Basis for Critical Evaluation of Cultural Buildings

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ABSTRACT

Searching for bases for critical evaluation for any building type is a very difficult trend. But, it brings the critical evaluation mechanism to definite controlled rules in a scientific process. The problem becomes more complex in dealing with cultural buildings, as their being is merely linked to emotional and intellectual needs. The article is dealing with this type of buildings as being both recreational and educational, or "Self-Educating Buildings," such as museums and libraries, as being more educational than recreational, and in "Performance Buildings," such as opera houses, theaters, as being more recreational than educational. In this article, some criteria are applicable in both types, and some of them are especially applicable for each one. In the first stage the article performs an outline understanding and definition to the first cultural typology, then extracts the critical evaluation bases from this definition, with a brief description to those criteria associated with some examples. The second stage includes a definition to the typology of performance activities, determining the definite critical issues that must be taken in consideration, when dealing with in the second type. The article presents in its finale a diagrammatic comparative application of these issues.

Keywords: critical evaluation, culture, image, morality, performance

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INTRODUCTION

Research conserving the representation of physical domains has led to three kinds of descriptions essential for capturing knowledge about physical systems that include:

(1) Functional description: *what a thing for*
(2) Structural description: *what a thing is*
(3) Behavioral description: *what a thing does* [1]

Being the main envelop that forms the human environment, these types of descriptions are applicable on buildings, i.e. architecture, more than anything else.

Searching for intangible and spiritual bases for critical evaluation for any building type is a very difficult trend. But, on the other hand, it brings the critical evaluation mechanism to definite controlled rules that redefine the criticism process in a scientific way. The difficulty of this approach is of different aspects; first is the multi emotional experiments that one passes at the same time in the same building type, second is the ability to transform the sensible qualities to be judged in a physical realm. The problem becomes more complex in dealing with cultural buildings, as their being is merely linked to emotional and intellectual needs. Through the understanding of this building type, this article is dealing with it as being both recreational and educational. This division is expressed in "*Self-Educating Buildings*", such as museums and libraries, as being more educational than recreational, and in "*Performance Buildings*", such as opera houses, theaters…etc. as being more recreational

than educational. As will be discussed in the article, a number of criteria are applicable in the both types, and some of them are especially applicable for each one.

The discussion here depends mainly on developing criteria away from analyzing the activity concept. It deals with the two types as two sides of one object. At first, it diagnoses the first type then applies it into the second. In the first stage it performs an outline understanding and definition to cultural typology, then extracts the critical evaluation bases from this definition, with a brief description to those criteria associated with some examples.

The second stage includes a definition to the typology of performance activities, determining the definite critical issues that must be taken in consideration, when dealing with such activities. The article presents in its finale a diagrammatic comparative application of these issues regarding three different scales.

CRITERIA

The emerging of "*Culture*" as a terminology had mainly influenced the modernism trend. Culture is not only a response to the new production methods, but it exceeds this limited role to emphasize expanded relationships. It also puts a framework for the reactions between groups, keeping in mind the political and social development. In its meaning, it raises the importance of personal experiment that specially influences the new conveyances of art, apart from its applications. So, it could be said that culture as a terminology has two parallel directions; the first is supporting a separate intellectual and emotional beings, and the second is conducting an observing overview away of the synchronous activities and events. The aim of culture is to gain ideals from life mechanism away of forced processes and to be added with its simultaneous emotions to human

experiments [2]. From this definition of culture, one may simply determine the message that the building must embody in its configuration and may highlight some key words that draw the building role. A cultural building is reflecting a response to these key words in different ways and different scales and in all the time the tools are the building physical characteristics. As these values are used in conducting the cultural pattern they could be used as criteria for evaluating such buildings as will be discussed in the following.

Type One: Self-Educating Buildings
This includes buildings such as museums and libraries, as being more educational than recreational.

Context
This includes two characters: domination and formality
(A) Domination: Cultural buildings, being always leading and institutional buildings, must be always dominant in their location/context. It should be expressed very strongly as a leader building in the site, but not overwhelming it (Figures 1 and 2).

This domination could be achieved in different ways; by a unique form or materials, by the surrounding urban design or landscape, by evacuating the area around the building, lifted base plane, etc.

Fig. 1. *Domination: San Francisco museum of modem art.*

Fig. 2. Guggenheim Museum Bilbao.

(B) Formality: Keeping a type of formality that is searching for respect and honor is very sensitive issue in this type of buildings. Therefore, a type of formality that is associated with alert and veneration must be kept. The degree of this formality is a very sensitive decision to make. It must be balanced as to achieve a friendly respect that appreciates the spirit that draws the interrelationship between the place and its beneficiary (Figures 3 and 4). Because of their position as a manifestation of intense public pride, cultural buildings are subject to the most critical scrutiny. They clearly expose the constant tension between the specialized need of the institution, its unique requirements for exhibition, preservation, and education, and the desire of the architect for an aesthetic statement [3].

Fig. 3. Formality: The British museum.

Fig. 4. Formality: Phoenix Art Museum.

Image
And this includes the nine following characters:
(A) Distinction: The role that this type of buildings plays is exceeding its physical dimension. It is a call for the change, a different vision to see the world conditions through a leader in emotional and intellectual domain. So, being distinguished is a very sensitive need (Figure 5).

Fig. 5. Distinction: Vitra Design Museum.

(B) Morality: One of the culture objectives is to initiate virtual and moral values. In this type of buildings, the building itself plays a key role in conducting the message. It is considered as an interaction media, within which the user and the action are reacting together. Therefore, it must accommodate the best conditions in order to enhance quality perception. Such way of morality in an architectural format that might be reflected in choosing the materials or in architectural form/style. Extreme loftiness is one of the most common inclinations in major cultural structures (Figure 6).


Fig. 6. *Morality: "Rome Reborn," Library of Congress.*

(C) Identity: One of the culture concepts is to deal with special type of people thoughts. This appears through the building's identity and how it relates to the place, where it exists. Using the notions of local architectural heritage is one of the most important factors that drive the building's identity and its reverence. This rule is still applicable, when we deal with international buildings with international roles that go beyond its national domain to approach international culture abstraction. At Bilbao, Spain, for example, Gehry designed a Guggenheim Museum that extends the notion of contemporary museum into a new realm (Figures 7 and 8). In Bilbao, the building became itself an identity to the city [3].
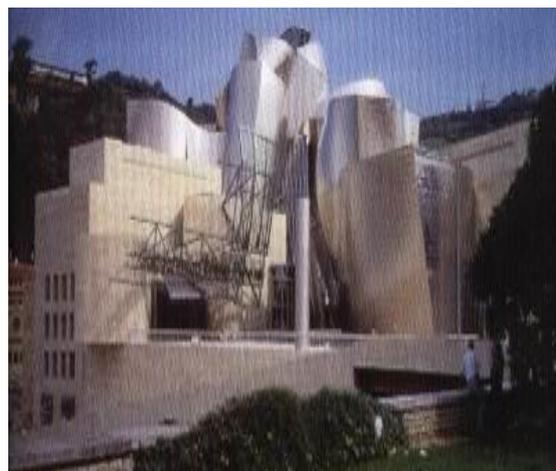
Fig. 7. *Identity: Guggenheim Museum Bilbao.*
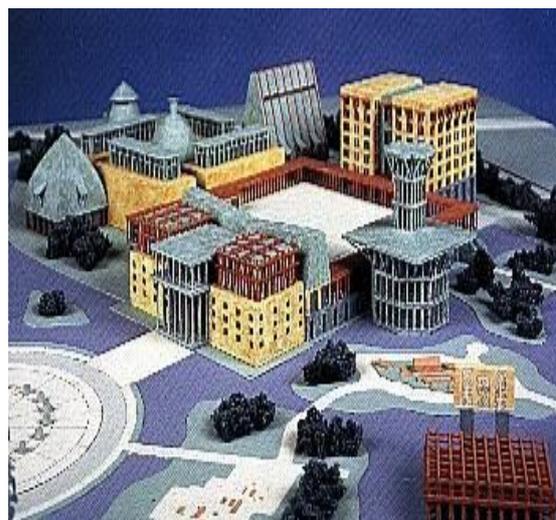
Fig. 8. *Identity: The Taiwan National Museum of Pre-History.*

(D) Clarity: This could be considered as one of identity features. Here, the building itself reflects the identity of its cultural enclosures and acts as a link between the container and the content to strengthen the ability of the building to express its ingredients. In museums, for instance, the collections dictate the form of the building: at Chikatsu-Asuka, a historical museum by Tadao Ando, the building preserves and displays artifacts from a series of burial mounds constructed in Japan over a thousand years ago. Reflecting the contents, the museum itself is designed like tombs, with much of its interior buried underground. In Mexico City, Ricardo Legoretta's Papalote Children's museum is a playful essay in

bright, lively color and simple geometry, designed to appeal to children. The Route 66 Museum sports a neon glow like a roadhouse or a motel. In other words, in this kind of buildings, form often follows not function but content (Figure 9 and 10).

Fig. 9. *Clarity: Chikatsu-Asuka museum.*

Fig. 10. *Clarity: Route 66 Museum.*

(E) Experiment: Not everyone cares to know the detailed history of an American highway, as it is narrated at the Route 66 Museum in Clinton, Oklahoma; nor have the figurative works of nineteenth-century German painters that dominate the collection in Seattle's Frye Museum generated strong interest in the art world. But the new renovated buildings that hose these collections are marvelous additions to their respective landscapes [3]. The extension at Musée De Louvre, Paris, is another one of the most notable examples of this tendency (Figures 11 and 12).

A successful design of this type of buildings should be mainly based on, and supported by, a very strong and expressive idea in a way that enables it to continue as a remaining effect inside the user's hidden perception, even after the physical existence in the place is over.

Fig. 11. *Inspiration: The extension at Musée De Louvre.*

Fig. 12. *Inspiration: Seattle's Frye Museum.*

(F) Inspiration: The type of activities hosted by cultural buildings is supposed to gain in its inherited being a lot of meaning that the physical container has to absorb, and in a further step to re-conduct. The media of this interaction must be accommodated to remodel the perception conditions away of its massiveness to a dreamy mortal and intellectual world through the spiritual transformation that helps the user to increase his intangible perception qualities and make it easier to him to accept the intellectual and emotional qualities. This interaction could

be reflected in special expression, space complexity, sequence, or in the treatments to the unified space. The depth of the experiment and its inherited effect is mainly related to the role that the building plays in the society and the range of its service (Figure 13). Symbolism is one of the most commonly used techniques to uplift the intangible qualities of the building that is emphasizing its intangible role.
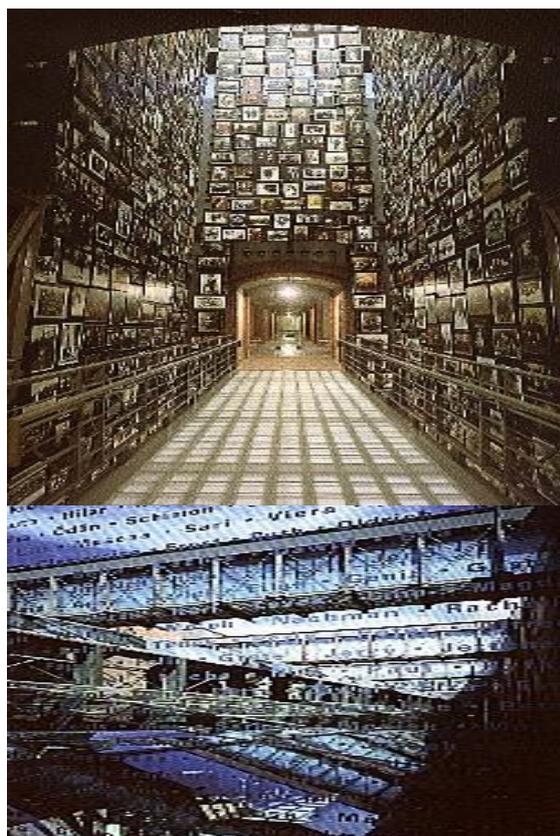
Fig. 13. *Experiment: United States Holocaust Memorial Museum.*

(G) Livability: Cultural activities -regarding their aforementioned definition- are dynamic and livable activities by default. Therefore, livability and dynamism in cultural spaces are important issues to be considered; the participatory action between beneficiary and the static space has to be transformed into a dynamic one.

Livability is a scale that measures the interrelationship between building and users and how it interpenetrates in their

emotional and intellectual domain. It could be expressed in different measures, among them the one that is between the different parts of the space, or in the different configuration of its components, can be distinguished (Figures 14 and 15).

**Fig. 14.** *Livability: Whanki Museum.*

Fig. 15. *Livability: Frye Museum.*

(H) Contemporaneity: The cultural process is mainly dealing with intellectual and emotional issues that might be classified as stationary values (values, ideals, etc.).

Therefore, linking the cultural building to its age is very important quality to address. Yet, it must be extended to deal with current trends of thought, in order to keep its vitality and its connection with the public realm. This simultaneous action could be extended to contain both interior and exterior (Figure 16).

A variety of subjects are housed in the "contemporary museum"; in addition to the more traditional interests in art and sculpture, a large number are devoted to history, science, computer technology, music, and entertainment. Environmental concerns are also evident, with emphasis on controlling energy consumption and building with less wasteful materials. An entirely new awareness and interest is shown in the protection and preservation of collections; the most innovative efforts are being made to maintain public accessibility while simultaneously ensuring the safekeeping of the collections [3].
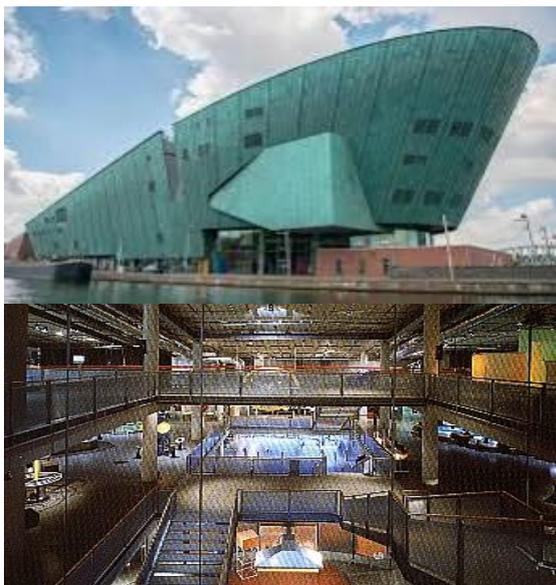
***Fig. 16.** Contemporaneity: New Metropolis National Science and Technology Center.*

(I) Remembrance and Metonymy: This criterion is specially found in the museums, which should have sensitive design that illustrates how architecture can be both evocative and moving in the development of a "storytelling" museum of history. These criteria could be achieved by different elements such as: emphasized approach, inspiring forms and compositions, sequential circulation and vision, or figurative elements.

Interiors
And this includes seven criteria as the following:

(A) Participatory: The role of culture is to help the society to upgrade its thoughts and ideas in an emotional and intellectual way. The way to reach this goal must go through a deep understanding of different mentalities in the society to find the better and the best among them. To link this idea to physical/architectural reality, an exchangeable relationship between user and place is needs. This relationship could take different ways, where the users may express their opinion in different design/work stages. This stage of interaction could be extended to erection steps themselves.

(B) Interaction: Interaction and exchange policy is always the start of perception-change and the persuasive approach for any change; indirect change accompanied with better and tangible realty.

Interaction may be considered as form of cooperation, where the cultural building's extent influences its surrounding environment as well as its beneficent and users. It may appear in the construction stage as in the designing decision or it appears later during its operation through its cultural output. In all the cases and during whatever stage, this interaction is a key to building success.

(C) Reservation: This point seems to be in conflict with the two previous points, but the mixture of the three issues, in spite of this false contradiction, draws the main spine that separates and organizes the re1ationship between people and the building.

This hidden value draws the line between the need of a building that is approaching people and, on the same time, that increases the level of their superciliousness and sophistication by dealing with it. So this type of buildings must be surrounded by a glory of respect and reverence that avoids any declination to commonness or vulgarity (Figure 17).

(E) Organization:
Organization, or in general rationality of appearance, is very important in this type of buildings, especially museums, since directions are one of the most factors that are needed in museums (Figures 18 and 19). Also, in libraries organization and discipline are very influential factors that affect the visitor or the user of the building and enrich his/her experience.

Fig. 17. Reservation: Getty Center.

(D) Diversity: The initial experience in institutional buildings, such as cultural buildings, is mainly generated by the variety of the inner components. This variety, or diversity, is very important to increase the visitor's feeling of surprise and cheerfulness, which encourages him/her to stay in the place for longer time and to wish to discover it more.

This diversity could be generated by different architectural approaches that includes, but is not limited to, the changes in the volumes/levels, the colors, and even the illumination of the interior spaces.

*Fig. 18. Organization: McCord Museum of Canadian History.*

Fig. 19. Organization: Thyssen-Bornemisza Museum.

(F) Complexity: The commissions of cultural buildings are very preferable for architects, for in designing them, architects are encouraged to be inventive in ways that are unthinkable in designing an office building or other large-scale projects. Cultural buildings' program has its functional complexities, but above all it cries out for originality of design. They give architects opportunities to provide both innovative and entertaining designs, either in the concept as a whole or in the details (Figures 20 and 21).

Fig. 20. Complexity: Guggenheim Museum Bilbao.
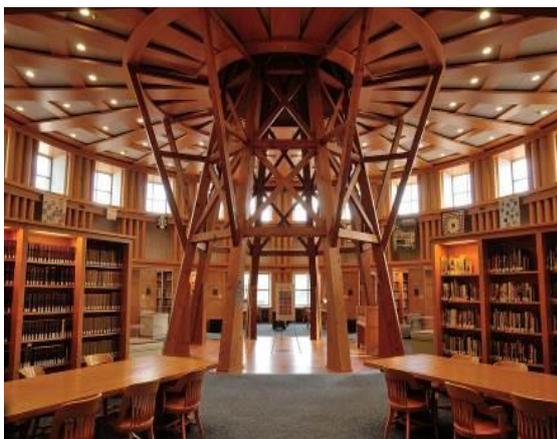
Fig. 21. Complexity: Denver Central Library.

(F) Comfort and Inclusion: This criterion, although intangible, but to be achieved a lot of tangible factors are needed, such as: suitable acoustics and sound isolation, suitable illumination, ability to upgrading and changes, resistance to decadence factors, simplicity and safety in use, suitable envelops and volumes of spaces, etc.

Type Two: Performance Buildings
In this type of buildings, entertainment is the other side of culture. This characteristic distinguishes these buildings as a separate part of the overall cultural activities. Indeed, this quality of entertainment has become essential for the cultivation of arts and remains a practical measure of civilization.

Values shared with Type One:

|	
(A) Domination	(G) Participatory
(B) Distinction	(H) Interaction
(C) Identity	(I) Reservation
(D) Experiment	(J) Diversity
(E) Inspiration	(K) Comfort and Inclusion:
(F) Livability	

Specific Values
The employment of this building type that is not devoted to the immediate task of education represents an intellectual challenge. Complete passiveness produces, it seems, some emotional urge to produce some positive results or to achieve some objectives. A set of issues that deal with culture building from this point of view could be developed, the same way as a specific critical evaluation issues related to cultural domains had been developed.

(A) Cheerfulness: A cheerful building is a one that has a delightful design, which aims to please the eye of the beholder and lift the spirits with their vibrant palettes and pleasant facades/interiors.

Barthes, in an interview conducted in 1973 designates opera as a "total spectacle." He dreams of an opera house that would be as open and popular as a cinema or an *Amphitheatre* in which bouts between wrestlers are held, an opera house that would allow the audience to come and go

as it pleased [4]. Dresden Semperoper, which is considered to be a prime example of "Dresden Baroque" architecture, is regarded as one of the most beautiful opera houses in the world. Its vibrant, warm colors and the amazing details make the experience inside it especially cheerful and unforgettable (Figure 22).
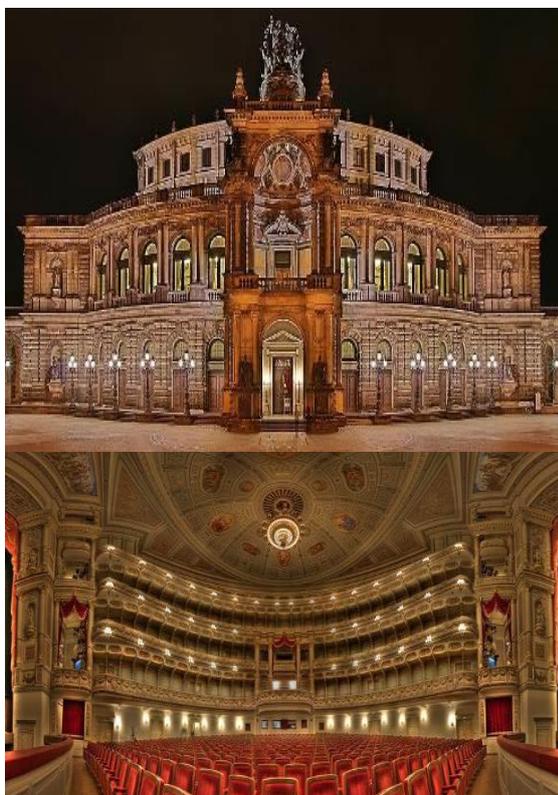
Fig. 22. Cheerful: Dresden Semperoper or Sächsische Staatsoper Dresden.

(B) Exaggeration: Architecture should mostly have control over exaggeration, but in some projects that have strong conceptions; these conceptions need to be translated into architectural expression through exaggeration. It comes down to a relationship between narrative and architectural outcome. This relationship demands that the architecture is not a theatrical set but is overtly disconnected from the literal with a life of its own.

The Walt Disney Concert Hall, by Frank Gehry (Figure 23) is one of the most well-recognized performance buildings around the world. Its design depends on fragmenting orthogonality, on which

humans' eyes are accustomed, and creating a space that escapes from the typical world of right angles. Exaggerating and distorting these vectors certainly produces an effect on the person negotiating such spaces, or perhaps a particular atmosphere or mood.
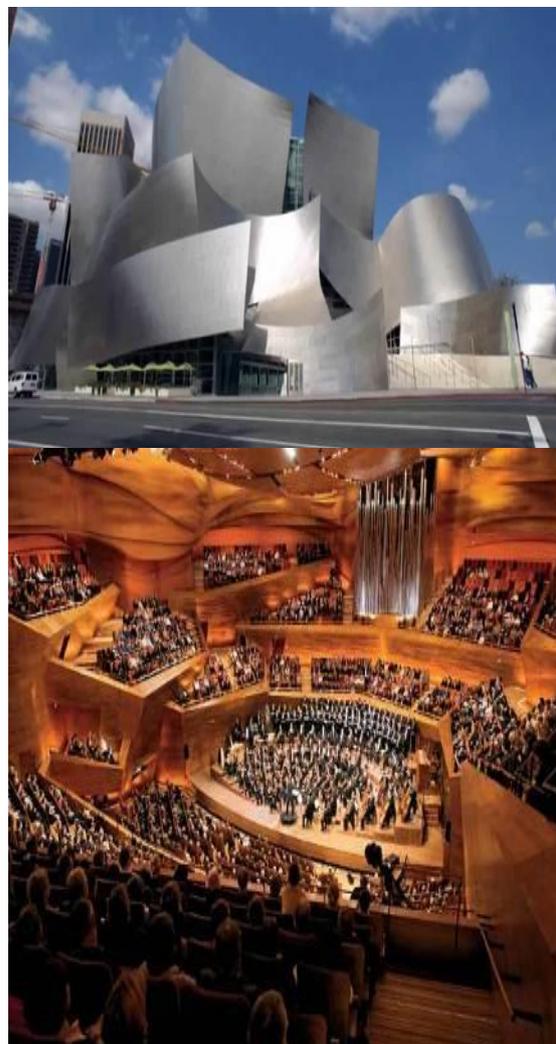
Fig. 23.Exaggeration: Walt Disney Concert Hall.

(C) Surprise: The ideal architectural solution is the one that combines pragmatic function with fascination of design. Surprising design is a one that has an element of amazement, which offers more than it seems at first glance.

Sydney Opera House (Figure 24) is one of those most fascinating, unusual designs that opened the way for the immensely

complex geometries of some modern architecture. The design was one of the first examples of the use of computer-aided design to design complex shapes. Surprising elements are also found in the inner foyers that shows the structural elements of the steel framing and the glass curtain walls. Its originality and uniqueness had been ascertained as it became a UNESCO World Heritage Site in June 2007, a National Trust of Australia since 1983, and the Australian National Heritage List since 2005. In addition to its exceptional design, the building also houses some unusual activities in opera houses; though its name suggests a single venue, the building comprises multiple performance venues, which together host well over 1,500 performances annually. It also houses recording studio, cafes, restaurants, bars and retail outlets.


Fig. 24. *Surprise: Sydney Opera House by Jørn Utzon.*

(D) Luxury: Joy, comfort, elegance and glory are all important characters that the designer needs to achieve in performance buildings (Figure 25). These characters are the substantiation of "luxury". One of the buildings, where this character is achieved most successfully is the *Palais Garnier* (Paris Opera House). It is a building of exceptional opulence and glory. The style is monumental with eclectic exterior ornamentation and an abundance of Neo-Baroque decorative elements. These include very elaborate multicolored marble friezes, columns, and lavish statuary. Besides being the one of the most expensive buildings, it has been described as the only one that is "unquestionably a masterpiece of the first rank" [5].
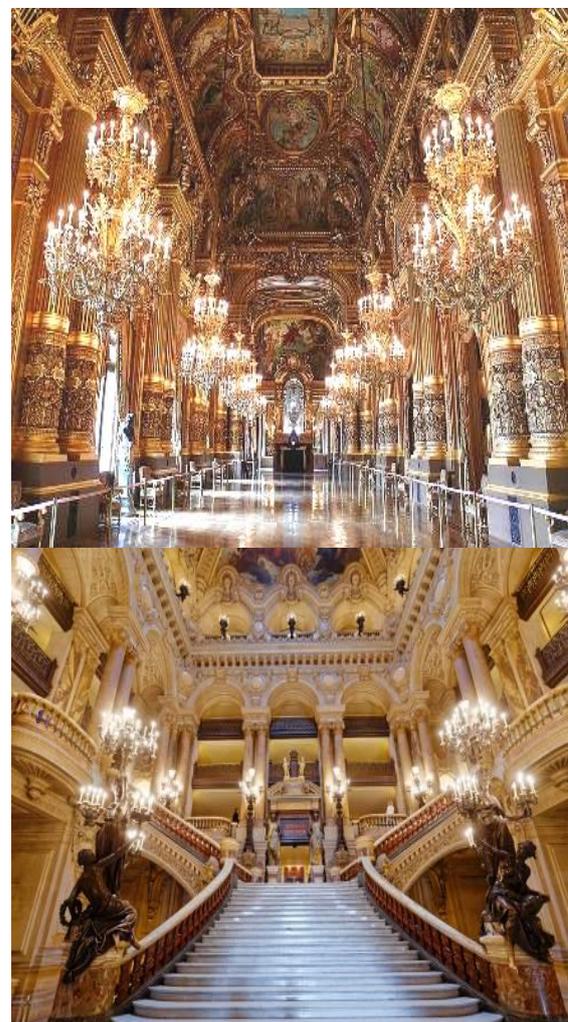
Fig. 25. *Luxury: Opera Paris or The Palais Garnier by Charles Garnier.*

CONCLUDING DIAGRAM
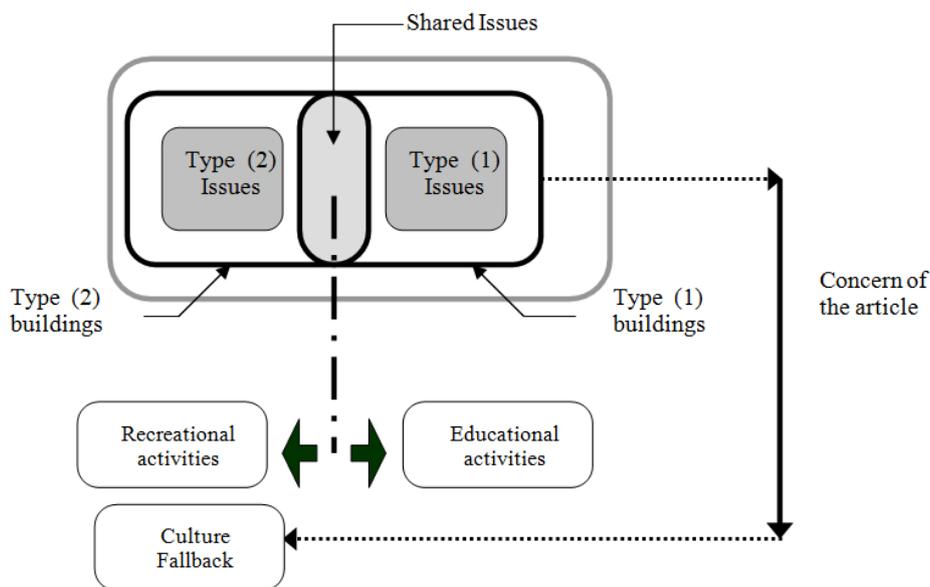
Type one self-educating buildings	Shared issues		Type two performance buildings
(A) Formality	(A) Domination	(G) Participatory	(A) Cheerful
(B) Morality	(B) Distinction	(H) Interaction	(B) Exaggeration
(C) Clarity	(C) Identity	(I) Reservation	(C) Surprise
(D) Contemporaneity	(D) Experiment	(J) Diversity	(D) Luxury
(E) Remembrance	(E) Inspiration	(K) Comfort and Inclusion:	
(F) Organization	(F) Livability		
(G) Complexity			

Fig. 26. *Diagram of the relationship between the two type of educational buildings.*

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