

The Impact of Digital Technology on Identity and Culture in Architectural Design

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ABSTRACT

Digital architecture is a movement in the field of architecture to provide a ground for more creation and innovation through the relationship between architecture and digital sciences. Many researches and studies have focused on the concept of identity, technology, and ecology and the impact of these systems on the ecological and morphological formation of design. The present study has been conducted based on a qualitative study and the writing of this article is a descriptive-analytical method and the data collection tool is library study and valid scientific articles. Recently, digital technology has spread rapidly and has had a significant impact on recent initiatives, but the connection between this digital development and environmental and biological organizations remains ambiguous. In fact, the preservation of cultural identity is one of the most prominent issues in architecture that has been raised for research and study, especially in the era of globalization of the "New World Order", which is characterized by revolutions in various fields. Nevertheless, architecture has been greatly influenced by digital technology. In many cases, the design style used in local buildings is completely random and their origin is unknown.

Introduction

Nature has always been a source of inspiration, knowledge, and well-being from which human needs originate and is an easy prey to feed on. With the advancement of modern science and industry, urban development has driven humans away from nature and led them to strive and achieve their greatest goals, resulting in many environmental problems. and the recent constructions. Therefore, it is necessary to pay attention to the formation and planning of the ecosystem through the building and the project site as an ecosystem in which ecological design is related to the environment, as well as the climatic characteristics and natural boundaries of the project site to measure its impact on the designed system and its performance instead of focusing on the building alone and ignoring its biosphere. The goal of ecological design is to achieve formations that value the characteristics of the region[1].

As the world witnesses an unprecedented acceleration and development of digital technology, these profound and radical transformations in technologies began in the 20th century, accelerating the speed of communication, so that technical barriers, political considerations, and geographical boundaries are no longer an obstacle to its development. The digital revolution paved the way for progress in all aspects of life, no field is left without its invasion. Among these aspects is the field of architecture and design, where the use of technology has made possible new design directions, such as dynamic digital architecture, which connects the two directions of dynamic and digital architecture. Through the changes brought about by technology in contemporary life, including the Arab world, we realize that we have become consumers of the works of many Western architects. They seek to transmit the latest innovations and works that have negatively impacted local identity, differentiation, and privacy. Many people support globalization, seeing it as a human phenomenon that aims to link different cultures and exchange their knowledge for effective development to open new horizons and provide great opportunities in global markets slow.. While opponents see it as calling for the elimination of cultural features that have technical power and economic control through the imposition of economic and trade policies that widen the technological gap and dependence on other countries. This is an intellectual problem in which architects' opinions differ between proponents and opponents. 2].

From the beginning of human existence to the present day, the people of the world have sought to maintain their social, national and cultural distinctions, the existence of identity has helped to increase awareness of cultural and social characteristics that have helped to differentiate individuals from one to another. The word identity in different fields and schools has different meanings and definitions, although there are different definitions of identity in terms of language and linguistic dictionaries: Identity is a set of characteristics that distinguish something from another, a person from another, or a group from another. Each of them has several elements in its identity. The word identity philosophically refers to the existence, manifestation, and physicality of the forms of the people who exist.

While architectural identity has been a real global concern over the past three decades. Many cities have become increasingly obscure and are beginning to lose their character [3], many architects and writers have begun to define the word identity, which varies from person to person, Gordon Cullen identifies identity in his book *Townscape*. The representation of the city of itself and the visual appearance of the city. According to Adam (The Role of Architectural Identity), he defines identity as the origin of a sense of belonging, which is the way in which individuals can relate as members of communities and groups. While "Himira" in his book "Reconstructing the Identity of Place with Architecture" says that it is part of the phenomenon of identity because it is necessary to preserve identity by changing buildings and places in societies. Architectural identity is a cultural phenomenon that can lead to the combination of social changes from the past to the future. In general, urban identity has been affected by several movements and stages to this day[2].

The combination of digital technology with conventional design techniques has revolutionized creativity and innovation in the dynamic field of architecture. The rapid development of digital tools – from CAD software to virtual reality simulation – has not only revolutionized the way architects conceive and realize projects, but has also made the identity and culture of architectural design unalterable. Today's architectural sector, previously distinguished by hand-drawn designs and realistic models, embraces technology as a vital step in the creative process. This change has ushered in a new

era of research, allowing architects to experiment with shapes, materials, and spatial concepts that were previously impossible. But when technology changes design principles, it raises important considerations about how this Transformation may affect architectural identity and cultural values, he proposes[1].

Through the changes brought about by technology in contemporary life, we have become consumers of the works of Western architects. Today, the expansion of the use of technology has somehow challenged the concept of culture and identity, the effects of which are evident in the non-identity of cities and architecture today. After the Industrial Revolution and the extensive developments of the twentieth century, technology quickly entered human life and underwent fundamental changes. Despite the great and glorious culture and civilization of the past, Iran has suffered from such an imbalance and discontinuity as if it is trapped in a predicament. But many people support globalization and see it as a human phenomenon that aims to link different cultures and exchange their knowledge for effective development, in a way that opens new horizons and provides great opportunities in global markets. [1].

In this study, we explore the fundamental impacts of digital technology on architectural identity and culture, with the aim of understanding the many aspects that this technological integration introduces. We look at how the use of digital resources has influenced and changed architects' design philosophies, cultural manifestations, and perceptions of identity. We also examine how technology interacts with the cultural context, and we examine that How architects adapt to the sociological, historical, and regional impacts of the digital age.

2- Literature review

This paper examines the impact of digital technology on identity and culture in architectural design. In this section, the definitions that support the review of the article will be shown. In this research, a qualitative method was used. This method is based on the content analysis of scientific and industrial journals related to digital architecture and identity. There were no time limits. All articles published in either Persian or English were reviewed by searching the Google scholar database. The articles were searched with the keywords of digital architecture, identity, and culture. The main sources of this research are related journals, articles, and white papers on digital architecture, the impact of digital architecture on the urban landscape, digital architecture, and identity. Therefore, the literature related to the research topic was reviewed.

- Digital Revolution

The present era has witnessed acceleration and development since the advent of computers and other modern technological devices that deal with digital methods. Digital technologies such as computers, the internet, smartphones, cloud computing, artificial intelligence, and various software programs are at the heart of the digital revolution. The digital revolution has led to an abundance of data, which is very important in architectural design. The digital revolution has transformed architectural design using sensors, Simulations and data analysis have impacted the development of environmentally friendly and sustainable solutions. This data-driven strategy, while understanding the architectural context, reduces adverse environmental impacts. Energy simulation, building performance assessment, and optimization are made possible by digital technologies, leading to environmentally friendly designs with less resource use [4].

The global flow of architectural ideas and influences allows for conceptual pollination and integration of design aspects from many cultural contexts, and enhances architectural design by integrating global and local identities in innovative ways.

The digital revolution is the main reason for development in different areas of life. It is known for the rapid change of information in different parts of the world. Hence the current era is called the age of digital life. Thanks to the digital revolution, everything is developing rapidly to the point where we cannot predict the characteristics of tomorrow's world, and its features are unlimited, because the possession of digital tools is a matter of fact. It has become essential in the simplest of everyday tasks [4].

-Digital Architecture Revolution

Digital Forms and the Digital Revolution The thinking and philosophy in digital forms is now known, and it is possible to incorporate the idea of digital forms within the concept and respond to the requirements of this age in all its orientations and excursions, and digital architecture is based on the use of computers . Organizing the format and transition events, whether in the case of static shapes or Animated that can be used through the use of virtual reality approaches natural reality so that it can be tested for the purpose of developing and evaluating changes. [5]..

This is not a new type of architectural style that is not limited to the integration of the latest techniques and technologies of modern architectural trends and disciplines to find solutions. The true nature of digital architecture lies in the way it deals with problems and its ability to propose possible alternatives that are dominated by non-standard relationships and non-repetitive designs away from their historical relevance.

In his book "Hybrid Space", Peter Zellers defined it as a different form of architecture characterized by free and dynamic forms in the virtual environment. Digital architecture relies on defining the design and specifying the solution by diverting attention from the problem. Therefore, an engineer who follows a digital approach must consider this change and move to a way that suits systematic design.

According to Heiserman, digital architecture is a set of grammar to deal with design problems using computational techniques. The digital revolution has brought about a significant change in architecture in the last few decades. The use of advanced digital technologies has changed the limits of creativity and expression of architecture, in addition to revolutionizing the way architects create and construct structures. Pencil and paper pave the way for CAD software, 3D modeling, and parametric design tools have opened up, as the digital revolution has ushered in a new era of architectural design[6]...

Architects can now visualize and modify complex designs with unparalleled accuracy and effectiveness. The seamless integration of these tools has made it possible to explore complex geometry, organic shapes, and eco-friendly design strategies that were previously unimaginable. It also enhances collaboration, simplifies operations, and expands design options, and changes the future of the built environment [7].

- The presence of technology in architecture

Digital technology has also entered the traditional architectural process, allowing architects to develop and enhance the process of their architectural activities. They can capture the attention of employers at different stages of the design by providing project information much earlier, or they can use their expertise in digital technology to strengthen facility management and planning on controlling the costs of the project process. Design, Domains It has an old history and on the other hand, it includes different meanings that show double values in it. In addition, during the formation of the structure of a plan, technology can stabilize the project in terms of visual information by proving the success of the project in effectively controlling the costs and quality of the project and by reducing the risks. The information that flows from the design stage to the organization is critical and when effectively controlled, it makes it possible to create a plan and implement other quick projects by providing ways to improve the work. [6].

- Digital Architecture:

A new architectural style was emerging and was not recognized until the early 2000s. This movement was due to the rapid growth of technology and the computer language, this style was later recognized by many architects as the most recent dominant style, due to its characteristics in developing an active design process based on data and logical results based on algorithms. It is known as "digital

architecture", and in Figure (1), the impact of this style and how it exploits the urban structure and the identity of the city can be clearly seen. According to Schumacher, it is described as a process whose background goes back to digital technology, animation, and techniques in which the performance of the design method is focused on scripting and coding algorithmic formulas with parametric systems..



Figure 1 - Aljada Project Central Centre, UAE - Sharjah.

In this context, Heiserman defines digital architecture: a set of grammars that demonstrate methods for solving design tasks by implementing a computational process as a solution mechanism. The concept of digital architecture is a discipline of engineering that is supported by digital architecture by using digital media in the process of designing, creating and designing a comprehensive architectural type.

- Digital Design:

As in other fields, the impact of the digital revolution on architectural design was clear, especially since all modern tools and theories were presented in the current era.

The launch of digital design first began with the launch of the digital revolution at the Center for Contemporary Art at the Crossroads, where architect Nicholas Grimshaw presented a paper titled "Architectural Machines" highlighting the applications of computers in architecture, followed by a discussion on electronic architecture at the Los Angeles Conference where the interactive relationship between architectural designs and digital displays was discussed.

Studies continued until architect John Fraser addressed the applications of digital technology in his 1995 book "Revolutionary Architecture." He also dealt with digital modeling inspired by nature and presented studies on virtual creativity in architecture.

In his book "Digital Architecture Now: A Global Survey of Emerging Talents" by Neil Spiller, he introduces young architects who recognize the digital design revolution and showcase their cutting-edge work that demonstrates how digital methods and tools are influencing the modern architectural profession [1].

Many of the architects who contributed to revolutionary thinking, such as Frank Gehry, Peter Wiseman, and Greg Lane, significantly supported the development of forms of relationships and space technology using unfamiliar designs, which led to a revision of traditional design to study change.

-Architectural Design Trends

The development of technology is the main reason for the current revolutionary designs. It brought new materials and new techniques in architecture, which led to the complementary link between design and technology. Digital architecture is characterized by new forms that were not available in the past due to the lack of construction techniques. Energy efficiency has gained a reputation [8].

Biophilic design focuses on people's connection to nature, while adaptive reuse and renovation become more sustainable and cost-effective. Modernist and minimalist design principles with clean lines, open spaces, and functionality continue to influence architectural aesthetics. Inclusive and accessible design also becomes more important. But architectural trends are based on regional and cultural contexts, technological advancements, and social change. It can vary.

The main advantage is the absolute freedom of information that was previously unknown, so that design serves as a technological guide to achieve the ideas embodied through production materials and design tools that add different dimensions and operational forms that allow the designer to achieve his ideas. The high quality and wide range of options allow him to come up with the solution. Effective and effective results [8].

-Digital Design Concepts

Computerized digital design has given rise to new design concepts. Branko Kolarevich divided them into several categories (Figure 2):

- Topological Design of Topological Buildings
- Isomorphic design for the homogeneity of buildings.
- Animated design for buildings with dynamic characters.
- Transformation design for simple and rudimentary blocks.
- Parametric design for design parametric calculus.
- Generative design expresses evolutionary design[9].

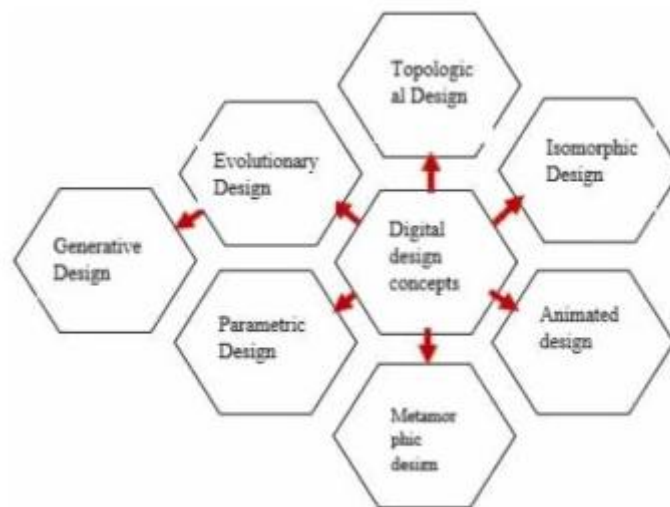


Figure 2- Digital Design Concepts[1].

The impact of the digital revolution on form and function

The digital revolution has played a major role in transforming and functioning and satisfying the ambitions of architects who seek to represent distinctive forms that represent progress and development. This work is embodied in the following :

- **Cyber Spaces**

Cyberspace architecture provides an opportunity for architects to examine and test an idea before it is actually built. It allows the user to walk through the details and provides a more realistic view of what it will be like in real life. It also allows different professionals to interact with each other and simulate an idea before the actual construction is done. This allows theories and concepts to be realized and explained even with the physical body, resulting in even new ideas. However, when they seem unacceptable, it is much more than this [10].

- The architectural cyberspace has expanded rapidly , including digital technologies such as VR, AR, parametric design, and data-driven techniques. This has transformed the design process, allowing for the creation of stable, flexible, and context-sensitive architectural solutions, which have completely revolutionized the communication, interaction, and interaction of architects with the built world [10]..

- **Liberation from the outer form**

In the era of the digital revolution, architectural forms are subject to additional rules such as proportions, modularity, and functions that go beyond those that emerged during the Industrial Revolution. By integrating the concepts of information and building communication systems to achieve the expected expansion of buildings, and taking into account the concept of smart buildings, the building passes between interior and exterior, seeking compatibility between technology and the organic organization of the building. The environment, and the sensitive surfaces of the building's exterior coating are transformed into complex exterior coatings whose aesthetics originate from the technology used in the building. [11]..

The design stage is directly influenced by the tools used in design, which influences the way design is thought. At a time when the use of hand tools such as flat and flat triangles was popular, the drawing of flat lines on square grid was prevalent in architectural forms, while in the era of the digital revolution and the use of computers in various design applications, fundamental changes occurred and a wide expansion of simple and flexible shapes It was created more acceptable.

Deviating from traditional geometries and styles, it allows architects to experiment with more organic, fluid, and expressive forms. Advances in digital technologies, computational design, and parametric modeling contribute to this freedom, allowing architects to construct complex and dynamic forms that are adapted to environmental elements and human desires. The resulting architecture is distinguished by individuality, flexibility, and harmony with its environment, enabling a more comprehensive and creative design expression..

- **Shape in Digital Architecture:**

Digital formats can be considered as the basis for design in their design on computers, and these forms have been expanded in various fields of engineering and technology. It reflects the experiences and expresses a new generation of theories in sculpture, architecture, and interior design, and this also plays a role in architecture and interior design, and the reasons for this new approach on a global level. It can be clarified by the following points:

- 1) Continuous development of computer programs.
- 2) The emergence of a new growing system of information networks.
- 3) Contributing advanced technology to the development of new technologies and industrial systems. The advent of new materials such as platinum was one of the reasons for the climate favorable to digital forms that helped confirm this new approach.
- 4) Digital culture and the acceptance of users and their response and understanding of this method in the development of this method at all technical and age levels, as well as industrial proliferation.
- 5) A new generation of architects and interior designers are interacting with this new thinking.

- **Changing the functional elements and inconsistency of form with function at the level of architecture and urban planning**

Digital architecture plays an important role in the relationship between form and function, or in terms of thought and philosophy, since it represents a new concept with the boundaries that the architect designs in the architectural space, while at the same time taking advantage of new technological upgrades such as smart and transparent materials. Transparent materials have become an important part

of formal and functional applications, and new solutions for architectural construction and offer a contemporary advantage[12].

Function is the reason for the existence of architectural works and is the first and most important influence on architectural form. The first fundamental principle in functional theory proposed by Lewis Sullivan is that "form follows function". In fact, form must be the product of the realization of functions because architectural form is only a surface for defining the spaces for which functions are created, and therefore the evaluation of architectural form must be based on the link between the model and the function that leads to it. Function is the motivation that drives the form, and the success of the model is due to the delivery of its services.

A well-designed building integrates form and function, improving user experiences and spatial efficiency. When form and function are in harmony, the overall aesthetic appeal and functionality are improved, leading to a more successful and long-lasting design. Being fully aware of the demands of humans and the surrounding environment helps architects design places that not only support They should be physically attractive, but also practical and user-friendly. Establishing this symbiotic relationship is vital to ensuring that architecture improves the lives of its inhabitants while contributing to the built environment.

-Transparency of the elements of architectural formation

Transparency, sustainability, and digital architecture are the new clothes worn in the new era, as they have influenced the form and spirit of architecture and design through new concepts that may reach new features and standards. They appear in an age that is concerned with expanding its circle and encompassing the entire world, transforming it into infinity, beyond the political boundaries of countries It is spreading and spreading the economy. Transparency to engage with climate challenges and extreme urban growth encompasses complexity and performance. It created new directions as well as new visualizations in advanced software techniques and hardware technologies. All of this led to its de-identity and fading..

The construction of the materiality of the form and systems ends up in an unforeseen structure with different shapes and designs, as the advanced technology implemented offers liberating methods for the building system that leads to the recording of the unforeseen plan landscape. [11]..

- Simulation based on morphology and ecomorphology

The production of a form and its visualization are closely and inextricably linked." Accordingly, More Fujini Design brings design and construction much closer together. It is a general prerequisite for exploiting the full potential of digital technologies in the design and construction of architecture that is created in general. The shape of the building and its interior and exterior spaces, as well as its relationship to the surrounding environment, or so to speak. The public site, usually in the form of spatial blocks, depends on a homogeneous relationship for the formation of function and logical arrangement.

Many previous studies have shown that the ecosystem depends on the process of confirmation to show a simulated image of energy flow and to show the role of materials or organisms in the environmental environment. They are vital for understanding and optimizing the interaction between natural environments and the built form. Ecomorphological models are used to guide sustainable design ideas by analyzing natural processes such as sunlight, wind movement, and development Vegetation is used. These simulations help design environmentally friendly buildings and urban locations with low energy consumption and environmental impact[1].

Morphological simulations, on the other hand, examine spatial configurations and building shapes, optimizing layouts for the tool and user experience. Architects may create harmonious spaces by combining ecomorphology and morphology that respect ecological principles and human needs, leading to the creation of resilient and efficient environments[1].

-Architecture and identity

Architecture reflects the identity of a region with respect to the region, its culture, the values and ideologies of the people of the region, and the historical background from which they

originate. The architect should always consider the sense of belonging in a society with regard to the location of the design.

Architectural identity is the first impression that people get of seeing a building. If interpreted correctly, it evokes confidence and luxury, creating an impression of the architect's identity and an impression of the area in a general sense..

Therefore, seeing an area without identity has a reflection in its system, especially when the need to defend the national and cultural identity of that area disappears. When rebuilding a building after demolition, the building can be re-established. It can be pre-built with the same symbol and familiarity. Another possible decision is to reconfigure the building and adjust it according to modern needs. However, it must be very carefully [16]..

Some components represent the original tradition or design, which can also be used to benefit contemporary concepts. Traditional architecture often depicts the identity of a particular region or culture through the use of local materials, construction processes, and architectural aspects based on cultural tradition. These structures and places serve as symbols of memory and social identity, providing a sense of belonging and They inspire a connection with the past. Architecture should help human beings to reflect their true values with a deep meaning. In multicultural societies, architecture may also be used to express and reinforce cultural identity.

- The application of digital architecture in the restoration of ancient urban landscapes.

By defining the impact of digital architecture on the regeneration of ancient landscapes, we can refer to the possibility of virtual recreation of ancient cities with little or no effects or signs as a result of various disasters such as earthquakes, wars, etc. One of the most appropriate methods for accurately recreating these urban landscapes is the use of digital modeling and simulation. By creating an accurate 3D model of a heritage site, its physical environment can be reconstructed virtually, which is faster and cheaper than a physical location. An example of such applications of digital architecture is the reconstruction of the city of Bam, which was destroyed on December 26, 2003 after a severe earthquake. The intensity was devastating. Old Bam was one of the most important cities in Fars province and the largest muddy complex in the world. The origin of Bam can be traced back to the Achaemenid period. (Fig. 3).



Figure 3- The citadel of Bam after the earthquake.

After the earthquake, a team of Iranian and Japanese experts worked on a 3D modeling of the city of Bam. They created the virtual reality space of Bam. Now the recreated pattern of the city of Bam and

its urban landscape enables tourists and enthusiasts to take a virtual tour of this lost city. The team uses data such as 2D maps, photos, mapping maps, Films, texture descriptions, and sketches were used to create 3D models of the ruined city. Then, they conducted analytical and comparative research on these data to supplement the primary sources of modeling, and finally developed 3D simulation of city buildings using modern techniques and tools such as AutoCAD and MAX-3D software . (Figure 4).

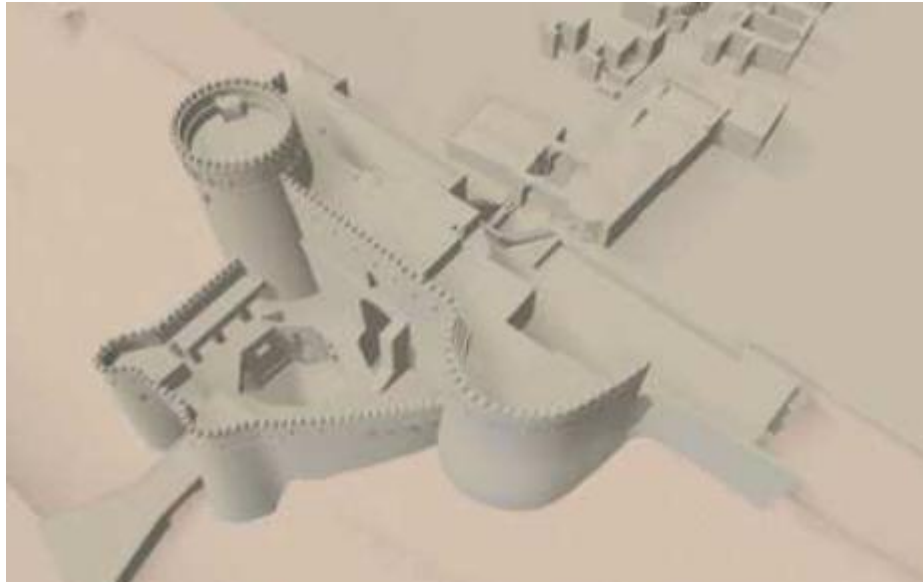


Figure 4-3D model of the citadel of Bam and its view

-Globalization vs. Architecture

Today, urban development strategies and architecture show the definite effects of the phenomenon of globalization. These effects exist all over the world and take the form of social, economic, and cultural phenomena such as the emptiness of city centers or residential blocks, the rise of blockers, social degeneration, and the increase in crime. All of them have been created due to the disregard of local models and the needs of users. In the name of modernity, The advancement and development of technology, such integrity has a significant impact on the uniformity, homogeneity of the landscapes of the built environment, and the destruction of spatial order. Today's designers, in a similar way to international style builders, seek technological innovations, use innovative tools to support design processes, simplify form, and copy standard solutions, which often leads to neglect of The needs of the users and the meaning become textual. With that in mind, contemporary architecture should provoke careful reflection and reflection.

All of them have been created due to the disregard of local models and the needs of users. In the name of modernity, advancement and development of technology, such integration has a significant impact on the uniformity, homogeneity of the landscapes of the built environment, and the dismantling of spatial order. Today's designers, in a similar way to international style builders, They seek technological innovations, use innovative tools to support design processes, simplify form, and copy standard solutions, which often leads to a disregard for users' needs and textual meaning. With that in mind, contemporary architecture should provoke careful reflection and reflection.

Nevertheless, in this murky context, there is an increasing emergence of urban planning and architectural solutions that are challenging globalization in the name of sustainable development paradigm ideas. Such solutions enter into a dialogue with the context of place and

the local housing development of a region and are inspired in it.[14] Many times, design solutions implemented with respect to traditional architectural values are the result of a search for a compromise between the authors' creative perspectives and the requirements of spatial order, as well as a broad field of understanding. A good example is the architecture of the Alpine countries, including Austria and Switzerland, as such architecture corresponds to and blends with the built texture and the natural environment.

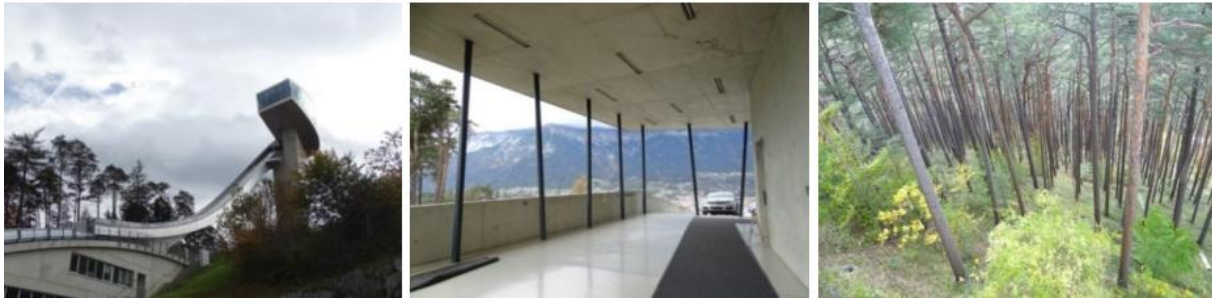




Figure 5 - An example of architecture and the natural environment

Bergisel Jump Ski Tower in Innsbruck, designed by Zaha Hadid. a) Overview; b) Arcades around the ski jump tower. c) The forest around the object.

Globalization is associated with cultural and aesthetic diversity. It forms the basis of architectural philosophy and design ideology [22]. It depicts the different ideologies and identities of the people of the region. For example, the Romans designed magnificent amphitheaters and temples to depict the grandeur of their empires [22]. This reflects the dominance of its people, who represented the hierarchy and values of Roman culture.

Table 1 shows some of the architects who have worked on digital architecture.

Table 1 - Digital Architecture (with emphasis on the authors)

Image	Project	Architect	Row
	Guggenheim Museum Abu Dhabi	Frank Gehry	1
	Hungerburg Innsbruck City Station	Zaha Hadid	2



Accommodation for a Ali 3
fashion designer , London, Rahim
2222 insult

Results:

The Third Industrial Revolution, sometimes referred to as the Digital Revolution, began in the late 20th century and has had a profound impact on society, companies, and individual lives. It has improved productivity, efficiency, information availability, social impact, education, healthcare, and environmental impact. Digital technology has significantly increased productivity and efficiency in various industries.

Empirical evidence shows the revolutionary impact of architecture and digital design on construction and the creative industries. 3D modeling and BIM (Building Information Modeling) improve design accuracy while shortening project scheduling and reducing costs. In addition, virtual reality allows for immersive encounters with pre-production concepts. 3D printing and Other digital manufacturing technologies enable complex designs, faster production, and reduced waste [23].

Tools that use artificial intelligence and machine learning improve productivity, creativity, and personalization. These technologies are changing the way we design, build, and interact with our built world.

It has also been shown that cyberspace has revolutionized communication, business, and education. This change is evident with the increase in the use of social media, the increase in e-business sales, and the adoption of e-learning platforms. However, the increase in cybersecurity threats and digital divide issues also emphasize the need for better management and security measures.

Empirical evidence suggests that simulations based on morphology and morphology contribute significantly to biological and environmental research. They provide information on the adaptive characteristics of species, ecosystem dynamics, and evolutionary patterns [24]. Such simulations also contribute to climate change modeling, species conservation strategies, and the understanding of biodiversity patterns. Empirical studies show Architecture plays an important role in the formation of society and individual identity. The design and aesthetics of buildings and public spaces often reflect cultural, historical, and social values.

Empirical evidence points to the profound impact of globalization on architecture, leading to the convergence of architectural styles around the world. This gave rise to the emergence of "stylistic architects" and iconic buildings. However, it raises concerns about the loss of local identity, cultural heritage, and sustainable practices. Architects are increasingly addressing these issues in their designs..

This research makes it possible to talk about the successful implementation of modern energy-saving technologies in buildings while maintaining identity. In this regard, along with the traditional techniques used in low-rise and medium-sized buildings, this study proved that the heritage vocabulary can be reapplied according to the current development and human

needs and the changes that are occurring. He developed a contemporary method. In society, since they have benefited the most from the heritage values of the heritage vocabulary that have achieved contemporary values by integrating them with modern building technology, materials and techniques, and this shows their flexibility in reapplying and benefiting from them in the contemporary. Architecture and the ability to create and innovate without adapting to the original heritage effect, which achieves civilized continuity.

.In general, a review of the research literature found that:

- 1) Western architecture was often associated with the determinants of the environment and the requirements of individuals, so an honest and balanced expression was appropriate for them.
- 2) Arab architecture is not a model, but principles and concepts.
- 3) There are broad areas of convergence between Arab and international architectural thought.
- 4) There is no permanent constant, but ideological and logical values and the ways in which they are applied vary according to variables, from the needs of individuals to the elements of the environment and time differences, on which is the intellectual insight of each architect.
- 5) Employing the integration of digital technology and ecological forms with architectural vocabulary is the task of the architectural designer, and according to his view, it varies from architect to architect.

4. Discussion and Conclusion:

The globalization of the world, its innovations increased the overall global performance, which significantly influenced the urban identity of the Arab world in particular. Many factors have contributed to this, namely the evolving technology that offers highly advanced digital features. The use of digital technology in architecture has sparked a creative and imaginative revolution, revolutionizing the way architects anticipate and realize ideas It has done.

The rapid development of digital technology such as CAD software and virtual reality simulation has opened up new opportunities and revolutionized the identity and culture of architectural design. The shift from manual designs to computer modeling enables architects to experiment with unknown shapes, materials, and spatial concepts.

Sources of creativity are freed from specific traditions and relationships and move towards the free form and use of digital technology in the design of digital models. The previous steps serve as a guide to the process, but each architect will take their own approach and produce a design in their own unique style. The design process depends on perspectives, ideas, and inspirations, and this means Staying in the old ways is not about preserving identity. On the contrary, ultimately, the design will be a reflection of the architect and his skills. Taking into account the advancement of technology in digital architecture and the maximum use of these capabilities in the architectural design process, the resulting creativity between the designer and each of the digital architectures is identity and environment. However, this transition raises important considerations about how technology affects architectural identity and cultural values.

With the globalization of architecture, there is a risk of losing local identities and specific cultural expression. As a result, architects must combine technology with awareness of the cultural context to ensure that digital architecture respects and promotes the cultural heritage of the communities it serves. Architects can help build architectural environments by using technology intelligently and in line with cultural values sustainable, functional and rich for the future[25]...

In general, architecture is the construction of a space that can give identity to human life. Anything that can best present identity, considering the person's desires, modernity and ultimately digitization are not exempt from this rule, but the conditions of digitization must be compatible with the architectural identity and not destroy the architectural identity, if these effects are in the direction of giving identity to art and architecture, digital art and architecture will also be valuable, otherwise only the values of architecture and digital art will be taken away from Today, with the advancement of technology, most sciences have benefited from computer and digital technology, if in the past, architectural design was done on paper and sometimes with errors, today computers both reduce errors and flourish creativity, of course, other arts have not been deprived of this progress and have more or less benefited from digital technology. But in any case, each of them has benefited from this technology in a special way and sometimes in different forms and has found a new identity

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