh and constantly hybrid and dynamic. What is interesting is that this same strategy is explained in Hertzberger's concept of Polyvalence (1991). Some scholars define heterotopia according to the (dominant) temporal coordinate—as a rift in the continuity of the temporal flow—and, secondary to this, according to the spatial coordinate-again, as a rupture in physical continuity, in the shape of the differentially formed item (Spanu, 2020). In other words, there must be a consistent system/ pivot, for it to be broken and to achieve this contrast. It is now evident how Hillier's definition of architectural theory mentioned in the introduction relates to this as a set of system with specific laws. Therefore, using the law and breaking it in different grids of existence and function superimposing each other can have the potential to be a heterotopic space, since it creates hybrids that allow the (re)combination of conflicting spatial and temporal

fragments (Spanu, 2020), and establishes a boundary with a distinct personality and delicate internal dynamics (Spanu, 2020).

Multivalence and Polyvalence

Postmodernist theories promoting pluralism and multifacedeness, which had a span of 50-year life span (Badu, Walker, Brace, & Jencks, 2011) can be seen repeatedly from different perspectives although their core is similar. An example of this is comparing the concepts of Charles Jencks' "Multivalence and Univalence" (Jencks, 1969) with Herman Hertzberger's "Polyvalence and Flexibility". This concept was well-linked into the practice of design in architecture is by Dutch architect Herman Hertzberger, whose theories had a great impact on understanding the social dimension of architecture, especially in Europe (Hertzberger, 1991).

And although Herman Hertzberger had many theoretical impacts on the perception of architecture spanning over many different years, one concept that gives a clear impression of his theories is his distinguishment between polyvalence and flexibility, based on his debate whether form really does follows function, and the contradiction within the well-known statement by Sullivan 'Form ever follows Function', which later became a moto in Modernist architecture. The concept of polyvalence sheds a light on how "leaving space" for various interpretations can be as important as "making space" (Kim, 2013). Linking this to diversity is crucial in designing spaces in multiple ways; allowing the observant the freedom to see space in what they find convenient, and to act upon it by modifying it to their need, is the kind of democracy architecture needs to follow in a metropolitan space. Such concepts had stayed within the discussions of architectural theory, for example, at later years Rem Koolhaas¹ had also discussed this concept under the idea of 'permanent adjustment', where change can be addressed by leaving space in a state of ambiguity and uncertainty.

Liminal Spaces, Non-Places, and Junkspace

In discussing the concept of 'making space' by Herman Hertzberger, an important theory comes to explain this in further detail. The theories of Henri Lefebvre had structured the concept of space into three categories: The conceived, perceived, and lived space, and the impact of this framework enhanced our understanding of space and modified it from the classification of mental-physical into a more precise one, figure 5 shows the impact of this framework on understanding the urban environment in its different dimensions and aspects.

Not taking these intellectual considerations when building environments is what led to what the Anthropologist Marc Augé called as "Non Places"; places that have no specific identity and are too homogenious that they do not represent or give distinction to what a human would describe as a "place", since the perception of a place constructs of finding meaning and social dimensions, a notion not evident in Non Places . Interestingly such places had special attention in recent years² due to their surrealist nature of being odd and leading to discomfort and feelings of familiarity and nostalgia yet tensioned and forsaken environment, a mix of opposite feelings that make their users experience what is called a "liminal space". To rationalize this phenomenon, Rem Koolhaas explained how the consequences of consumerism led to "Junkspace" (Koolhaas, 2002), a term likely link with liminal and non-places.

A reflection on the state of belonging within the modern human living in contemporary settings could be seen in the concept of Non-place, which comes from the effect of supermodernity on human perception of space, and therefore of existence. Non-places are related to the concept of heterotopia, where non-places illustrate liminal spaces and places of transition. Such spaces are evident in supermarkets, airports, and elevators, where everything seems familiar regardless of the observant's cultural background, therefore making it a familiar place capable of enhancing belonging, while at the same time such spaces offer

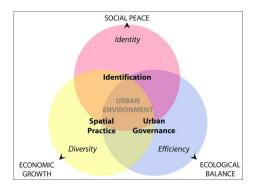


Figure 5. The Production of Urban Qualities: The Conceived Space (Urban Governance), Perceived Space (Spatial Practice), and Lived Space (Identification). Image: (Wiedmann & Salama, 2012).

Interestingly, such places had special attention in recent years due to their surrealist nature of being odd and leading to discomfort and feelings of familiarity and nostalgia yet tensioned and forsaken environment. a mix of opposite feelings that make their users experience what is called a "liminal space".

a generic identity that is pertaining to the human sole function and is present everywhere, therefore has no specific identity, and can make the observant feel belonging to the space as well as distant from it, a hybrid of opposites that is worth investigating.

Is there such thing as Architectural Theory?

The previously mentioned classifications means that any space that is linked to more than one category is automatically resulting in a form of juxtaposition, where the same space could have multiple meanings and functions and therefore is functioning on multiple grids of existence that are superimposed, however the level and intensity of contrast may vary. Furthermore, the impact of this framework is seen in allowing architectural theorists to investigate the complexity of the urban object in a logical unbiased manner, and less reliable on poetic/metaphysical philosophies that at times further complicate the phenomenon observed into a subjective theory-loaded point of view. In the end, we have the right to question: *is there such thing as architectural theory*?³

When this paper started with a quotation from Bill Hillier on his impression and definition of architectural theory and its role within the intellectual and practical realm in architecture and urban planning, it is intended to illustrate that Space Syntax theories helped in moving architectural theory from an experience/feelingbased discipline with its philosophical impact, in which it is hard to be unbiased and carries many subjectivities to it, into a relatively scientific objective method of analyzing and understanding space, while keeping a space to incorporate phenomenology in an evidence-based manner. Not only did space syntax's theories better analyze the urban object using technologically advanced tools, but their importance also lies in their ability to combine visual and social aspects of the built environment with physical ones, in addition to combining objective reality with the intellectual realm with its theories, resulting in solutions that are easy to comprehend and considered as a paradigmatic shift in urban logic analysis. However, there must be always a balance between the technical sides of analyzing architecture and urbanism with its more human dimension, which is what Kevin Lynch tried to achieve by combining the scientific method with human experience and visual experiences to understand Legibility in his first book "Image of the City" (Lynch, 1960) and then later constructed theory-based arguments on the concept of time and its relation to the sense of place in his book titled "What Time is This Place?" to further analyze the intangible values a place holds (Lynch, 1972).

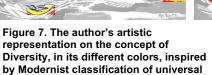
Figure 6. Barzan Tower. Image: AEB.

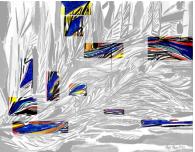
Rewinding to the Case Study's Context: Barzan Tower

It is evident that the concept of juxtaposition is not new in the architectural discourse. Doha, the capital city of Qatar, and like many other cities in the Arab peninsula, is experiencing this phenomenon on multiple levels and scales, due to its nature as an emerging city that constantly developing. In figure 6, a tower was built in a business bay to give an international feel and identity to the city but still wanted to give an impression of locality, such attempts are seen as "a significant expression of the unresolved global-versus-local dilemma" (Boussaa et al., 2021).

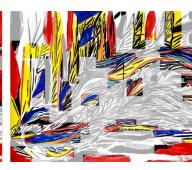


colors. Image: Author, 2021.









Finding the Cornerstone

Since the methodical analysis used in this paper is hybrid and is used to produce multi-objective answers in which diversity in the built environment can be conceived, perceived, and lived, simple visuals are used to illustrate how universal objects can be juxtaposed to produce diversity in perception. By taking the concept of juxtaposition as a cornerstone of this argument, it proposes to understand the overwhelmingly open world the modern human found themselves exposed to and suggests options where abstract concepts are cast into form in different architectural typologies. As the theoretical framework used in this study took into account the chronological review of postmodernists' literature and theories concerned with architecture and urban planning.

The Sensitivity of Emerging Cities

Moving from postmodernism to deconstructivism, and then to juxtaposition: we realize that deconstructivism is hardly a new movement, it could be seen in different eras and is not only related to postmodernism. Therefore it is not a coherent stylistic development. What is interesting in the deconstructivist discourse is that it exposes the unfamiliar and the disturbing in a way that could be therapeutic at times. We can observe trends and patterns of deformity, distortion, fragmentation, and the awkward superimposition of jarring, disparate grids in real-life situations –in our case, the language of the built environment–and find its impact on our perception of the space with a contradiction and tension that can hardly get unnoticed.

Diversity has always been exhibited in large cities, and the inflows of 'strangers' have stimulated cities to become centers for the arts, creativity, and innovation (Vranken, n.d.). However, diversity and change do not always carry a positive impact. How do we approach Architecture in continuous change? Is there a fixed formula to maintain balance in the overwhelming trends of change in the age of postmodernism? The simple visual experiment in Figure 7 tries to illustrate an answer, where the image starts with the three universal and primary colors found in Figure 8, where the colors and their corresponding shape were later adopted by the Modernist movement through Bauhaus School (Arnott, 2019). The Bauhaus' use of primary colors and shapes and its relation to Modernism and rationalism at large is seen a method of classifying and categorizing, and standardizing nature to achieve a control of it. The artistic representation of the concept of diversity is done by juxtaposing the universal colors into a unique identity that resembles universality yet diversity at the same time.

To further elaborate on the artistic representation illustrated in Figure 7 and Figure 9, the inspiration coming from by the Bauhaus movement, where planes, instead of masses, were juxtaposed one to the other, in a range of passive and dynamic manners to create spaces in between that piqued the viewer's interest (Cheesman, 1988). Figure 7 is an attempt to illustrate how visual language is used and classified into different categories —as primary colors in this case— and how juxtaposing these categories results in conceiving new categories by finding hidden links between the separate mono-modal elements. There is great significance in understanding the different phenomena occurring in our daily life



Figure 8. Universal correspondence between shape and color. Image:(Arnott, 2019).

and making sense of them, finding their similarities and differences (Güney, 2007), especially the ones related to the built environment since they are directly linked to our sense of space therefore of place and existence.

'Multiformity' as a concept might be the last stage of what postmodernism can offer in terms of intellectual contribution in architectural criticism along its visual language's eclectic nature.

In Conclusion

It is always easier to rely on confusing deconstructivist theories to justify certain phenomena in architecture and urban planning whenever the concept/design argument and explanation are weak and unable to be convincing. What is challenging, however, is to categorize such overwhelming inputs into what could be under control and digestible by the human mind. Some theorists argue that "the more we forbid ourselves to conceive of hybrids, the more possible their interbreeding becomes" (Latour, 1993). There lies a contradiction in architectural theory and discourse: drawing on the concept of polyvalence, does space adapt to its users, or do users adapt to space? to what extent architect can control their flexible design without infringing users' free interpretations of the space (Kim, 2013). Such intellectual attempts channel the social intangible values into physical form, for theorists and critics to analyze and interpret. While giving architects the freedom of having a sense of intuition and a soft side to choose the images suitable for each need and context, to be expressed with forms and colors (Wiedmann & Salama, 2012).

Multiform in Postmodernism

'Multiformity' as a concept might be the last stage of what postmodernism can offer in terms of intellectual contribution in architectural criticism along its visual language's eclectic nature. Charles Jencks' endeavor to propose an alternative to the Modern Movement has been done in the concept of Multivalence (Michael, Yaacob, & Ali, 2020) along parallel theories explained in this paper. Multiform, as a trend and mannerism, rather than a style, could be the in the end tunnel of skepticism against rational structuralist Modernist, a view that defies aesthetic and ideological uniformity, and which arises from a sensibility that rejects the desire to organize or impose order (Hopkins, 2021). The uncertainties present in the post-COVID world may be in need of such mentality, however incorporating values of resilience could help support the view of Multiform as a methodology of high sensitivity and responsivity to context with its diverse variable needs.



Figure 9. The author's artistic representation on the concept of Diversity. Image: Author, 2021

Acknowledgments

The author would like to thank Aalto University for allowing researchers to investigate topics in a creative, fresh, and nonrestrictive manner, thus creating an environment that encourages innovative research. This study was not funded and was conducted through spare time research.

References

- Arnott, M. (2019). The Red Square and The Bauhaus. In. dimadesign.
- Badu, M., Walker, D., Brace, P., & Jencks, C. (2011). Paradigm Lost? Charles Jencks and others reconsider the ultimate fate of Postmodernism. *Architectural review*, 230(1378), 31-32.
- Boussaa, D. (2018). Urban Regeneration and the Search for Identity in Historic Cities. *Sustainability*, *10*(48). doi:10.3390/su10010048
- Boussaa, D., Alattar, D., & Nafi, S. (2021). The search for identity in a global world: The case of Doha in Qatar. *Journal of Urban Regeneration and Renewal*, *14*, 295-311.
- Carmona, M., Carmona, R., Heath, T., Oc, T., & Tiesdell, S. (2003). *Public Places, Urban Spaces: The Dimensions of Urban Design*: Architectural Press
- Cheesman, T. A. (1988). *Dynamics of juxtaposition in architecture*. (Bachelor of Architecture). Ball State University, Indiana.
- Curl, J. S. (2006). A Dictionary of Architecture and Landscape Architecture: Oxford University Press.
- Erwig, M. (1997). Semantics of visual languages.
- Forty, A. (2004). Words and Buildings: A Vocabulary of Modern Architecture: Thames & Hudson.
- Foucault, M. (1984). Of Other Spaces: Utopias and Heterotopias. In.
- Golda, J. R., Heinb, C., Orillardc, C., & Oyarzun, R. L. R. a. F. P. (2019). Complexity and contradiction: in memoriam Robert Venturi. *Planning Perspectives*, *34*. doi:10.1080/02665433.2019.1587927
- Güney, Y. I. (2007). Type and typology in architectural discourse. *BAÜ FBE Dergisi*, *9*(1), 3-18.
- Hammersley, M. (2019). From Positivism to Post-Positivism: Progress or Digression? *teoria polityki*, *3*, 175–188. doi:10.4467/25440845TP.19.009.10292
- Hertzberger, H. (1991). Lessons for Students in Architecture: 010 Publishers. Hillier, B. (2007). Space is the machine. 4 Huguenot Place, Heneage Street London E1 5LN United Kingdom: Space Syntax.
- Hopkins, O. (2021). What is Multiform? *Architectural Design*, 91(1), 6-11. doi:10.1002/ad.2646
- Jacobs, J. (1961). The death and life of great American cities In.

- Jencks, C. (1969). Semiology & Architecture. Meaning in Architecture.
- Kim, Y.-J. (2013). On Flexibility in Architecture Focused on the Contradiction in Designing Flexible Space and Its Design Proposition. ARCHITECTURAL RESEARCH, 15(4), 191-200. doi:10.5659/AIKAR.2013.15.4.191
- Koolhaas, R. (2002). Junkspace. October, 100, 175-190.
- Latour, B. (1993). Nous n'avons jamais ete modernes. [English] We have never been modern (C. Porter, Trans.). Cambridge, Massachusetts: Harvard University Press.
- Lim, F. (2007). The visual semantics stratum: making meaning in sequential images. New Directions in the Analysis of Multimodal Discourse, 195-214.
- Lynch, K. (1960). The Image of the City. United States of America: The M.I.T. Press.
- Lynch, K. (1972). What Time is this Place?: MIT Press.
- Major, M. D. (2017). *A Failure of Modernism*. Paper presented at the 11th Space Syntax Symposium.
- Major, M. D. (2018). The Syntax of City Space: American Urban Grids.
- Major, M. D. (2021). 'Excavating' Pruitt-Igoe using space syntax. *Architectural Research Quarterly, 25*(1), 55-68. doi:10.1017/S1359135521000130
- Major, M. D., Atour, R. M., & Tannous, H. O. (2021). Organized complexity of the urban object. *Journal of Design for Resilience in Architecture and Planning*, 2((Special Issue: Space Syntax)), 01-17. doi:10.47818/DRArch.2021.v2si032
- McCunn, L. J., & Gifford, R. (2021). Place imageability, sense of place, and spatial navigation: A community investigation. *Cities*, *115*, 103245. doi:10.1016/j.cities.2021.103245
- Michael, G., Yaacob, N. M., & Ali, Z. M. (2020). The Notion of Multivalence by Charles Jencks and Kisho Kurokawa Comparison Through Methods of 'Abstract Representation' and 'Abstract Symbolism'. *e-BANGI Journal*, 17(2), 51-68.
- Peltoniemi, S., Poutanen, J., Ahtinen, A., & Salonius, H. (2017). Spatial solutions supporting information exchange and knowledge creation. *Architectural Research in Finland, 1*(1), pp.106-119.
- Salama, A., & Wiedmann, F. (2016). Fragmentation and Continuity in Qatar's Urbanism: Towards a Hub Vision. In (pp. 155-177).
- Salama, A. M. A., & Wiedmann, F. (2013). *Demystifying Doha: On Architecture and Urbanism in an Emerging City*.
- Scharf, R. (1974). What Time is This Place? [What Time Is This Place?, Kevin Lynch]. *The Annals of the American Academy of Political and Social Science*, 411, 238-239.

- Spanu, S. (2020). Heterotopia and Heritage Preservation: The Heterotopic Tool as a Means of Heritage Assessment. Switzerland: Springer Nature Switzerland AG.
- Venturi, R., & Brown, D. S. (1972). Learning from Las Vegas / Robert Venturi and Denise Scott Brown. In.
- Vranken, J. (n.d.). Social Challenges of Cities of Tomorrow. *European Commission (Directorate General for Regional Policy)*.
- Wiedmann, F., & Salama, A. M. (2012). The Role of Architecture in Producing Urban Qualities for Sustainability: Implications for the Future of Architectural Education. Paper presented at the Malaysian Architectural Education Conference, Malaysia.
- Young, J. O. (2001). Art and Knowledge. London EC4P 4EE: Routledge.

Notes:

- 1 from a lecture by Rem Koolhaas in 2017 in Taiwan
- 2 For more details and further explanation, liminal spaces and their link to Heterotopia, Junkspaces, Non-Places can be found in many recent blogs where ordinary users explain the odd experinece they feel in such environments. Videos available on YouTube also explains this phenomenon.
- 3 Taken from a video titled 'There is no such thing as architectural theory' where faculty members from prominent universities in Australia debate whether Architectural Theory is a discipline in itself or whether it is emergent due to multidisciplinary approaches in research and intellectual dialogues.