

# The Purpose of Aesthetics in Architecture

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**Abstract:** *This paper explores the multiple connotations of the term "Aesthetics in Architecture" to professionals and laymen/users, to facilitate more informed decision-making. One of the research methods used was a survey for aesthetic evaluation of design parameters and photographs. Across categories, people felt that aesthetics should certainly be pleasing while integrating overall performance. Safety was considered priority. Heritage buildings were appreciated for their timelessness and durability. Non-professionals rated iconism lower and cost-consciousness much higher. Users felt that climatic comfort, cost and maintenance were important. Aesthetics also impact construction labour productivity and stress, environmental conditions of communities around, and climatic comfort integration.*

**Keywords:** Aesthetics, aesthetic evaluation, pleasing aesthetics, climatic comfort, performance, ethical value, expression

## 1.1 Introduction:

The notion that a building should have a "pleasing aesthetic" is often an important consideration while designing architecture. Albeit, the term "pleasing aesthetic", has multiple and varied connotations. The meaning associated with the term "aesthetics" in this paper is "overall external looks and feel".

Architects often have the poetic license to go overboard with the aesthetics while assuming that clients/users of buildings would also appreciate the building and their ideas about "pleasing aesthetics". However, there is not much attempt from the architectural fraternity at post occupancy analysis to get factual user evaluation. People also tend to give contradictory reactions when they are the actual users of a building and not merely onlookers or visitors.

## 1.2 Synopsis:

The aim of this research paper is to explore the purpose of aesthetics beyond visual and sensorial delight to different people (users and professionals).

The objectives:

1. To find the evaluation of users/non users on the chosen parameters for the design of the aesthetics of architecture.
2. To get a sense, if the perceptions/assumptions of the professional community about users is factual.
3. To understand if and how actual experiences and associations of the respondents, change their perspective of aesthetic evaluation.
4. To find if there are any common ingredients that make architectural aesthetics appealing.

The rationale is to explore the threats and opportunities that are offered by the domain of aesthetics as well as its far reaching impacts along with those, which are not readily obvious. These multiple perspectives will give useful insights into this domain, so as to help the entire community of professionals, lay users and clients, to make more informed decisions.

## Scope and limitations:

The research was restricted to an audience that could understand the notion of aesthetics and respond in a coherent fashion. The sample size was 30 and was based in Mumbai. The choice of the ten buildings chosen for response to photographs, was on the basis of a dynamic visual design, varied aesthetics and different typologies. Residences were not included. The respondents also provided reasons for their evaluation. The buildings chosen for aesthetic evaluation through photographs (on a scale of 1-5, from excellent to bad) were as follows:

1. Pompidou Centre, Paris
2. The Bilbao Museum, Spain
3. Taj Mahal, Agra
4. Bahai (Lotus) Temple, Delhi
5. Cathedral and John Connon School Extension, Mumbai
6. Prince of Wales Museum, Mumbai
7. Rani Ki Wav, Patan, Gujrat
8. Rudrapur School, Bangladesh
9. Victoria Terminus, Mumbai
10. One BKC, Bandra Kurla Complex, Mumbai

## Methodology:

The study is mostly qualitative in nature, though there is some quantitative analysis in the surveys. It was a mix of the following 2 methods:

1. An open ended survey was carried out, with a qualitative sampling of a mix of architects/faculty/fifth year B. Arch students and laymen. They were asked to respond to a questionnaire on aesthetic evaluation. (detailed in 1.3.2). They were also asked to name a favourite building(s) and state what could be the positive/ negative outcomes of aesthetics in architecture.
2. They were also shown colour photographs of certain famous buildings in Mumbai and other parts of the world and rate them on a scale of 1-5(excellent to bad) and give reasons for their response. The survey was delivered in a face to face format.
3. Some iconic works of famous/decorated architects have been studied to point out some interesting relevant facts based on their aesthetics.

### 1.3 Literature Review and Data Collection

The term “aesthetics” could be defined as the branch of philosophy that deals with the nature, expression and perception of beauty as in the fine arts or/and the study of psychological expressions to beauty and artistic experiences.<sup>i</sup> “Aestheica” by Alexander Gottlieb Baumgarten defines aesthetics as knowledge gained by the senses, as distinct and different from the knowledge gained by intellectual process, but not inferior to it in any way<sup>ii</sup>.

Fundamentally, vision is one of the first senses that kicks in, when you encounter a building or perhaps even think of one. And so, it is certainly, the visual aspect of the building in question, that is a major factor while evaluating a building aesthetically, while possibly factoring in, other parameters and associations/actual user experiences.

Aesthetic judgements can be based upon an underlying logic that is moral, ethical, socio-economic or even political. A palatial home in a general scenario of poverty could be looked upon as a status symbol or even as a vulgar display of wealth and power. E.g. The major driving idea underlying Roman architecture was power and that of Greek architecture was refinement and these ideas are manifested in the aesthetics of that architecture. When a person opines that a certain building has pleasing aesthetics, the implication is that the building is beautiful in his perception. This subjectivity of understanding makes aesthetics a debatable subject. People engage with buildings as per their values, and the emotions that the building evokes when they look at them, think about them or occupy them. Judgments of beauty are sensory, emotional and intellectual all at once<sup>iii</sup>.

#### 1.3.1 Historical perspectives to aesthetics:

The instinct to decorate has existed from prehistoric times when the prehistoric homo sapiens tried to decorate their faces with colours and used ornaments to embellish their bodies. Much later pure structural devices like keystones of arches or supporting stone brackets started becoming objects to be decorated. Structural columns fashioned out of palm trunks tied together, got converted into a standard aesthetic in stone columns and capitals when stone became the dominant building material. Coming to the current day, people try decorating their own little domains in various individualistic ways. The white “rangoli” patterns created by many Indian communities outside their entrance doors is testimony that the instinct to decorate keeps manifesting itself.

Referring to Vitruvius, buildings must have the element of “Delight” which incorporates the idea of aesthetics and the accompanying beauty; along with “Firmness”, which can be associated with strength and “Commodity” that can be associated with functionality. Ruskin makes his opening remarks in his book, “The Seven Lamps of Architecture”, by differentiating and defining architecture and building. He says that architecture goes way beyond the mere act of building; it transcends to an altogether different level and can add multiple layers of beauty and meaning that can enrich buildings.

So it does seem that architecture must certainly have the element of beauty and aesthetics as an inherent part of the building. “A thing of beauty is a joy forever”-so it is very likely to be used, enjoyed and even preserved.

#### 1.3.2 Parameters of Design for Aesthetics in Architecture:

Based on empirical studies/observation of buildings in Mumbai, certain parameters have been identified as those which should be considered while designing aesthetics in architecture. The reason for this identification is that they often constitute some of the physical as well as non-tangible elements that build up the overall aesthetical image and expression. The respondents had to answer whether they agreed/disagreed to each of these design parameters, both as users and non users of buildings. They are as follows:

1. Form, shape, colour, texture, scale
2. Iconic architecture
3. Symbolism/Philosophy
4. Architectural language/vocabulary
5. Harmony of the various parts, at all scales (small and large)
6. Climate responsiveness
7. Cost consciousness
8. Safety
9. Appropriateness in the total context
10. Weathering of the materials
11. Long term maintenance, cost, ease etc.

#### 1.3.3 Drivers of an overall aesthetical expression:

There are certain other factors which could be considered as drivers of an aesthetic expression. The building is often an outcome of a single dominant idea like some of those listed below:

1. **Iconicism:** Buildings like the Al Burj, Dubai resurrect the city they are located in. They convert these cities into tourism hubs to a large extent because of the sheer power of their iconic presence.

2. **Aspirational lifestyles and understandings:** The indigenous traditional systems or adaptations of those are making way for the “glass box” architecture or reinforced concrete buildings because of the aspirations/understandings of users.

3. **Sustainability, climate, cost/maintenance and durability:** Vernacular buildings often have an aesthetic that is driven by climate, local materials/skills and sustainability.

4. **Socio-economic/political and religious factors:** Buildings like churches or those for governments may have very overt religious symbolism or even openness to denote a transparent government.

5. **Consumerism/Globalisation/marketing efforts:** The materials and construction goods industry often markets products and systems aggressively and that dominates the landscape of aesthetics. E.g. glass facades

6. **Vocabulary/Language:** Symbolism can depict modernity, religion, power, purity or mystery. It can be expressed as the single overarching idea that defines the aesthetic design in a very overt manner. e.g. The Bahai temple, Delhi, also popularly called as the Lotus temple )

7. **Utilities like pipings, drying lines, air conditioning units and water lines:** There are several examples of this kind of “honest” aesthetic expression e.g. Llyods Building, London

8. **Technology/materials:** The overall character that the building assumes is often an outcome of the technology, the construction system and materials used. E.g the Hightech Architecture with steel structural systems which are often prominently visible.

**1.4 Analysis and results:**

**1.4.1 Response of users versus non users, professionals versus non professionals, users/non users:**

Most non professionals are not well oriented towards architecture, even lesser towards aesthetics. They don't hold

any conscious opinions and had to make an intellectual effort to respond. Many even found the survey an eye-opener about architecture.

1. For users, iconism is less important, climate responsiveness, cost consciousness and graceful weathering of materials is much more important.

2. Professional users give more importance to iconism, less to cost consciousness but rated climate responsiveness and safety almost like non professionals.

3. Professional non users also care more about iconism, are less concerned about cost consciousness. However, it is certainly the responsibility of professionals to educate laymen on relevant matters to help all the stakeholders involved to make appropriate and informed decisions during the design process.

**Table 1 (All the data is expressed in %, y-yes, n-no)**

	Iconic, y/n/maybe	Cost, y		Iconic, y/n	Climate, y/n	Cost, y		Iconic, y	Climate/Weathering y	Cost, y
<b>Professional users</b>	25/37/38	50	<b>Professional non users</b>	87/6	56/12	31	<b>Users</b>	23	92/92	57
<b>Non professional users</b>	20/30/50	70	<b>Non professional non users</b>	30/50	50/40	50	<b>Non Users</b>	65	53/46	38

**1.4.2 The response to photographs:**

Experiences/associations almost always get woven into aesthetic evaluation subconsciously or otherwise. Most non professionals do not understand the aesthetic of Pomidou Centre, but almost all are fascinated by the dynamic forms like those of the Bilbao Museum. Almost all non professionals appreciate the glass box aesthetic but do not have climatic associations with it, although they respond

that climate responsiveness is very important as a design parameter. Heritage structures top the list for their timelessness, durability and their classic beauty. The Rani ki wav, the stepwell in Gujrat, was highly appreciated for its conceptual and ethical value also.

However professionals are more critical of the glass box aesthetic. A larger number of professionals could appreciate the Bilbao Museum and the Pompidou Centre.

**1.5 Studies of iconic works of famous/decorated architects; tabular data and analysis: Table 2**

This is an exploration of some interesting facts/impacts of the aesthetical aspects and expressions of landmark buildings by famous architects across geographies/time frames.

Building, architect/location	Aesthetic	Description/analysis and outcome apart from the aesthetic
Kanchanjunga by Charles Correa, located at South Mumbai, a high end luxury apartment housing	Clean geometry, with a bold, colourful solid-void like composition	The design is worked out through double height sections. Breeze goes across the entire split level apartment so that there is no artificial cooling is required. The double height terraces form a buffer zone as a climatic defense. <sup>iv</sup> <b>Climatic comfort is achieved by passive means</b>
Bilbao Museum by Frank Gehry, a museum for contemporary art, in Bilbao, Spain, set along a river	Titanium clad, glittering building with curved forms	“Known for its Bilbao Effect” The seemingly random curves are designed to reflect light. <sup>v</sup> <b>There were huge economic gains, for many years, through increased footfalls in Bilbao and Spain with cascading economic activity to serve tourists; this was called the “Bilbao Effect”</b>
Jewish Museum by Daniel Libeskind, museum to highlight Jewish History, set next to a heritage structure	Zinc coated surfaces with random looking line like slit openings on the building	Some angles of the zig-zag plan have come up to accommodate the existing trees on the site <sup>vi</sup> . Artefacts could not be displayed directly onto its sloping surfaces. The random looking lines have been derived by a specific method. <b>Extremely successful as an experiential architecture and a narrative both internally and externally.</b>

Walt Disney Concert Hall by Frank Gehry, a concert hall in an urban setting with residential areas around.	Metal clad building with undulating wavy forms.	Metal replaced stone cladding because of budget overruns. <b>The metal cladding increased glare for the surrounding community, a less reflective material would have been more comfortable for them. It also caused a significant rise in the temperatures of residences around<sup>vii</sup></b>
Dr. Chau Chak Wing Building, University of Technology, by Frank Gehry, Sydney	Popularly known as “the paper bag”, with an undulating brick facade	The idea was to humanize the building using these individual overhanging and twisted bricks to replace the older practice of decoration <sup>viii</sup> . <b>It was stressfully challenging but a unique project for the bricklayers; however, it reduced their productivity significantly<sup>viii</sup></b>
The Bahai temple also called as the Lotus temple because of its shape. It is designed by F. Sahba and located on the outskirts of Delhi	Lotus like structure appearing to bloom in a pond	The lotus represents purity in many religions practiced in India and has huge symbolic and spiritual significance. <b>This lotus form appearing to float on surrounding water bodies has been optimized to facilitate natural ventilation, cooling and lighting within the building in the hot and dry Delhi climate<sup>ix</sup></b>
Louvre, Abu Dhabi by Jean Nouvel, a museum for contemporary arts in Abu Dhabi	There is a large heavy dome roof with its multiple layers of metal components. The interior is organised within this large space.	It also provides a large flexible column free space. <b>The ever changing light patterns give a sense of the time and season throughout the day and the year, within the structure and give a connection to the outside environment.<sup>x</sup></b>
UC Innovation Centre, by Alejandra Aravena, an office building in Santiago, Chile	Building is turned inside out, to avoid solar gain, it has a blankish exterior with few openings and huge voids to serve as break out plazas.	The offices are planned around an internal atrium that brings in light and helps foster social interaction because people actually see other people through the glazed internal facades that face each other. <b>The typical exposed glass façade that has huge solar gains and hence requires huge artificial cooling is turned inside out, as matter of “common sense” quoting the architect.<sup>xi</sup></b>

**The following conclusions can be drawn based on the tabulated data and analysis:**

1. Symbolic connections, passive climatic comfort and lighting can be integrated with the aesthetic design that performs in multiple dimensions.
2. Dynamic and unique aesthetics can be a huge driver for tourism and accompanying economic revival, but can also be a construction challenge.
3. The aesthetics can also provide a sense of place, identity and regionalism.
4. The building and its materials can cause significant discomfort to the community around.

**1.6 Conclusion:**

It is the responsibility of professionals to educate clients, keep the interest of the user in mind, and add value to the aesthetics by capitalizing on the opportunities to integrate climatic comfort, long term maintenance, cost-consciousness and

identity. The resulting aesthetic would probably be a more “multidimensional and complete aesthetic”.

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