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MASTER'S DISSERTATION

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Theme: Visibility and Urban Vegetation

The project: School of Fine arts

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Summary

introduction	<u></u>
1. Problematic :	
1.2. Research question:	11
1.3. Objective:	11
1.3 PROJECT CHOICE MOTIVATIONS :	11
2 memory structure:	11
Chapter 01	
Introduction	
<u>1. Concepts related to the project:</u>	14
1.1. Art	14
1.2. Definition:	14
1.3. Art History Timeline: Art Movements and Their Impact:	15
1.4. Architecture:	15
1.4 .1 Synopsis of How to Derive Meaning from Art and Architecture:	15
1.4.2.The Influence of Context in Art and Architecture :	16
14.3 .the architect and art (corbusier) :	16
1.4.4. The architecture concept related with art :	17
14.7. Cubism :	19
1.4.8.Metaphor:	19
1.5 Synthesis	20
1.5.1 The relationship betwen space and art:	20
1.6 .The theme related with project:	27
1.6.1.Vegetation and visibility:	27
The definition :	27
1.6.2. The relationship with visbility and vegetation :	36
1.6.3. vegetation and visibility benefits in architecture buildings :	37
1.7 Conclusion :	
Chapter 2	
Introduction:	40
1. Theoretical approaches to the project:	
1.1. Definitions:	40

1.1.1. Art:	40
1.1.2. Cultural facilities:	40
1. 1.3 A school of fine arts:	40
2 Principles of The School of Fine Arts:	40
3 The role of a fine arts school:	41
4 Specialties in the School of Fine Arts:	41
5 Characteristics of the schools of fine arts in building :	42
6 Standards and Spatial Requirements of Fine Arts Schools:	42
6.1 Workshops :	42
6.2 classroom	44
6.3 The amphitheater :	45
6.4 The exhibition space :	45
7 analysis of examples :	48
7.1 Technical sheet:	48
1) School of Arts. SAINT-HERBLAIN, FRANCE.	48
2) Faculty of Fine Art, Music and Design of the University of Bergen / Snøhetta	49
3) School Of fine Arts Canterbury	49
4) Regional School of Fine Arts, Batna	50
4) Regional School of Fine Arts, Batna7.2 Study of international and national examples :	
	50
7.2 Study of international and national examples :	50
7.2 Study of international and national examples :1.Urbane integration and accessibility:	50 50 51
 7.2 Study of international and national examples : 1.Urbane integration and accessibility:	50 50 51 52
 7.2 Study of international and national examples :	50 50 51 52 53
 7.2 Study of international and national examples :	50 50 51 52 53 54
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	
 7.2 Study of international and national examples :	

8.5 Field location :	60
Field location (of the ground)	60
8.6 Dimensions of the ground :	61
Dimensions of the ground	61
8.7The limit of the ground :	62
The limits og the ground	62
8.8 The fronts : A.B.C.D	63
The fronts : A.B.C.D	63
8.10 Study connectivity :	66
9 Challenges (-)	67
9.1 Exposure to climatic condition:	67
9.2 Insecurity	68
9.3 The negative monotony:	68
9.4 Land not easily accessible	68
10 Benefits of the site	69
11 Architectural programation:	69
11.1. ADMINISTRATION	70
11.2 Applied art sector	71
11.3 Applied art sector	71
11.4 LIBRARY	72
11.5 pedagogic sector	72
11.6 Kitchen with refectory	72
12 Conclusion :	73
Chapter 03	. 74
Introduction :	
2 The idea of the project:	75
3 Starry Night Analysis :	76
4 Link the analysis to the project:	77
5 Steps of my idea :	79
6 Project description :	85
6.1 Façade principles :	85
6.3 Horizontal and vertical circulation:	88
6.4 Vegetation types :	88
6.5 How can the visibility appear in the project :	91

6.5 Distribution of spaces:	91
7 Graphic documents:	92
7.1 Location plan	92
7.2 Ground plan :	93
7.3 plans	93
7.4 Facades :	96
7.5 The sections :	97
7.6 The views :	98
General conclusion :	104
Bibliography :	
Abstract :	
ملخص	111
Acknowledgements :	112
الشكر و التقدير:	

introduction

Architecture is defined as the art and science of designing buildings and structures. a wider definition would include within this scope the design of any built environment, structure or object, from town planning, urban design, and landscape architecture to furniture and objects. It could also be defined as the manipulation of shapes, forms, space and light to change our environment. A very famous definition of architecture is the one made by French architect Le Corbusier: "Architecture is the masterly, correct, and magnificent play of forms under the light.

Art and architecture are very attached elements that cannot be separated from each other and which are two essential disciplines one in relation to the other, many historians have defined architecture as a craft or manual work. Source : (Towards an architecture, 1923); (The Visual History of Architecture Denis Sharp, 1972)

The ancient Greeks called architecture the mother of the arts. In ancient times, architecture was a form of artisanal expression that manifested itself in an implicit way with sculpture and painting

Architecture can reflect both the cultural expression of human relationships with drylands and the functional knowledge of the sustainable occupation of these environments. Art can reveal ancient wisdom in relation to the natural world and bring contemporary forms of imaginative participation in planning and management.

The Art and Architecture thematic group focuses on enriching knowledge and understanding of the role of these fields in the relationship between wetlands and culture, and on the broader engagement of artists and architects in the work of the convention on dry zones. Moreover, Biskra is a historic town well known for its spas and a location very picturesque geographical area associated with a very rich cultural background of information which has favored the emergence of a particular status that the city acquires and a passage of civilization which has gave Biskra a certain attraction of famous personalities in all fields of Ibn Khaldoun, to men of art and culture and literature, also citing in passing Karl Marx, Auguste Maure, painters, musicians and foreign writers like the French André Gide (1869-1951) and the photographer Auguste Maure (1840-1907) who lived in Biskra and have expressed their admiration for this city in their respective works. French painters:

Nasreddine Dinet Eugène Fromentin (1820-1876) and Gustave Guillaumet (1840-1887) will be, on the other hand, evoked under the theme "The sources of Orientalism in Algeria". The composer and Hungarian pianist, Béla Batroc (1881-1945) and other talented young painters who have inherited art and style and having restored the image of a city Biskra of art in this case.

In addition and given that the city presented great potentialities: cultural, artistic and architectural nationwide which was to benefit enormously from an infrastructure of artistic and cultural facility which embodies the particular status of the city as essential center of influence but the reality is quite different it has not even benefited from a school of fine arts like other cities across the country. Hence it is detrimental to think of plan and design a city-wide fine arts school that will build a bridge between the past, the present and the future and reconcile Biskra with its glorious past in this optically my fine arts project must take charge of this grievance while signaling this architectural and urban variance that characterizes the city of Biskra through this project.

Whereas the latter we offer several advantages and techniques that support it in terms of the structural and aesthetic aspect and also support it for its integration with the urbanization around it with the techniques of vegetation cover and ease of connectivity by enhancing the visibility as one of them strengthens the second and gives the project an aesthetic and architectural value we talk to it in thearical part to explain more about that point

<u>1. Problematic :</u>

Cities today are focal points for the interaction between urbanization and nature. In recent years, the density of buildings and other hard surfaces has increased dramatically through urban population growth and urbanization has become the phenomenon of our century in both developed and developing countries.

Like the rest of the world, rapid and uncontrolled urbanization in favor of agricultural space affected Algerian cities and changed the quality of life, especially in the city of Biskra, which witnessed a radical change in the landscape, in an oasis with a harmonious relationship between man, vegetation (palm plantations), water and climate in a desert city with Many problems resulting from the breakdown of this relationship including air pollution, climate change (climate warming) and sandy winds, these and other problems have affected the quality. of the lives of city dwellers as well as the natural biodiversity. In this work we seek to restore the characteristic of the old city landscape and to correct the current situation with urban vegetation. We will try to correct these problems with our theme , which is urban vegetation and transparency. First, we will continue the oasis located next to the ground and integrate it with the project (from exterior , interior) , and this is by grading(plam trees) the quality of palm trees to show the transparency of the project and we will have limited desertification without losing balance of vision by vegetation urban (figure 01) plus outher options we will see it after (in project).



Figure 01. difference between oasis treatement (difference between oasis treatment (continuity) and interruption (auther 2021)

1.2. Research question:

how to revive the ground with art elements (school of fine arts) to complete cultural pole then use the vegetation as supporting it also enhance the visibility ?

1.3. Objective:

- Enhancing the visibility, especially both sides of the valley and using balconiesss or something to strengthen it.
- repair the urban wasteland that has created a discontinuity of vegetation (palm trees)
- Social integration of art and artists in the city.

<u>1.3 PROJECT CHOICE MOTIVATIONS :</u>

Fine arts and architecture are one line, just as art helps us to understand society, its culture, and its history, and it contributes significantly to intellectual, aesthetic and emotional development. It is certain that the programming of the School of Fine Arts will help us in the cultural and social awakening in the city of Biskra, which has a rich past in history and culture.

The study of fine arts sheds light on the distinctive characteristics of different societies and regions with artistic innovation and support for artistic development in society in Algeria, especially in Biskra, innovation of modern technology that keeps pace with the times, and the integration of the external activity of the city in the project, and this is by creating an external exhibition to invite the public to the School of Fine Arts that the presence of many cultural and educational projects are promoting and developing the region. This gathering may arouse the interest of students and visitors to the hospital... from the presence of this school that carries many arts

2 memory structure:

This memory was organized as the following :

An introductory chapter and three 03 main chapters.

• A general introduction which contains an introduction, the motivations of choice of project, adopted methodology and memory structure.

• The first chapter is to develop the theoretical part which is composed of the definitios related to the topic and the project, which consists of carrying out a bibliographic and documentary research and a literature relating to this effect.

• The second chapter is the application of the different analyzes on the concepts related to the topic and the project in the various fine arts institute.

• The third chapter is the conceptual chapter made up of: the objectives, the elements of passages, the conceptual idea and the projection of the project.

• Finally, this work will of course be concluded with a general conclusion which relates all the approaches followed and adopted and the application of the different concepts and results obtained.



Figure 02 : Memory structure diagram,

Source: (author, 2021)

<u>Chapter 01</u>



Introduction

This chapter is the result of many documentary research on the concepts related to the topic and the project, as it clarifies the basic concepts that affect the project.

From among the forms of art and its paintings, we are inspired by our idea of strengthening the link between aesthetics and functionality and its positive impact on urban bastion.

1. Concepts related to the project:

Art and architecture have a deep connection that unites them through their design, their designer, and their individual meanings. Both are created using the same organizing principles, the same visual elements, and the same engagement of the senses .

<u>1.1. Art</u>

- ↓ We consider the term "art" as opposed to nature "conceived as power.
- producing without reflection " science" conceived as pure independent knowledge applications ".
- Art is a human activity, the product of this activity or the idea that one has of it and which deliberately addresses the senses, the emotions, the intuitions and the intelligence.

Source : cnrtl.fr/definition/art

<u>1.2. Definition:</u>

Art: masculine name (Latin, artis, ars)

- 4 All the rules and techniques of a professional or other activity.
- **4** Set of artistic works of a country, of a period.
- **4** Expression through human creations of an aesthetic ideal

The expression The meanings that were previously suggested remain of two that are currently used and are still important :

• Art as an aesthetic value

• Art as a technique

1.3. Art History Timeline: Art Movements and Their Impact:

The foundation of art history can be traced back tens of thousands of years to when ancient civilizations used available techniques and media to depict culturally history-timeline significant subject matter. Since these early examples, a plethora of art movements have followed, each bearing their own distinct styles and characteristics that reflect the political and social influences of the period from which they emerged. (Figure 01).



Figure 03 : The arrow of The Lifespan of Art in Five periods .Source :author 2021

<u>1.4. Architecture:</u>

Architecture is defined as the art and science of designing buildings and structures. A wider definition would include within this scope the design of any built environment, structure or object, from town planning, urban design, and landscape architecture to furniture and objects

1.4 .1 Synopsis of How to Derive Meaning from Art and Architecture:

- Art communicates complex ideas and emotions. It does so because of its formal qualities, its content, its context, and the ways we encounter it.
- Formal qualities are the structure and composition of a work of art or architecture. Formal qualities organize our visual perception, emphasize certain areas of an artwork, communicate general emotional moods and add to our aesthetic pleasure in a work.
- An artwork has content, sometimes in many complex layers. We "read' content through subject matter and iconography. We also rely on the writings by professionals to add to our understanding of a piece or a building.

Every work of art was created in a specific historical, political, social or religious context. Knowing about that context broadens and deepens our knowledge, understanding and appreciation for a particular work of art

1.4.2. The Influence of Context in Art and Architecture :

Context consists of the interrelated social and political conditions that surround a work or building. Context includes a host of factors, such as historical events, economic trends, contemporary cultural developments, religious attitudes, other artworks at the time and so on and so forth . We encounter art in all kinds of ways, and the nature our encounter add meaning to the piece. The way we encounter art even changes how the art looks. Art can appear in museums, in galleries, on the street, at family gatherings, at malls, at shows, and more. In each case, the venue affects the value and meaning of the piece (Figure 02).



Figure 04 : The Metropolitan Museum of Art.

Source (Deriving-Meaning-from-Art-and-Architecture)

view art affects how we interpret art. The museum setting encourages us to appreciate the formal qualities of a piece that we may not be likely to notice in a different setting. photo by Kathleen Odenthal.

14.3 .the architect and art (corbusier) :

he was generally opposed to school, Le Corbusier did briefly attend art classes from the age of about 21 to 24 at the local art school in his hometown of Chaux-de-Fonds, Switzerland. He did not take any architecture classes while there, but he did discuss architectural concepts with his art teachers. And while attending the school he also completed his first architectural

design, for a mountain chalet called the Villa Fallet. The design of the building, which is notable for its steep, A-frame roofs, relied on a mixture of traditional natural materials such as wood and stone and subtle geometric references in the construction, (Figure 05).



Figure 05 : Villa savoye France.

1.4.4. The architecture concept related with art :

- abstract
- minimalism
- cubism
- Metaphor

1.4.5. Abstract :

Abstract art uses visual language of shape, form, color and line to create a composition which may exist with a degree of independence from visual references in the world.[1] Western art had been, from the Renaissance up to the middle of the 19th century, underpinned by the logic of perspective and an attempt to reproduce an illusion of visible reality (Figure 06 and 07).



Figure 06 : Frank Gehry's Guggenheim Bilbao Source : http://painting.about.com/od/abstractart/a/abstract_art.htm



Figure 07 : Abstract (art painting) Source : http://painting.about.com/od/abstractart/a/abstract_art.htm

1.4.6.Minimalism :

Minimalism emerged in the late 1950s when artists such as Frank Stella, whose *Black Paintings* were exhibited at the Museum of Modern Art in New York in 1959, began to turn away from the gestural art of the previous generation. It flourished in the 1960s and 1970s with Carl Andre, Dan Flavin, Donald Judd, Sol LeWitt, Agnes Martin and Robert Morris becoming the movement's most important innovators.



Figure 08 : Barcelona pavillon with minimalist concept



Figure 9. Geometric Minimalist in Art Painting.

1..4.7. Cubism :

Cubism is an artistic movement, created by Pablo Picasso and Georges Braque, which employs geometric shapes in depictions of human and other forms. Over time, the geometric touches grew so intense that they sometimes overtook the represented forms, creating a more pure level of visual abstraction Figure 10.





Figure 10 : Cubist 'Scape House' By kouichi kimura

Cubism in art

1.4.8.Metaphor:

In the arts, we actually do something very similar with our uses of imagery. A visual metaphor is an image that the viewer is meant to understand as a symbol for something else. Visual metaphors can be obvious, subtle, funny, or scathing, but they form a nexus of imagery that artists have used across the centuries to help communicate information without words. In the history of art, the visual metaphor is king Figure 11, 12.



Figure 11 : Michelangelo, detail from Creation of company Adam, 1508-1512, fresco, Sistine Chapel .

Source : https://jag.journalagent.com/itujfa/pdfs/ITUJFA_9_2_1_21.pdf .



Figure 12 : longaberger basket.

Source :

https://jag.journalagent.com/itujfa/pdfs/ITUJFA_9_2_1_21.pdf

1.5 Synthesis

The project contains the aesthetic standard and the technical side. As we have seen there is more focus on the technical side creative relating to the underlying e of new materials such as glass... in contrast to architectural projects throughout history art has been dominant and apparent by proportion notion retained of the use of art as a design tool:

1.5.1 The relationship betwen space and art:

1.5.1.1. From art to space :

The American architect Frank Lloyd Wright once said that "Space is the breath of art." What Wright meant was that unlike many of the other elements of art, space is found in nearly every piece of art created. Painters imply space, photographers capture space, sculptors rely on space and form, and architects build space. It is a fundamental element in each of the visual arts.

Space gives the viewer a reference for interpreting an artwork. For instance, you may draw one object larger than another to imply that it is closer to the viewer. Likewise, a piece of environmental art may be installed in a way that leads the viewer through space.Figure 01 Figure 02.

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Chapter 01..... Concepts chapter
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Light

shape

Texture

Source : https://www.thoughtco.com/definition-of-space-in-art-182464

1.5.1.2. From space to art:



Figure 02 :ContextPerceptionsSpecific point of view

Source : https://www.thoughtco.com/definition-of-space-in-art-182464

1.5.1.3. The concepts related to the project:

1.5.1.3.1. Metaphor :

Is an art and architectural movement that developed in Europe during the mid-20th century It is considered by some to be merely an aspect of postmodernism whilst others consider it to be a school in its own right and a later development of expressionist architecture . The style is characterised by the use of analogy and metaphor as the primary inspiration and directive for design. Certain architects have also been known to utilise metaphors as a theme throughout their work such as Le Corbusier.

(Source : Metaphorical architecture is an architectural movement that developed in Europe in the mid-20th century).

1.5.1.3.2 Conditions for successful use of a metaphor:

- 1. literality.
- 2. The degree of detectability.
- 3. transcendence.

4. essentiality.

The more these conditions are respected, the more the metaphor gives better results from an architectural point of view.

Metaphor is defined as a special meaning attached to an object or idea and can be tangible (visual) or intangible (concept). Source : (www.academia.edu/22355592)

architects who are interested in the metaphor with their work on it (Metaphoric architects) :



Basil Al Bayati The palm mosque KSA (metaphor a cancept was a palm).



Le Corbusier Notre Dame Chapel France (metaphor the concept was a hand).



Eero Saarinen TWA Flight Center, 1962, New York (metaphor :concept from a bird).

Source :

https://www.academia.edu/22355592/De_l_usage_de_la_m%C3%A9tapho re_dans_la_cr%C3%A9ation_architecturale.



Jørn Utzon Sydney Opera House Australia.



Fariborz Sahba Lotus Temple india (concept from a lotus flower).

Source :

https://www.academia.edu/22355592/De_l_usage_de_la_m%C3%A9tapho re_dans_la_cr%C3%A9ation_architecturale.

1.5.1.3.3. Art and metaphor :

A metaphor is a figure or speech in which one thing implicitly represents another thing. ... It's a metaphor. In the arts, we actually do something very similar with our uses of imagery. A visual metaphor is an image that the viewer is meant to understand as a symbol for something else.

many artists in the past like leonardo da vinci, van gogh ... took inspiration from the metaphor and then incorporated it into art, no one can understand what they meant on their tables only after a hundred years or study it (Figure 1 and 2).



Figure 03 : Da vinci's inspire

Source : https://www.jstor.org/stable/1576403

- mona lisa by leonardo da vinci inspire this table from his father's face superimposed with his face Mona lisa by Leonardo Da Vinci 1503-1517.
- salvador inspire From his memories of the coast in his hometown of Catalonia, Spain. He once explained: "This photograph is a landscape near Port Legate, whose rocks are illuminated with a translucent and sad twilight; in the foreground is an olive tree cut into leaves (figure 03).



Salvador Dalí (Spain, 1904-1989), The Persistence of Memory

source : (moma.org/learn/moma_learning/salvador-dali-the-persistence-ofmemory-1931)

1.5.1.3.4. Metaphor and Architecture :

The ideas about the role of metaphors in architecture date back to ancient times. suggests the use of nature as metaphor and observation of things growing like a tree almost two millennia ago. He also points out that when people adopted a sedentary life, some build shelters for themselves resembling bird nests by getting inspiration from swallows. As nature designed the human body symmetrically, perfect buildings, particularly temples, were symmetrically designed by the ancients. The reason for the effective identity of Gothic architecture is associated with its use of natural entities' structures and natural processes as metaphors.

1.5.1.3.5. Examples:

ExampleThe Glass pavilion :

is inspired by his aphorism "Light wants crystal". Inaccordance with Scheerbart's ideas, the dome of the Glass Pavilion wasdesigned with double-glazed walls whose colored prism is inside andreflective glass is outside (Tucker, 1994). The second metaphor used in thisbuilding is Gothic architecture. According to Taut, this structure aims toreflect the spirit of Gothic cathedrals and the pyramidal shape of the crownis, in the words of Frampton (1980: 116), a "universal paradigm of allreligious buildings, which together with the faith (figure 04).



Figure04 : Glass pavilion By Bruno taut 1914. Source : architectuul.com/architecture/glass-pavilion

Example circular walls and contrast of black and white hues:.

In this section a column is also the metaphor of the axis of Universe (correa 1996). While adapting this mandala to the conditions of the contemporaryera, on the one hand Correa attempted to express the roots of society, enlive the past in collective memory and on the other hand indicate the social change. Jadav (1998) interprets this approach as a search for identity by Indian architecture which is believed to be alienated from local and national identity during the period of colonization for 200 years. Here, metaphorical approach of Correa which is based on cosmology of Jaipur City plan is seen as an example which ensures historical continuity without losing the purpose of renewal and thus attempting towards the solution of creativity identity dilemma (Figure 05).



Figure 05 : Jaipur city plan was based chequred navgraha mandala Source : boloii.com

1.6 .The theme related with project:

1.6.1.Vegetation and visibility:

1.6.1.1 Vegetation:

The definition : plants in general, or the plants that are found in a particular area

. Aquatic vegetation: *in* sites where visibility was too poor for observation of tadpoles, such as areas with submerged aquatic vegetation, microhabitats were sampled with a small dipnet.

. **Dead vegetation :**_The plants covered about 33 per cent, of the ground, there were 18 to the square metre and the weight of one square metre of dead vegetation was 765 gms.

Dense vegetation : Most parts of the alluvial plain are cultivated and covered by dense vegetation. Source (dictionary.cambridge.org)

Urban vegetation : Cities concentrate a multitude of sources of air pollution. The surfaces and layouts of buildings and streets help to create urban heat islands. Both air pollution and heat have proven health effects on the population. Faced with these challenges, it is now necessary to rethink the city to offer city dwellers a healthy and sustainable environment. Plants are part of the strategies developed to contribute . Figure 01



Figure 01 : landscape and visual path Source : rb-aa.com/architecture-vegetation

1.6.1.2. Achitecture vegetation :

1.6.1.2.1. the vegetation technic on architecture :

• Green roof and envelope :

Greening the building envelope is a rapidly developing field in the words of ecology, horticulture and built environment, since it's an opportunity for combining nature and buildings (linking different functionalities) in order to address environmental issues in dense urban surroundings. Vegetation allows improving the air quality, incrementing biodiversity and reducing urban heat islands thanks to its cooling and refreshing capacity, beside an aesthetical value. The massive integration of vegetation in architecture allows exploiting the surface (both horizontal and vertical) and, consequently, an improvement in environmental quality and inhabitants' wellbeing.





The green roof of school of fine arts singapore details of the green roof

Source : sciencedirect.com/topics/earth-and-planetary-sciences/urbanvegetation

• Green walls

Green walls are vertical structures that have different types of plants or other greenery attached to them. The greenery is often planted in a growth medium consisting of soil, stone, or water. Because the walls have living plants in them, they usually feature built-in irrigation systems.

Chapter 01..... Concepts chapter



green facade, green wall Vertical vegetation (Skyscraper italy)

Source :.naava.io/editorial/what-are-green-walls

• Landscape :

Landscape architecture is the study and practice of designing environments (outdoors and indoors) of varying scale that encompasses elements of art, environment, architecture, engineering, and sociology.s the study and practice of designing environments (outdoors & indoors) of varying scale that encompasses elements of art, environment, architecture, engineering, and sociology.



Jewel at Changi Airport, Singapore

The amazons Spheres

Source : /www.seattlespheres.com/

1.6.1.3.Vegetation effects on urban :

While the bulk of urban vegetation is located on private residential lawns, other urban green spaces such as parks, forests, and other open areas play multiple roles within a city. In

general, urban vegetation serves as a regulator for social, ecological, and economic processes, working to modulate their effects on public health, social equity, and the environment. Urban parks and forests provide respite and recreation for city residents and are related to multiple quality-of-life indicators, including physical health in children (Bell et al., 2008), socialization, and reduced stress (Jennings et al., 2012) figure 01.



Figure 01 : Graphic curve representing the effect of vegetation cover on temperature

Source :.rb-aa.com/architecture-vegetation.see

1.6.1.4 The benefits of vegetation :

- These systems intervene in the bioclimatic behaviour of buildings improving their performance
- The vegetation also reduces the environmental noise inside and outside, obtaining quieter environments
- reduces land degradation and salinity...

1.6.1.5.Vegetations examples :

NBBJ architecs applay in their project the vegetion i will show some projects of them in Figure 01 and 02 and 03 .



Figure 01 : the company of amazon (exterior and interior side) Source : http://www.nbbj.com



Figure 02 : spiralling glass tower topped by outdoor hiking trail by NBBJ

Source : http://www.nbbj.com



Figure 03 : skyscarper (headquarters in shenzhen with spiraling garden terraces)

Source : http://www.nbbj.com

1.6.1.2. Visibility :

1.6.1.2.1. Architecture visibility:

Visibility is an element that establishes indoor space and outer space relationships; and determines the existence and strength of this relationship, as well as the ability to transmit light and contribute to visual interiors. However, apart from all these, transparency allows buildings to be an urban element, except the buildings, which require privacy at a higher level, such as housing. While transparent facades used in the houses integrate the building with nature; transparency in public buildings gives the message that everything is clear and it offers the possibility to fuse with other urban elements. For this reason, in the scope of the study, transparency is regarded as a recreating element of public space; and its ability to attach the interior space to urban life is focused on.

1.6.1.2.2. Visibility Effects on urban :

- In contrast to the typical character of the buildings in street, the life in the outer space connects inside even in upper floors. Meanwhile the inside reaches public life by means of transparent façade, so the building and its interior become a part of the urban space. The square, the street and the building are recreating each other
- The visitor can see the Street and from different angles and elevations during passing from one function to another. This gives a stop affect to the movement in the street. At this point public daily life takes a break and encourages people to stop, look and see the surrounding
- The urban experience is transferred from the square to the building and vice versa. The cultural The inner structure is visible from the square and this encourages people to come inside and take part in cultural activities Figure 01



Figure 01 The vertical public axe combining different layers Source : Source : Transparency as A Component of Public Space (pdf)

1.6.1.2.3 The benefits of the visibility:

The visibility in architecture is one of the most important concepts to support the project in terms of clarity in the environment around it . And transparency in the project gives it a full integration with the auther buildings, and the interior becomes with the outside and it has many benefits, the most important of which are :

- Eliminating blind spots.
- Simplifying control.
- Improved quality of service to end users.
- Optimized network and application performance.
- The ability to gather and study end users' behaviors.

1.6.1.2.4 the influence of the visibility in architecture :

 The new fully transparent façade gives a sight to the dynamic street and square from different angles and elevations Figure 01



Figure 01 : normal facade vs facade with visibility's application

Source : http://www.teget.com/meydanladiyalog.

architectural program visible for citizens. A stop-look affect appears for a moment as a part of dynamic movement in the street. Public flow gives a break at that point; people "stop, look and see" the building. They have also experience the inside easily thanks to the portico functions like a sieve

(Figure 02). At the same time, people inside the building can give a break to their continuous movement according to building program, "stop, look and see" the urban surrounding. Thus, the building and the inner life becomes a part of the public one.



Figure 02 The urban life from different angles and elevations Source : Transparency as A Component of Public Space (pdf)

Apart from this, the sheltered volume of the cultural life becomes a part and a component of ordinary people by means of this motional-visual ability provided by visibility



Figure 03 : The Portico (door) functions like an entree and connects the street to the building Source : Transparency as A Component of Public Space (pdf)

1.6.1.2.5. Visibility Example:

Transparency in the urban project lies in the transparency of the walls for the integration of the internal space with the external. This is a basic condition. We will see some examples to illustrate this. There's is many architects applay the visibility on their project :

- Stelle lomont rouhani
- Richard meier
- Laura keahler

the most one is :

Richard Meier : The Grotta Home (Figure 01) :



Figure 01 The Grotta Home

Source : www.architectmagazine.com/project-gallery/the-grotta-home-byrichard-meier-a-marriage-of-architecture-and-craft

<u>laura kaehler :</u>

CONNECTICUT PAVILION HOUSE--2019 CT AIA EXCELLENCE AWARD WINNER (Figure 02).



Figure 02 CONNECTICUT PAVILION HOUSE--2019 CT AIA EXCELLENCE AWARD WINNER

Source : www.kaehlerarchitects.com/portfolio#/new-gallery-87/

1.6.2. The relationship with visbility and vegetation :
Chapter 01..... Concepts chapter

The visibility is mostly determined by the landscape (vegetation) and landscape features, their size, the distance from the observer and exposition (Felleman, 1979). The topography of the terrain is repre- sented by DEM; most of the viewshed algorithms are designed for a raster DEM. DEM can repre-sent either the bare terrain (digital terrain model, DTM) or the terrain with the features that are permanently located on it, such as buildings and vegetation (digital surface model, DSM).

Modelling of the vegetation depends on the accessible datasets and their quality. In Slovakia,

the main data sources include the Basic database for the geographic information system $$\mathbbmsc{R}$$

(ZBGIS) and the vegetation maps. Some applications, e.g. spatial archaeology, may require knowledge of the vegetation referenced to some past time period. This information can be extracted, for instance, from the maps of potential vegetation, historical maps, or from paleobotanical researches. How-ever, as mentioned, e.g., in Connoly and Lake (2006) or Wheatley and Gillings (2000), these data-sets generally lack the resolution needed.

Vegetation improves the quality of the buildings integrated both inside and as part of its enclosure. Improves its energy efficiency among other benefits. But in addition the vegetation integrated in the buildings improves the environmental and visual quality of the buildings from inside to outside (integration).

(source:publication/330957864_Vegetation_modelling_in_25D_visibility_analysis)

1.6.3. vegetation and visibility benefits in architecture buildings :

- Plants reduce energy consumption.
- Plants extend the life of the roof.
- Plants moderate temperatures in hot spots.
- Eliminate blind spots.
- Simplification of control.
- Improves the environmental and visual quality of buildings.
- Visibility refreshes spaces
- Freshen the air with polltion ilimting
- Integration with the environment

Chapter 01..... Concepts chapter



this project shows the influence of vegetation and visibility in an urban environment

Source arch.daily/Urbanvegetation

1.7 Conclusion :

In this chapter we have discussed some concepts such as: art, architectural project, theme ... the art of metaphor and architectural vegetation and visibility. We have come to determine the links and mechanisms that unite art and architecture and also to identify the differences that mark these two major areas of human history and architectural. It is an exciting and very creative form that has perfected the architectural quality and highlighted the cultural and artistic aspect of each society. The visibility and urban architectural vegetation are as keys concept in contemporary architecture, given its impact in the urban environment and its qualities especially at the level of the animation inside the street, as well as the views.

Chapter 2



Introduction:

In this chapter we will talk about social, cultural and above all artistic importance. and we offered several examples of fine arts schools to analyze in order to understand the development mechanisms of this kind of projects in the light of its historical evolution and to show their impacts on the urban environment and their spatial qualities and architectural. Towards the end of this chapter we have studied the site in which our project will be designed. in order to derive the advantages and the constraints and mainly its landscape qualities via different analysis methods such as: INES, morphological analysis and sensitive analysis.

<u>1. Theoretical approaches to the project:</u>

1.1. Definitions:

1.1.1. Art:

Is the set of means, processes and rules that tend to a certain function Creation of specific objects or staging intended to produce a state in humans particular sensitivity, more or less linked to aesthetic pleasure.

1.1.2. Cultural facilities:

Public or private collective equipment intended for cultural activities, in which the dimensions of education and leisure combine: theaters, exhibitions, libraries, school of fine arts, museum, cultural center, etc. Cultural facilities have become increasingly important since the beginning of the 1960s. Regional, departmental metropolises or towns of a certain importance, have a museum, a library, a theater, a conservatory, a house of culture.

1. 1.3 A school of fine arts:

Is a school, which trains artistic disciplines, known as fine arts: drawing, painting, engraving, sculpture, photography, graphic arts, and new electronic media. Source (Meubliz.16)

<u>2 Principles of The School of Fine Arts:</u>

Communication between the artist and his society and the regeneration of culture.

• Reservation of regional art with all its elements.

- Encouragement of youth and the development of gifts and the revival of art
- Activation of the artistic range after exhibitions and competitions

3 The role of a fine arts school:

- Revival of local arts.
- developed the art and encourage research in this area.
- protect the local culture according to the programs that brings together the ideology of society and directed by modern techniques.

4 Specialties in the School of Fine Arts:

There are more than one specialities in the school of fine arts with multi domain (Figure 01) and (Figure 02).



Figure 01 Specialties in the School of Fine Arts Source (author 2021)



Oil drawing

Orchestra

sculpture

some types of specialties in school of fine arts (author 2021)

5 Characteristics of the schools of fine arts in building :

- > Unlimited conceptual ideas using a free plan, a solid building capable of developing
- > Integration into the site and obtaining techniques and materials allow continuity visual
- > All materials are used in construction but mainly steel, glass and reinforced concrete
- ➢ big masse (Figure 03).



Figure 03 : Bauhaus School of Fine Arts

Source : art.uiowa.edu/about/historical-timeline-school-art-and-art-history

6 Standards and Spatial Requirements of Fine Arts Schools:

6.1 Workshops :

These are large spaces where practical work and crafts are done, the work is collective, under the supervision of a manager, we have many types of workshops figure 01 and 02, 03, 04.



Figure 01 : drawing workshop and its details

Source : Source: standards and classroom layout: (Neufert 8th edition, 2000)



Figure 02 : the important details of sculpture workshop

Source : Source: standards and classroom layout: (Neufert 8th edition,



2000).

Figure 03 : decorate workshop and its details

Source : Source: standards and classroom layout: (Neufert 8th edition, 2000).



Figure 04 : some elements should find it in ceramic workshop

Source : Source: standards and classroom layout: (Neufert 8th edition, 2000).

6.2 classroom

Classroom: an area in which the student acquires theoretical knowledge of art and others, and which enriches the culture

6.2.1 The necessary conditions in this area :

Calm. It is preferable the rectangular shape of the room.

The maximum width of the room 7.2 m2

Layout: tables + chairs + cupboards Lighting: side lighting and artificial lighting for the picture figure 05.



Figure 05 : The types of the classroom

Source: standards and classroom layout: (Neufert 8th edition, 2000)

6.3 The amphitheater :

is a large room, see an entire building designed to contain it, intended for teaching practice, traditionally arranged in the shape of a hemicycle figure 06.



Figure 06 The details of amphitheater

Source: standards and classroom layout: (Neufert 8th edition, 2000)

6.4 The exhibition space :

Are the most important and specific spaces figure 07 :



Figure 07 : The interior space from exbitition room

Source :inexhibit.com/case-studies/light-sources-for-exhibition-design-part-

1/

6.4.1 Types of exhibition routes:

- Rectangular shape
- Square shape
- Circular shape
- maze circulation
- central circulation
- central circulation



Figure: Space with its shapes and the circulations

Source: the standards and layout of the amphitheatres: (Neufert 8th edition, 2000)

6.4.2 types of lighting:

Artificial lighting plays a crucial role in the exhibition design. I will describe the most important light sources, sorting them by the technology used to produce the light flux, and trying to explain what makes a light source more or less suitable for some specific application related to exhibition design there's exmples show how to apply the articial lighting.



Figure zenithal lighting -side lighting -artificial lighting

Source : inexhibit.com/case-studies/light-sources-for-exhibition-designpart-1

7 analysis of examples :



7.1 Technical sheet:

1) School of Arts. SAINT-HERBLAIN, FRANCE.



School of fine arts France

- **4** Situation: School of Arts. SAINT-HERBLAIN, FRANCE.
- 4 Architect: TETRARC
- ♣ Project area: 4460 m2
- 4 Realized in: 2010

2) Faculty of Fine Art, Music and Design of the University of Bergen / Snøhetta



Faculty of fine arts Norway

- ↓ Situation: university of Kent, Bergen, Norway.
- ♣ Architect: l'agence Snøhetta
- ♣ Project area: 14800 m2
- Realized in: 2017

3) School Of fine Arts Canterbury



School of fine arts Canterbury

- ↓ Situation: university of Kent, Canterbury.
- **4** Architect: HawkinsBrown.
- Project area: 2500 m2
- 4 Realized in: 2006-2009

4) Regional School of Fine Arts, Batna



Regional school of fine arts Batna

Situation: Batna

k Realized in : 2008

7.2 Study of international and national examples :

1.Urbane integration and accessibility:

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT- HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
Urbane integration and accessibility:	Project is easily accessible as it is located on the main roads of the city Location next to a major intersection which makes the project accessible and visible Harmonious integration between the project and its urban and natural environment	The project is easily accessible by mains roads of the city the shape of the plot is subordinate to its urban environment	-Integration of the project in an urban environment very accessible, quiet and calm	The project is well integrated into its urban environment the general form of the project corresponds to that of the land the project is in contact with its environment by four facades The project is close to the two small port of the city and to several important equipment which makes the project accessible and visible

Integration of the project in an urban environment, accessible, quiet and calm for learning. The project situation must offer a plus for the project (accessible-visible, an element of appeal and attraction).

2 Entrances to the site :

	School Of Arts de Canterbury	Regional School of Fine Arts, <u>Batna</u>	School of Arts. SAINT-HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
Entrances to the site	Acts informations		Biotage Biotag	The entrance to this project is via two pedestrian accesses, one from the south and the second from the west.
te	this project is very accessible it located in an important intersection and accessible by two major axes	Entrance marked by the salient volume with a deferential geometry compared to the other volumes	Deux entrés un principale pour les visiteurs et les étudiants et une deuxième entrée pour les travailleurs	For mechanical access, there is a parking lot in the northeast of the project and through this parking lot, people access the project.

- There are generally two to three entrants in fine arts schools according to the users of these entries (entry of visitors, students, worker)
- The entrance is a very important element in the schools of fine art, it must be marked by the volume and texture as well as the landscape design
- The entrance should be attractive and welcoming. The entrance must be or appear large and well-lit

3 The flow :

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT-HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
The flow	The form of this project in a single volume as well as the hierarchy of spaces (roads, parking project, project) they separate between the mechanical and pedestrian flow.	A complete separation between the passage of pedestrians and mechanical traffic with a favor to pedestrian traffic	complete separation between pedestrian passage and mechanical traffic	The idea of this project is the opening up the university to the city is why we do not find fenced walls and the project is easily accessible from several sides

In the examples of the fine arts we find a separation between the macanic and pedestrian flow and in these examples studying the treatment of the main entrances favors the pedestrian flow c to bring these types of establishments closer to society.

4	Built	and	not	built	:
т.	Duni	anu	πυι	Duni	

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT-HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
Built and				
Built and not built	The project is one-piece, it is difficult to understand the relationship between the shape of the project and the shape of the land, therefore the relationship between the built and the unbuilt. The unbuilt surrounds the project on all four sides and is used as a parking and the rest is the continuity of the greenery that connects the project with its natural environment	La cohérence entre la forme du bâtiment et la forme du terrain est biens lisible	La cohérence entre la forme du bâtiment et la forme du terrain est biens lisible	The project is monobloc, the shape of the project corresponds to the shape of the land. The unbuilt surrounds the project on four sides there is parking in the north and the rest is greenery that connects the project to its natural surroundings.

In the examples of the fine arts, we find a separation between the macanic and pedestrian flow and in these examples studying the treatment of the main entrances favors the pedestrian flow c to bring these types of establishments closer to society

-	T 7 I		
5	Volui	netrv (•
$\boldsymbol{\mathcal{I}}$	v orur	netry :	•

	Ecole des beaux arts canterbury	Ecole des beaux arts Batna	Ecole des beaux arts Nante	Faculté des Beaux-Arts, de Musique et de Design de Bergen
Volumetry	the volumetry of this project is a parallelepiped monobloc	A composite project of three linked volumes with a height clearance between them each main activity (library and internet room, workshop) is marked by a different volume volumetric used to mark the main entrance as well	The volumetry of this project is monobloc A contrast is marked by the volume between full and empty, transparency and opacity (ground floor trancparant and the other opac levels)	the volumetry of this project is a monobloc The two east and south facades are elevated and the entrance is via urban stairs.

The volumetry of these projects meets the requirements of the site and the project theme

6 The façade :

	Ecole des beaux arts canterbury	Ecole des beaux arts Batna	Ecole des beaux arts Nante	Faculté des Beaux- Arts, de Musique et de Design de Bergen
The façade	Two light dark contrast color have been used in this project with a smooth texture (curtain walls and Zinc). Small narrow vertical strip windows with a simple rhythm that can be changed by simply switching from one facade to another The facade that overlooks the square and for more visibility and readability in order to strengthen the link between the project and its environment (especially the square) is transparent on the ground floor in contrast to the opaque floor with only narrow windows	administration Sale de réunion Caféteria indication Caféteria Caféteria indication	<image/> <image/>	a smooth texture with light colors was used in this project (curtain walls and zinc). a metallic skin which dresses the facades and also covers the cantilevered volumes The skin is made up of modular elements that create plays of light and shadow on the facade a large bay window on several levels that creates a visual link between the building and the public square opposite, making it participate in urban life. Small windows with a random rhythm that changes from one facade to another For the skyline of the main facade is in contrast with the background mountain skyline

- Transparant is used in these projects to strengthen the link with the city; the rest of the facade treatment depends on the activities inside, for example the exhibition of paintings, it does not require vertical opening ...
- ✤ The facade makes the project more readable.
- The facade of the school of fine arts must be a link between the exterior and the interior
- Maximum panoramic views must be ensured for users of project spaces

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT-HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
Spatial and functional				
organization		14" etage		

7 Spatial and functional organization :

The project consists of three units (part) depending on the use of space. Administration sector: in relation to the exterior and other sectors it contains the office, meeting room... Educational sector: classroom, learning, auditorium, multipurpose room... Activity sector: exhibition, auditorium ... a strong relationship between these three sectors

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT- HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
Horizontal and vertical circulation	Image: state	Plan RDC		

8 Horizontal and vertical circulation :

horizontal circulation	vertical circulation
Special movement (artist, technic) Public	Elevator (VIP, technician)
movement (visitor, student, Travalleirs)	Staircase (student,
	worker)
	The distance between
	Them enter (25 / 50m)

	School Of Arts de Canterbury	Regional School of Fine Arts, Batna	School of Arts. SAINT-HERBLAIN, FRANCE.	Faculty of Fine Art, Music and Design of Bergen
The constructive and		Hand and a second secon		
structural system	A massive structure by reinforced concrete wall was used in this project according to a geometric framework	Mixed reinforced concrete structure	A massive structure by reinforced concrete wall was used in this project according to a geometric framework	mixed structure : a massive structure by reinforced concrete wall was used in this project

9 The constructive and structural system:

Several types of structure can be used in these projects depending on the needs, the geometry of the spaces, the design..

8 Field analysis:

8.1 General information on the city of Biskra:

Biskra is an Algerian Wilaya located in the center-east of Algeria in gate of the Sahara, it is nicknamed the queen of the Zibans, and the gate of desert, it is located at an altitude of 87 m at sea level.

8.2 The climate of Biskra:

The climate is dry Saharan type; the rainfall is 120/150 mm / year. The average temperature is 20.8 degrees C °. Characterized by a very hot and dry summer and a cold and dry winter.

8.3 Motivation of select the land:

• Its positioning in an important residential center which suffers from a lack of cultural facilities, with the aim of creating a certain balance in the city.

- The continuity of a (cultural-educational) pole: near the theater and the university
- Attractive site visible from several points especially the other fringe of Oued and the bridge

8.4 Motivation of the land :

motivation of select the land:

Direct link with the city on the national road n = 83 which links the city of Biskra and Sidi Oqba

Land programmed by the municipality to build a fine arts school



Convergence point between (Downtown - Laalia - Chatma -Sidi Okba)



Its positioning in an important residential area (aliya)



The continuity of a cultural pole (theater-house of culture) which linked with an educational pole (the university)



Motivation of the ground Source : photo took from the author 2021

8.5 Field location :



Field location (of the ground) Source : photo took from the author 2021

8.6 Dimensions of the ground :

2-a) dimensions of the ground (floor-land) 146.40 - P 110.85 284165 n 346.4Q 241.80 110.85 *91 F 241.80 132.30 AL BUT \$32.30 159.30 г 160 159.30 The shape of the ground is rectangle surface= 370 520,60

Dimensions of the ground Source : photo took from the author 2021

8.7The limit of the ground :



The limits og the ground Source : photo took from the author 2021

8.8 The fronts : A.B.C.D



The fronts : A.B.C.D Source : photo took from the author 2021

8.9 The dominant architectural styles :

The dominant architectural style



As most of the area around the land is new housing, the dominant style is modern architecture.

The dominant architectural styles Source : photo took by the author 2021



The use of (the arch the dome and the square)







The dominant architectural styles Source : photo took by the author 2021

8.10 Study connectivity :

Study connectivity



Study connectivity

Source : photo took by the author 2021

2) B : roads leading to the land



Roads wich leading to the ground Source : photo took by the author 2021

9 Challenges (-)

9.1 Exposure to climatic condition:

The land is completely exposed to the sun and the wind to its topographic positioning





The ground and Exposure to climatic condition

Source : Google maps

9.2 Insecurity

- The street is considered a place of fear because of very low pedestrian flows •
- ٠ The fence walls and the palm tree create an abundant space (no means land)

9.3 The negative monotony:

The same image is repeated: -discontinuity of the vegetation and building especially in this area plus the track their visibility and security

9.4 Land not easily accessible

Because of : strong flow at high speed and the access perpendicular to the main road



10 Benefits of the site

- The panoramic view
- The site is visible from several points (especially the other fringe of Oued)
- Functional diversity
- Presence of a natural heritage
- The topography of the land is almost flat (at low altitude next to the Oued and the road)
- Direct link with the city on the national road n = 83 which linked the city of Biskra and Sidi Oqba
- Point of convergence between (Downtown Laalia Chatma Sidi Oqba)
- The continuity of a pole
- cultural (theatrical house of culture) who tied with a pole educational (university)

<u>11 Architectural programation:</u>

After we saw examples of school fine arts plus the culture department, we conclude there is three principle blocs proposed surface program to 400 students.

11.1. ADMINISTRATION

service	Space	Surface of unity	number	Total Surface
DMINIST	Lobby	250,00	01	250,0
RATION	(Reseption)			
	Directer office	25,00	01	25,00
	SECRITARIAT	30	01	30
	OFFICE accounting	20,00	01	20,00
	SCHOOL SERVICE	30,00	01	30,00
	Meeting room	40,00	01	40,00
	TEACHER ROOM	50,00	01	50,00
	Archive room	30,00	01	30,00
	Sanitary	18 m ²	01	18m ²
TOTAL				573

<u>11.2 Applied art sector</u>

service	Space	Unity surface	number	total
Applied	Design room	180,00	02	440,0
art sector	Oil painting room	180,00	02	360,0
	Sculpture Workshop+deposit	200.00	02	400.00
	Molding Workshop+deposit	200.00	02	500.00
	Ceramic Workshop+deposit	200.00	02	400.00
	Graphic art wokshop	180.00	02	360.00
	music	140,0	02	280,0
	Local and depot	80,00	01	80,00
TOTAL	1		2930	1

<u>11.3 Applied art sector</u>

Applied art sector	Espace	Surface unité	nombre	totale
	Exposition room	260,0	01	260
	stock	40	01	40
	Exposition hall	520,0	01	520
	Théâtre take 600 places	750	01	750

	Sanitary	5.40	04	21.6
TOTAL			159	1.9

11.4 LIBRARY

LIBRARY	Reading room individual	120	01	120
	Reading room collective	180	01	180
	archive	40	01	20
	Computer room	180, 0	01	180,0
	Room of Documentation	50,0 0	01	50,00
	Deposit of new Books	50,0 0	01	50,00
	Management office	40	01	40
	Sanitary	3,25	04	13
TOTAL		ł	703	

<u>11.5 pedagogic sector</u>

pedagogic sector	classroom	50,0	6	300
		0		
	Language ROOM	80,0 0	02	160
	Sanitary	3,25	04	13
TOTAL			473	

11.6 Kitchen with refectory

Kitchen with refectory	Kitchen	185	01	185
	Chef's office	15	01	15
Chapter 02	••••••	Analytical	chapte	
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	hall	20	01		20
	Managment	15	01		15
	cloakrooms	10	02		20
	deposit	30	01		30
	Cold room (freezer)	15	01		15
Preparation room		15	01		15
Cooking room 25 01		01		25	
	Wash the dishes 15 0		01		15
	Waste stock	10	01 2		10
	sanitary	3,25			07
	Student dining hall		2		150
	Teachers' dining hall	100	01		100
TOTAL				587	·
TOTAL SURFACE of the project				9200m ²	
Total Srface circulation of the project				1380 m ²	

<u>12 Conclusion :</u>

After this work of initiation into research we had more knowledge and skills in relation to our theme and our project, we discovered in this stage major concepts and notions related to our field of study, we analyzed national examples and international by determining the types of the main spaces that we find in this type of project and the relation between them, the volume, treatment of the facades, organization ... also our ground has higher visibility can be help us to integrate in the project and contiunity of palms subsequently and after consulting several programs we proposed our own program for develop our project in the next step.

Chapter 03



Introduction :

The content of this final chapter explains the conceptual idea, the genesis of form, and the elements .

The main aspects related to the topic and the method we tried to relate to it

Elements and incorporate them into the design process, then provide a new description and Transparent components for the School of Fine Arts to be finally on display.

<u>1 Objectives and intentions :</u>

- Work with the concept of visibility and vegetation urban, to design an urban passage in the project
- ↓ Create a space that is common to artists and the public
- ↓ The area is full of cultiral theatre ... with my project make a cultural pole
- Create green wall freind of environmet then gives air fresh and limit the pollution with long lives of walls more than the simple wall technics
- Make visual approach to lead people easy to the project (the track is between the vegetation with multy plants).

2 The idea of the project:



My idea was how to create visibility and vegetation on shoole of fine arts which link it to the urban, and attract most of the people to see the works of the students, the project specially with some balconies to strnth the vesion between shores so after that I added a metaphor for take a few touches of art to be my project full . the table was by a famous artist (vensit van gogh: starry night) Figure 01.



Figure 01 Starry night bythe artist vensit van gogh

Source : vangoghgallery.com/painting/starry-night.html

Starry Night, Van Gogh, 1888, housed at the Museum of Modern Art in New YorkThis table carries many ideas from the artist's brain, we will take each element and analyze it to understand what the table will carry in.

<u>**3 Starry Night Analysis :**</u>

The sky : The sky includes all of the stars, the moon, and the most important is the galaxy in which the painting is centered. It is also radiant with light, representing the attraction of everything that it by means of the cypress tree, as described by the artist is something cant imaging full of energy with brightness figure 02.



Figure 02 : The sky

Source : vangoghgallery.com/painting/starry-night.html .

The city: which refers to the buildings and the church people \dots Figure 03 .



Figure 03 : The city (village)

Source : vangoghgallery.com/painting/starry-night.html .

The tree: which connects the sky and the earth and makes them one mass figure 04 .



Figure 04 : the tree

Source : vangoghgallery.com/painting/starry-night.html .

4 Link the analysis to the project:

As the painting is divided into two important parts, my project is also divided into two (the city and the school of the arts). As for the tree that connects them, my theme is the plant cover, which will be a strong point. to link the project to the urban city and the continuity of the vegetation cover which was intermittent in this area (figure 01) and (figure 02). In addition to strengthening the visibility, where pedestrians to reach the project are easy to connect them, that is, rather, the vision is clear with the continuity of the vegetation (figure

03). As conclusion the trees in table is vegetation with good quality of the visibility the projectis the sky with their elements of arts finally the villa gis the zone or the area.



(figure 01) discontinuity of oasis beside the project

Source : Photo took by the author 2021.





Source : photo took by author 2021.

The location of the ground is strategic and close to the main road also on the second bank and the presence of the valley and the other area .We form fake axes of people's vision of the

project without exaggeration while penetrating and strengthening the project's vision in its volume or creat some element arttarct them more suggations ... (figure 04).



(figure 04) visual axes from the project to the next area.

5 Steps of my idea :

- The first stepI analyzed the painting and divided it into two parallel parts (the city and the school of art) figure 01
- The sky has an important center and it is the galaxy where the project is centered with balanced space distribution figure 01
- I took the axes of vision from the city to the project and the division of the project according to the main axes with a touch of vegetation to enhance the visibility and atract people from outside figure 01.



Figure 01 the first step of the idea (Source photo took by author 2021).

The secound step i open the middle of my project to integrate the interior and exterior together with line of visibility (Figure 02) and garden contine from the plams outside to inside the project to relive and refresh who satying there with cold air and breez. (Figure 03).



Figure 02 : volume opening in the middle (Source photo took by author 2021)



Activities of the school intside with continuing of the vegetation from outside .

Source : photo took by the author 2021.

The third step i create some balconies beside oued to keep in touch with other side of the area figure 03.



Figure 03 : the creation of the balconies beside oued to attract the visitor from nextarea .

Fourth step make gardens outside to all of people can meeting there with some activities of school like theatre... (Figure 04).



Activities of the school outside . Source : photo took by the author 2021.

- In the end, the block divided it into three main sections (part for education, part for Exbitition and part for administration) i choose, and between these blocks there are openings covered with vegetation to reach the other side with a full view (theme) figure 05.
- I choose the left side for the educational sector because is close to the university and the right side for the exhibition because is close to the theater and make a cultural pole on this side in the center is the administration is o key of entry and link section between these two.



Figure 05 : three main sections (part for education, part for Exbitition and part for administration). Source photo by the author 2021 .

- Adding an artistic touch to the form in the final with a few curves and visual openings that leave activities between the internal and external spaces of the project.
- ↓ Finally the steps of the project before and after by the figures (07,08) :



Figure 07 : the steps of the project before and after by the author 2021.



Figure 08 : the steps of the project before and after by the author 2021.

6 Project description :

6.1 Façade principles :

- **4** The facade treatment: is a fusion between a contemporaryand artistic touch
- Protection of the facade: ensure the facade solar protection plus we add some touches of vegetation wich gives freshness and quality with good vision they are greaan wall, also concrete and glass wall (double skin) Figure 01.
- Double skin benefits : Almost a self-explanatory name for façade systems consisting of two layers, usually glass, wherein air flows through the intermediate cavity. This space (which can vary from 20 cm to a few meters) acts as insulation against extreme temperatures, winds, and sound, improving the building's thermal efficiency for both high and low temperatures (Figure 02).



Figure 01 : details of the wall double skin.

Source : Photo by the author 2021.



Figure 02 : double skin influence in interior space.

Source : https://www.archdaily.com/922897/how-do-double-skin-facadeswork.

6.2Accessibility:

6.2.1 Main access:

The location of the main entrance is from the main road with treatment specific which allows a very good accessibility to the ground. The entrance opens into a large reception and distribution hall connecting the different spaces (Figure 01).



Figure 01 visual approach from el Alia to the project (school)

Source : photo took by the author 2021.

6.2.2 Secondary accesses:

These accesses allow university users to have quick and direct access to esplanades (visual approach ,Figure 01).



Figure 01 : Visual approach from the university to the school of fine arts.

Source : photo By the author 2021.

6.3 Horizontal and vertical circulation:

6.3.1 Horizontal circulation:

The spatial organization fragmented according to the type of activity sector.

6.3.2 Vertical circulation:

• Stairs and elevators are distributed evenly throughout the project.

• Freight lifts are used for the supply of materials and for service.

6.4 Vegetation types :

6.4.1 Urban scale :

I choose multi types of the plants which lives at arid and semi arid areas ,in the huge scale i chose the palms to contain the oasis beside the project that what we calld the vegetation urban in addition palms degrees like we talk above to let the visibility of the project showing to the humain figure 01.



Figure 01 : Types of the plants that's apply on the Ground of the project

Source : photo took by the author 2021.

6.4.2 Human scale :

The project has full of paints at the same type like Kentia and veitchia Merrillii both of them havent big size so i can put them inside the project to complete the continuity of the oasis into the school with diffrent flowers wich gives the place good smells and good views to the visitor which makes him feels that place integrate with the nature of the area. The plants of The green wall is climber which can live in semi arid and arid area i did it in my facade with many benefits like long lives of the wall air fresh (Figure 02).

why i chose the green wall in my project?

- Green Facades brings benefits to both the environment and to the structure of any construction type. The impact of climate change especially in hot areas like biskra
- Research shows that green facades have a high potential to absorb noises. This results in a reduction of noise levels inside the room.
- **4** A greening saves up to 30 % of energy due to evaporation, cooling and shading.
- I add sunbreaker in some spaces to let the contact between exterior and interior (Figure 02).



Figure 02 : the benefits of the green wall and the plant's apply on it

Source : photo by the Author 2021 .

6.5 How can the visibility appear in the project :

- First, I separated the volume into three blocks that formed three openings that connect between the two facades (the visual field), allowing a clear view of what is behind the project (Figure 01).
- **4** Visbility also appears in the project's fluidity on the volume (Figure 01).



Figure 01 : The visibility's imapct on the volume project and its environment

Source : photo took by the author 2021.

6.5 Distribution of spaces:

The spaces are distributed as follows:

- **4** Basement contains: Deposit and Exbitition and exhibition hall .
- Level 01 contains: schooling, amphitheater, workshops ,cafeteria, kitchen and restaurant.
- **4** Level 02: administration, classrooms, creative workshops.
- Level 03: the library.

7 Graphic documents:

7.1 Location plan



Location plan

Source (author 2021)

7.2 Ground plan :



Ground plan

Source (by the author 2021).

7.3 plans

7.3.1 plan N 00 (basement):



Plan N0 (Basement)

Source : by the author 2021

7.3.2 plan N 01:



plan N 01

Source : By The Author 2021

7.3.3 plan N 02:



plan N 02

Source : By The Author 2021.

7.3.4 plan N 03:





Source : By The Author 2021.

7.3.5 structure plan :



structure plan



Cha	pter03Concep	otual	chapter
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7.4 Facades :



The Facades

7.5 The sections :



The Sections

7.6 The views :

Interior views :





Interior views

Exterior Views :



Exterior Views





Exterior Views





Exterior Views



Exterior Views

Source By The Author 2021.

Conclusion :

During the implementation of the project, i made sure that it is covered by scientific and local standards, as it will include all the concepts that have been studied and applied in the entire process of designing the project, technical and aesthetic. We adapted the metaphor to give the project value and artistic touch with the support of the vegetation cover and the ease of its conductivity in a transparent way that leaves the visitor Or the passenger feels the artistic atmosphere throughout the project points .

<u>General</u> conclusion

General conclusion :

This research work enabled us to build a set of information about the importance of the artistic dimension in architecture or rather in the architectural project. The motivation for choosing the School of Fine Arts is linked to several points, the most important of which are :

- ↓ The community's understanding of its culture and history
- ✤ Skills development and intellectual development
- Sensory development, which leads to cultural awakening, as well as the development of the creative and aesthetic side.

We also talked in the first chapter about the integration between architecture and art, and we tried to link them to the topic (urban vegetation and visibility) in order to integrate the project with its urban environment, as it had a positive impact on the project to be an artistic and aesthetic meeting integrated with the surroundings.

As we explained in the second chapter the importance of the technical approach and the analysis of several schools of fine arts and what should take from this informations to do the school.

In the third chapter, we took into account the previous chapters to develop the idea of the project more, as we see that the development of modern architecture is always about new forms and the difference of ideas and creativity, as some architects chose a metaphor, which is considered from the field of art and architecture together, it may affect a lot on the architect's project, especially if the project was artistic and cultural.

Also in the chapters, we took he link line, which is the technique of urban vegetation, as it is a very modern technology and its impact on the visibility and the urban streets..., that is, in general, it positively affects the urban environment as a whole to give a landscape...

On the basis of this research and informations, we have adopted this structured methodology on :

an introductory chapter and three main chapters.

- The introductory chapter is a general introduction that contains the reasons for choosing the project and the structure of thesis
- **4** The first chapter revolves around the theoretical part :

the basic concepts of the theme and the project are supported by bibliographic and documentary research.

- The second chapter is an analytical part of projects and their applications of subject concepts in fine arts schools, and urban analysis in order to know the advantages and quality of site selection and their theme plus the spaces on the school.
- Chapter Three: It is the chapter in which all the information in the previous chapters is taken as a pathway to the project and the achievement of the objectives mentioned earlier and the techniques in the subject, in addition to solving the thesis.

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Abstract :

Architecture and art are two related fields that cannot be separated, as historians have defined architecture as a work of art .

The submitted work includes a general documentary research on the artistic dimension in the architectural project and its applications in schools of fine arts, with a focus on literary and scientific concepts to reach an in-depth understanding. While showing the applications of art in the architectural project throughout history to the present day, it is necessary to respect and show an artistic touch on the project through the application of the art of sensory metaphor and the flexibility of spaces as art lines through the urban corridor, and the latter I modified objectively, which is the urban vegetation and visibility where There will be a relationship of integration , and integration between the region and the project, and the preservation of the vegetative balance, which was defined in that region by the continuous interruption of vegetation. Establishment of a cultural pole consisting of an art school, a theater and a library.

The methodology that I followed makes it possible to understand the relationship between architecture and art in general, as well as linking them to a topic to complete the work well. Hence, we divided the thesis into chapters where the entrance was explaining the motives for choosing the topic and the research methodology. The theoretical chapter explains the basic concepts, the analytical chapter helped to control those elements The basis for starting the design process and this is found in the practical chapter as between the design context and the cartographic documents. And the balanced division that art brings to the project .

Keywords : Art ,Architecture ,Metaphor, school of fine arts , vegetation ,cultural pole , visibility .

ملخص:

العمارة والفن مجالان مرتبطان لا يمكن فصلهما ، حيث عرّف المؤرخون الهندسة المعمارية على أنها عمل فني.

يتضمن العمل المقدم بحثًا وثائقيًا عامًا حول البعد الفني في المشروع المعماري وتطبيقاته في مدارس الفنون الجميلة ، مع التركيز على المفاهيم الأدبية والعلمية للوصول إلى فهم متعمق. أثناء عرض تطبيقات الفن في المشروع المعماري عبر التاريخ حتى يومنا هذا ، من الضروري احترام وإظهار لمسة فنية على المشروع من خلال تطبيق فن الاستعارة الحسية ومرونة المساحات كخطوط فنية عبر الحياة الحضرية ، والأخير الذي قمت بتعديله بشكل موضوعي ، وهو الغطاء النباتي الحضري والشفافية حيث ستكون هناك علاقة تكامل وتكامل بين المنطقة والمشروع ، والحفاظ على التوازن الحضري. تم تحديد في تلك المنطقة انقطاع الغطاء النباتي. و إنشاء قطب ثقافي يتكون من مدرسة فنون الجميلة بجانب المسرح والمكتبة.

إن المنهجية التي اتبعتها تجعل من الممكن فهم العلاقة بين العمارة والفن بشكل عام ، فضلاً عن ربطهما بموضوع لإكمال العمل بشكل جيد. ومن هنا قسمنا المذكرة إلى فصول كان المدخل فيها يشرح دوافع اختيار الموضوع ومنهجية البحث. و الفصل النظري يشرح المفاهيم الأساسية ، الفصل التحليلي ساعد في التحكم في تلك العناصر لبدء عملية التصميم وهذا موجود في الفصل العملي بين سياق التصميم ووثائق رسم الخر ائط. والتقسيم المتوازن الذي يجلبه الفن للمشروع.

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الشكر و التقدير:

بادئ ذي بدء ، أود أن أشكر الله على إعطائي الصحة والشجاعة والصبر لإكمال هذا العمل المتواضع بعد العمل الشاق والكثير من التضحيات والجهد. أود أن أعبر عن امتناني لوالدي، وأشكرهم على دعمهم المستمر خلال الدورة الجامعية، ما أقوله أو ما أفعله، لا أستطيع أن أشكركم بما فيه الكفاية.

خالص شكري لاستادي السيد مدوكي مصطفى وحضوره ونصائحه وإرشاداته الثمينة وصبره ودعمه المستمر وخاصة لاستثماره في عملي البحثي وكل الجهد الذي كان قادرًا على تقديمه طوال الوقت. في هذا العام، من أجل إعطائي الأفضل، وتعليم الناس أن الهندسة المعمارية هي أكثر من مجرد ضربة قلم رصاص على قطعة من الورق، شكرًا لك سيدي. كما أتقدم بخالص شكري لاساتذتي الثاني والثالث السيدة نصيرة حكيمة والسيد محمد الهادي معطى لله، على مرافقتهم لي، وكذلك لنصائحهم الحكيمة، ومساعدتهم التي لا تقدر بثمن، واهتمامهم بعملي. شكرا لك سيدي وسيدتي . كما نتقدم بخالص الشكر إلى قسم الهندسة المعمارية بجامعة محمد خيضر بسكرة وإلى رفاقي في فئة 2021/2020 لتشجيعهم لي.

دون أن ننسى شكر أعضاء لجنة التحكيم السيدة ماضوي مريم والسيدة بعدادش حليمة على التقييم العمل ، ، وفي هذه المناسبة ، شرفني وجودهم.