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The Impact of Globalization on Neoliberal Architecture: How Modern Architecture has become a Tool for Control and Compliance

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Abstract

In the last two decades, many developed countries such as America and developing countries such as Jordan have undergone extensive privatization of public spaces, which has been expressed by intensive and modern construction of resident societies where this process can be observed in many cities that apply the principles of policies and neoliberal and modern theories in engineering Architecture, which in turn affected the support and expansion of capital for the higher social classes and the weakening of the welfare of the poor social classes as part of the globalization processes. My research method will focus extensively on the relationship of politics and beauty in architecture through a comparative study based on an analysis of the influence of architectural characteristics of neoliberal and modern theories before and after World War I and II on the formation of buildings that in turn affect the city, society, or region. The architect criticizes the role of globalization, politics, and economics as an important factor in architecture development processes.

Keywords: Globalization • Neoliberal Architecture • Modern Architecture • Privatization • War I • War II.

Introduction

Architecture addresses various theoretical and practical fields based on a general understanding of architectural theories developed by architects. The confusion arising from understanding can be reduced by the significance of many different concepts in the term architecture if we try to define these concepts and theories and their significance clearly. There is a growing acceptance in the literature about the widespread of the concept of globalization in shaping the political and economic pillars of countries of the world. However, we still have little understanding of the relationship of globalization to the political situation and the emergence of neoliberal and modern architectural theories that contributed to the analysis of factors and challenges towards globalization. It is difficult to establish a clear and comprehensive definition of globalization, but the formulation of any definition must include three main elements: extension (expansion), intensity, speed, and impact. The term globalization is derived from the word globalization and is associated with the emergence of a large number of architectural theories before and after the First and Second World War, and economic networks around the world [1].

What is the most appropriate definition of globalization?

Globalization is described as a process of interaction and integration between people, companies, and governments all over the world, and some consider it a form of capital expansion that is based

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on the principle of integrating local and national economies into a free financial approach [1].

Literature Review

"Globalization" as Antony King claimed, "can only be understood contextually. There is no identity outside its social, cultural, historical, and geographical context." The representation of identity, which is closely linked to the conception of architectural regionalism, is no longer a matter of a single region or a single country. Identity today is constantly defined, re-defined, constructed, and re-constructed [2].

Globalization has grown due to advances in transportation and communication technology and international trade, and the invention of electricity and the idea of entering the elevators in architecture [2].

According to studies conducted by the International Monetary Fund in 2000, globalization has four main aspects: trade, capital and investment movements, migration, and knowledge diffusion. The main dimensions of globalization are economic, political, cultural, ecological and ideological [3].

The main factors in the emergence of globalization are summarized by the meeting of the world's population in the past two decades with more people than ever before in known history. Traveling around the world has risen to unprecedented levels, the number of tourists visiting certain countries and cities in a particular year often exceeds the indigenous number of those Places, global travel has encouraged this massive growth of the tourism industry (tourism development), attractions for cultural heritage provide incomegenerating opportunities for some of the world's poorest (as well as richer) societies, environmental challenges such as global warming, trans boundary water, air pollution, and the over-fishing of the oceans by globalization [4].

How did the era of globalization affect Jordan?

The late capitalist urban condition is characterized by a trend toward

aestheticization, where the primacy of the visual and the centrality of the image have reduced the city to a landscape of visual consumption. Broudehoux points out that, despite a strong economic rationale, there is a social logic to this practice of selling places, she argues that urban image: construction through public works and marketing campaigns is often used as a tool of social control [4].

•What is the emerging relationship?

The location of the Hassani Mosque in the center of the country, Jordan is the beginning and economic vitality and the beginning of modernity in its simple form, and that the formation at the top of the mosque is the oldest (the idea of the nucleus) and is the beginning of the period of the buildings that are located at the top (a ring-like shape) somewhat falling down the main street Where the movement begins (mass) [5].

Then it was also found that the city center from the top of the mountains (focal point) of the old and the nucleus began (the division of hemoglobin) and the division of its circle that turned into Bath, is the street that connects at the lateral direction from Marka to reach Ras Al-Ain and began to appear stronger market buildings began to fall from the functions of the mountains It varies from local job point (house) to function movement (market shops) [5] (Figure 1).

Globalization Reflected Onto Architecture: Tall Buildings of Ankara-Turkey

The buildings that converted into a symbolic (iconic) global product leads to an advantage in the race for attracting global investments and tourism, on behalf of the cities/urban districts. This process, which was initiated haphazardly in Turkey in the 1980s, has been on-going throughout the 1990s and especially in the 2000s using the restructuring of the government on a neo-liberal basis [6].

The process is concurrently observable through the tall buildings and/or building blocks which match with urban regeneration projects. High-Rise and/or tall buildings have been within the goals of architecture as signs of power, wealth, dominance, prestige, and religion [6].

Example: Pyramids in Egyptian and Ziggurats of Sumerians, temples in the Roman and Byzantine periods (such as the Pantheon and Hagia Sophia). mosques and minarets in the Muslim civilization have all, through their height, been signs of the level of civilization, culture, and power [6].

•What are the most important theories of architecture associated with globalization?

Within the framework of globalization, there are many different theories of architecture, including neoliberalism theory, modernity theory, postmodernism theory, contemporary theory, and Regional theory. This research will focus on neoliberalism theory and anti-thesis the modernity theory and its impact on architecture.

The concept of Neoliberalism is confined to the political and economic practices that affect the well-being of the individual, his freedom, and his private property rights in the marketing and trade sector. The neoliberalism is summed up in the term "privatization of public spaces" [7].



Figure 1. The impact of globalization on Jordan society.

Variables	Neoliberalism	Liberalism
Intervention in the economy	More	Less
Focuses on	Markets (more limited)	All aspects of a society. (social, economic, and political aspects)
Term	Used Accusatory	Self-Description
Placement (their location)	End of introduction	End of introduction of the "statement of the problem"

Table 1. Difference between Liberalism and	Neoliberalism.
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•What is the difference between Liberalism and Neoliberalism? is shown in Table 1.

•How to neutralize the power of the profession in the neoliberal era, the rise of two new dynamics solved the function of architecture in spatial production?

The First one, commodification of the architectural profession and its transformation to a business, pairs with the neoliberal policies of the privatization of the state and public services. [7].

The second is the counter-movement of resistance against the neoliberal policies and an attempt to empower people in occupying and appropriating the process of the creation of space [7].

- What are the main factors that influenced the theory of neoliberals?
- 1. The rule of the market: Liberating "free" enterprise or private enterprise from any bonds imposed by the government (the state) no matter how much social damage this causes greater openness to international trade and investment, as in NAFTA. Reduce wages by de-unionizing workers and eliminating workers' rights that had been won over many years of struggle [8].

No more price controls. All in all, total freedom of movement for capital, goods, and services. To convince us this is good for us, they say "an unregulated market is the best way to increase economic growth, which will ultimately benefit everyone" [8].

- 2. Cutting public expenditure for social services: Like education and health care. Reduce the safety-net for the poor, and even maintenance of roads, bridges, water supply again in the name of reducing government's role [8].
- 3. Deregulation: Reduce government regulation of everything that

could reduce profits, including protecting the environment and safety on the job [8].

- 4. Privatization: Sell state-owned enterprises, goods, and services to private investors this includes banks, key industries, railroads, toll highways, electricity, schools, hospitals, and even freshwater. Although usually done in the name of greater efficiency, which is often needed, and Privatization has mainly had the effect of concentrating wealth even more in a few hands and making the public pay even more for its needs [8].
- 5. Eliminating the concept of "the public good" or "community": Replacing it with "individual responsibility." Pressuring the poorest people in a society to find solutions to their lack of health care, education, and social security all by themselves - then blaming them, if they fail, as "lazy" [8].

Several qualifications must be applied to this argument: (Why- Causing that appearing)?

First, since flows of labor and long-term capital (money) in the current era of globalization are much smaller than in the nineteenth century.

Second, the breakdown of the global system during the First World War and the failure to reconstruct it after the war can better be explained by examination of events within Europe

Third, the inherent weaknesses of a gold standard system, then by the immigration policies of countries in the New World, though these may have had some contributory effect.

The neoliberal theory of globalization has been criticized on several counts:

First, Sceptics emphasize the similarities between the global economy of the nineteenth century and that of today [9].

Second, Then point to the economic weaknesses that characterized the earlier era of globalization.

Third, a combination of fixed exchange rates and free capital flows

that characterized the gold standard is seen as a source of economic instability and as the primary cause of the Great Depression [10].

Forth, another point of criticism relates to growth in trade. Whereas theorists of neoliberal globalization point to the complexity of international trade patterns, skeptics focus on the growth of regional trade agreements, and particularly of the EU. As was observed above, the fact that trade has grown faster than world output in the last 30 years is largely due to trade within the EU [9].

Five, there are many criticisms of neoliberalism, including its potential to endanger democracy, workers' rights, and sovereign nations' right to self-determination [9].

Six, Neoliberalism's naysayers also say that its call to replace government-owned corporations with private ones can reduce efficiency [9].

What do the theories of neoliberal globalization argue?

That exposure to international competition will force countries to reduce expenditure on welfare and community services- However, empirical evidence suggests that public expenditure is generally higher, relative to national income, in countries where the ratio of trade [8].

What are the arguments that supported neoliberalism?

View until recently was that the developed countries could not maintain expensive social security systems and publicly financed health and education in the face of competition from Asian economies with low taxes and minimal welfare states [8].

Comparing the effect of the neoliberal movement after World War I and World War II? is shown in Table 2.

Architects, pioneers of the neoliberal movement, and cases that reflect the principles of theory?

First Case: Birmingham New Street railway station - Architect: Zaera-Polo's. The fermentation test as per VDI-4630. Fermentation tests of this kind provide information regarding (Figure 2):

Comparisons	World War I	World War II
Main idea	Disrupted the economy and broke the imperial system.	The early neoliberal ideas of the Mont Pelerin Society
What do you emphasize?	Emphasis on the laissez faire.	Emphasis on the fundamental importance of the individual.
What are the basic requirements?	 New social identity. Urbanization. The slow democratization of social life. Created new social functions and needs. 	 Limited state intervention to police the system. Establish conditions favorable to competition. Prevent monopoly. Provide a stable monetary framework (critiques). Relieve acute misery and distress.
What are the demands?	They rejected the impact of historical events on the social demands of the individual	Demands for social justice found new forums for expression in the world after World War II.
What types of buildings are used?	The first "tall office buildings" of Chicago and New York.	The societal relevance of workers housing provision, a key role in re- organizing class relations and the city, and social and spatial practice-in New-York.
What was the purpose it was calling for?	The revolution in production and transportation had erected without the help of an architect.	To mitigate (reduced) the growing social unrest created by the current housing crisis.
The most prominent architects		Gropius, Mies van der Rohe, Le Corbusier, Wright, and Aalto, continued to dominate the scene. S.R. Crown Hall Chicago
Reverse architectural formalism?	Return to Monumental Classicism. Example: Red House-Bexleyheath	Monumental Formalism-The International Style. Example: Bauhaus Buildings in Germany.
Important architectural characteristics	 Respect for the properties of the material. Preference for the elementary geometries of an abstracted classicism. Concrete block buildings. 	 Highly sculptural masses and spaces. Decorative qualities of diverse building materials. Exposed structural systems.

Table 2. Effect of the neoliberal movement after World War I and World War II.

Technological innovation	At a lower level. Example: Le Corbusier- Ken Tanaka Tokyo- The At a higher level. Example: Gropius-Fuel station. National Museum.
The materials used	1- Raw material. 2- Noble" materials like stone and marble and conventional methods of a masonry building. 3- Iron. 4- Cement.
The dominant architectural character	Medieval Modernism. Example: Central St Martin's building LCC New Brutalism buildings. Example: Sir James Stirling's History Fac architects. Cambridge (1964–67).



Figure 2. Birmingham Railway Station - Zaera-Polo's.

Why was this case chosen?

The undulating stainless-steel cladding added around the old station is based on the distorted shapes seen from moving trains. The bifurcating, undulating, smooth forms of the track field have been transferred and embedded into the geometry of the building to ornate the city and to convey [11] (Figure 3):

- 1. Historical character as a transportation hub. As a result of the damage caused after the end of the World War II.
- Various traffic systems such as the famous canals and the roman roads converge and overlay.

The curving aesthetic continues into the interior, where a large atrium above the station concourse is topped by seven domed skylights made from transparent ethylene tetrafluoroethylene plastic [11].

What is the ethylene tetrafluoroethylene plastic?

The properties of glass before the emergence of the theory of neoliberalism are solid amorphous, and often amorphous transparent. The oldest types of glass historically manufactured are "silicate glass" based on [12] (Figure 4):

- 1. The chemical compound of silica (silicon dioxide or quartz).
- 2. The main component of sand.

The properties of glass after the emergence of the theory of neoliberalism are high resistance to corrosion and strength over a wide temperature range. ETFE has a relatively high melting temperature, excellent chemical, electrical and high-energy radiation resistance properties [13] (Table 3).

Second Case: Newport Street Gallery-Architect: Caruso St John-2000s- London, UK (Figure 5).

Why was this case chosen?

A poster for Chitty Bang adorned the facade for years but has now been replaced by an enormous LED screen facing the railway tracks – a genius marketing move that will enliven the morning commute. The materials used on the roof are the remains of old railway iron not being used after the Second World War [14].

Inside these sturdy brick, shells were cathedral-like spaces 11, 14, and 15 meters high (the feature that attracted hirst to buy them in 2002 and use them briefly as his studio). Presenting a sheer wall towards the railway viaduct. Computer-aided production means it is much more possible to do things like this than it would have been 10 years ago-says St John. Adrian [14].

The building is a former theatre carpentry and scenery production workshop, redesigned by Caruso St John. The design was praised for its "virtuosity. His private gallery in Vauxhall has involved the conversion of an extraordinary terrace of listed industrial buildings. The gallery form the whole length of the street, with the three listed Victorian buildings flanked at either end by a new building [14] (Figure 6 and Figure 7).

How was neoliberal architecture formed in Jordan?

Why was this case chosen? The city of Amman is distinguished by the presence of the Abdali-project. The Abdali area was once popular (a large area). It was near a military area, opposite the Shmeisani area (the building of the Jordanian government intelligence service). [15].



Figure 3. Before / After the emergence of the neoliberalism movement.



Figure 4. Before / After the emergence of the neoliberalism movement.

Table 3. Comparison between Fused quartz (Before the emergence of neoliberalism) and ETFE (After the emergence of neoliberalism).

Comparisons	Fused quartz (Before the emergence of neoliberalism)	ETFE (After the emergence of neoliberalism)
		1- Is self-cleaning (due to its nonstick surface)
		2-Recyclable
	1- lowers the glass-transition temperature	3- It could be stretched (up to 3x)
	More specular reflection and increased optical dispersion.	4- Still be taut if some variation in size occurs
	3- Very low thermal expansion .4- Is very hard.	5- ETFE has an approximate tensile strength of 42 MPa (6100 psi).
Properties Architecture	5- Resists high temperatures (1000–1500 °C).	6- Working temperature range of 89 K to 423 K (–185 °C to +150 °C or –300 °F to +300 °F).
		7- ETFE resins are resistant to ultraviolet light.



Figure 5. Newport Street Gallery, Caruso St. John.



Figure 6. Before / After the emergence of the neoliberalism movement.



Figure 7. Newport Street Gallery, Caruso St. John.

The first time in Jordan, a whole area is fenced (became the property of a person). Which is the Global Resource Company (owned by Hariri) - Lebanese prime minister and business tycoon Rafic Hariri? The region has a military history (associated with the history of the country of Jordan) - the acquisition (ownership) of a general area [15].

In 1989, there were economic debts on Jordan over the World Bank. He asked Jordan to privatize government property and services and public companies and transfer them (became) private companies [15] (Figure 8).

What is the definition of modern theory?

Modernism includes the philosophical principles associated with cultural changes in Western societies in the late nineteenth and early twentieth centuries. It expresses new social visions and the development of a developed society [16]. The process of social change resulting from industrialization. The term modernity is reflected in the principles of modern design, technological developments, and community modernization [17].

It is associated with the function of buildings, approached from an analytical viewpoint, rational use of materials, the elimination of ornament and decoration, and openness to structural innovation. Modernism encompasses many different variations, including Futurism, Constructivism, De Stijl, Bauhaus [18].

Described differently by different historians (themes, styles, years, periods). The USA rose to become a world power politically and economically, However, Roaring Twenties, the Great Depression, WWI, and WWII significantly affected the mood of the American people [18].

Described by several historians in terms of patterns and periods, as the United States became politically and economically strong. But the losses left by World War I and II greatly affected the American people and the world [19].

Modernism focuses on modern building techniques and methods, especially the use of reinforced concrete and glass. It highlights the idea of shape following the function and rejecting the decoration and encouraging simplicity, as it spread after the Second World War when it was gradually replaced as a basic style of institutional and institutional buildings with postmodern art [16].

Comparison between Modernist & Postmodernist Architecture is shown in Table 4.

Architects, pioneers of the neoliberal movement, and cases that reflect the principles of theory?

First Case: The Guggenheim Museum • Situated in Manhattan, New York City - Architect: Frank Lloyd Wright (Figure 9 and Figure 10).

Why was this case chosen?

The museum is characterized by a large difference in the external appearance compared to the surrounding buildings, its idea is to combine the geometric shapes triangles and arcs and squares that embody the concept of organic architecture. Its design is inspired by the inverted pyramid of the Zagora Temple which was embodied by Ramp, which extends from the ground to the opening of the sky to the top [20] (Figure 11).

The materials used in construction were precast concrete blocks,



Figure 8. Before / After the emergence of the neoliberalism movement.

Table 4. Comparison between Modernist & Post-modernist Architecture.

Comparisonns	Modernist Architecture	Postmodernist Architecture
Duration	late 19th- early 20th century	Late 20th -21st century
Predecessor	Nordic Classicism	Neoliberalism Architecture
Relationship with design principles	Our efforts to reconcile the principles underlying architectural design with Rapid technological advancement and the modernization of society.	Refers to the functional and formalized shapes and spaces of th modernist style are replaced by diverse aesthetics.
Maianaanaana	Form follows function	Pluralism, double coding, flying buttresses, and high ceilings,



Form follows function

iralism, double coding, flying buttresses, and high ceilings, irony, and paradox, and conceptualism.



Figure 9. The Guggenheim Museum, Frank Lloyd Wright.

the white paint used on the internal walls makes the works of art stand out and The skylight is supported by steel joints [20].

Second Case: Wainwright Building, Known as the Wainwright State Office Building, St. Louis, Missouri- Architect: Dankmar Adler and Louis Sullivan (father of modern architecture) in 1890 – 1891s (Figure 12).

Why was this case chosen?

The building is characterized by the uncommon use of traditional building materials such as stone, brick, and wood in simple and easy building methods that reflect its natural features and are installed by large soft aircraft, and it reflects the classic idea of the three-part column that Sullivan advocated around the tall building [21] (Figure 13).

The base contained retail stores that required wide glazed openings. Above it, the semi-public nature of offices up a single flight of stairs is expressed as broad windows in the curtain wall. The building's windows and horizontals were inset slightly behind columns and piers, as part of a "vertical aesthetic" [21] (Figure 14).

Comparison between Modernist $\boldsymbol{\vartheta}$ Neoliberalism Architecture is shown in Table 5.



Figure 10. Before / After the emergence of the Modern movement.

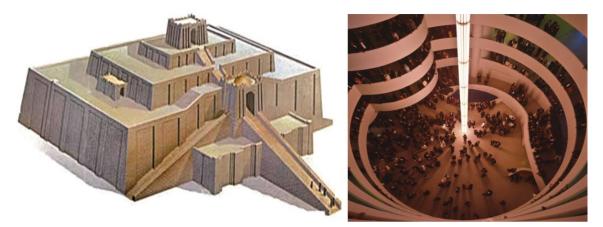


Figure 11. Sumerian Civilization, Guggenheim Rotunda.



Figure 12. Before / After the emergence of the Modern movement.



Figure 13. Wainwright Building, Dankmar Adler and Louis Sullivan.

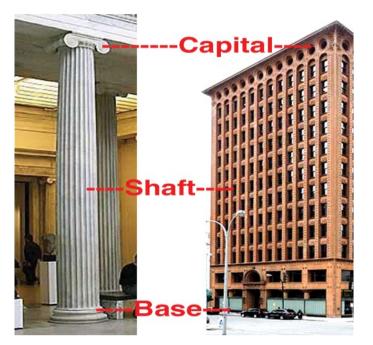


Figure 14. Wainwright Building, Dankmar Adler and Louis Sullivan.

Table 5. Comparison between Modernist & Neoliberalism Architecture.

Comparison	Modernist Architecture	Neoliberalism Architecture
Duration	late 19th- early 20th	After the World War II
Predecessor	Classic architecture	Modernist Architecture
Major concept	Form follows function	Privatization space
Ethics	Individualism	Society
What is real	Naturalism	Industrialism
Approach	Objective (theoretical and analytic)	Subjectively (On the movement previously)
Formalization	Classicalism	International style-modern
Materials	Marble- Iron – Cement-Reinforced Concrete- Steel and Glass.	Reinforced Concrete- Steel and Glass.
Next new era	Neoliberalism	Post-modernist era
Characteristics	 Use traditional (local) and new materials. 2-Reduce traditional forms. 3-Depend on Complex emotional & psychological elements that bear on them. 4-Promote technological development around the world. 5-Focus more on the future than on the past. 	 1-New materials (modern). 2-Reduce traditional forms. 3-Depend on political & economic elements (factors-event 4-Promote technological development around the world. 5-Focus more on the future than on the past.
Influential Events	World War I and World War II.	World War I and World War II.

Architectural characteristics common to the two movements

The architectural characteristics common to both theories are summarized in exposed structure systems, elimination of unnecessary details, the appearance of material ought to be seen rather than concealed, and use fabricated materials, the invention of new forms.

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