



Assignment 4: Case Studies

(Transcending Architecture: how to do it)

hand-out: Wednesday 10 February

submission: PPT of oral presentation and PDF (or JPG) of boards uploaded to course G-Drive

Presentation: Wednesdays 17 and 24 March (Group 1 and Group 2 respectively)

Objective

Is there a relationship between transcendence and architecture? Can the built environment help us access a spiritual state, perhaps God? And if so, how? This ‘HOW’ deserves great attention from those of us who profess architecture, since we are in charge of, hopefully, make it happen. Since the premise of this class is that Transcending Architectures (TA) are real, our next step ought to be to *develop a list of traits, features, or conditions shared by such buildings so that we could perhaps facilitate their replication.* In other words, our goal ought to be to establish *concrete design heuristics for TA.*

Case Studies

Teams of two (or three) students will be given 2 (or 3) buildings noted for their sublime attributes that is, their capacity to seek, induce, or present the Transcendent. One will be a contemporary building and the other a historical, pre-modern structure. They have chosen from a list of ‘architects considered to produce TA,¹ buildings said to provoke extraordinary experiences in a survey conducted by Bermudez,² or work being conducted by the TA research group from the Architecture, Culture, and Spirituality Forum.³ Since two or more students will be working on this study, there is an expectation of a thorough (and comparative) investigation.

¹ This list was composed by 30 scholars and architects attending the Fifth Architecture, Culture, and Spirituality Symposium: Urbanism, Spirituality and Wellbeing at the Glastonbury Abbey in Hingham, MA (June 2013). URL: http://www.acsforum.org/usw_symposium/

² There are many publications reporting on the survey results but a good start is this one: https://www.academia.edu/3893879/AMAZING_GRACE_New_Research_into_Extraordinary_Architectural_Experiences_Reveals_the_Central_Role_of_Sacred_Places

³ Refer to: <http://www.acsforum.org/acsf-declaration-of-transcendent-human-habitat/>

Methodology

With the stated goal at heart and the assigned buildings, you will seek to discern the *unique empirical* (i.e., concrete, objective, material, observable) **conditions** enabling such TAs. There is no prescription as to how to conduct the analysis, only that (1) any claim or conclusion has to allow for cross-checking (i.e., ‘verification’) by any fair observer/visitor to the actual building (i.e., empirically) and/or reference to the published literature (i.e., scholarship, research); and (2) you use a Matrix to guide/record your discoveries (see below). It is strongly recommended that you get fully familiar with the work through still and moving pictures (including sounds when possible) as well as written, published scholarship. It is expected that drawings and diagrams of a variety of types will be used to demonstrate observations and findings. Reference books such as Unwin (2009), Jenkins (2013), and Clark & Pause (2012) offer excellent examples of how to accomplish such systematic investigations.

Conditions

‘Conditions’ are defined as *“those fundamental architectural attributes, features, or characteristics that ... play an essential role in expressing and/or giving people access to the Transcendent. While these conditions ha[ve] a level of abstraction they [are] not the ‘concepts,’ ‘ideas,’ ‘meanings,’ or ‘intentions’ behind the projects. Rather, these conditions [come] out of being a generalizable set of concrete, perceivable architectural features or circumstances. A ‘condition’ [is] to be accompanied by a short description of what it was meant (say 1-2 sentences) such as ‘Monolithic Materiality: use of few materials in large areas and/or continuous fashion with few (but great) details;’ or ‘Spatial Emptiness: uncluttered, unobstructed, unoccupied extensions of space.’ These conditions [have] to be the results or outcomes of the analysis of a case study and literature review of the project or about the architect and not based on preconception, belief, or a-priori hypothesis.”* We see the conditions of Transcending Architecture as *“ ... ‘beacons’ or ‘attractors’ (from Chaos Theory) that may (1) guide design efforts toward the [TA]; (2) empirically indicate its presence; and/or (3) nudge dwellers/visitors into experiencing it.”* (italics are quotes from Ardan et al, 2014)

Matrix

You will utilize a Matrix to guide your inquiry and then organize its results. However, this analytical template may be bypassed, adapted, or changed if need be (but arguments/evidences will be necessary to do so). This Matrix was developed from a comparative analysis of 22 case studies of TA (Ardalan et al, 2014). The Matrix has fourteen (14) general categorical conditions that may induce or propitiate TA. In alphabetical order:

Context; Cosmos/Nature; Hidden/Manifest Experience; Light; Luminous Program; Materiality/Tectonics; Mathematics (Geometry); Motion (Access, Ritual, Path); Ontological Axis; Scale; Sound; Space/Form; Time; Unity.

Aesthetic Conditions				Living Conditions				Connectedness			Holistic		
Sensual		Formal-Spatial		Programmatic		Temporal							
Light	Materiality/ Tectonics	Space/ Form	Mathematics (Geometry)	Scale	Luminous Program	Motion (Access, Ritual, Path)	Sound	Time	Context	Cosmos/ Nature	Ontological Axis	Unity	Hidden/ Manifest Experience

Digital Resources

A wide variety of online resources are available in the “OTHER” course webpage:

<http://juliobermudez.com/courses/618/other.htm>

Case Studies List (* Teams [2], [4] and [6] have 3 members, hence three buildings each)

- [1] **E. Fay Jones: Thorncrown Chapel (Arkansas)**
Pre-Modern architecture: Machu Picchu (Peru)
- [2]* **Frank Gehry: Disney Concert Hall (L.A.)**
Richard Meier: The Atheneum (New Harmony, IN)
Pre-Modern architecture: Pyramid of the Sun (and surroundings) -- Teotihuacan
- [3] **Jorn Utzon: Sidney Opera House (Australia)**
Pre-Modern architecture: Stonehenge (England)
- [4]* **Mario Botta: Santa Maria degli Angeli Chapel (Monte Tamaro, Switzerland)**
Santiago Calatrava: Milwaukee Art Museum (Milwaukee)
Pre-modern architecture: one building + context in the Forbidden City (Beijing, China)
- [5] **Peter Zumthor and Louise Bourgeois: Steilneset Memorial (Vardo, Norway)**
Pre-Modern architecture: The Laurentian Library (Michelangelo, Florence, Italy)
- [6]* **Hassan Fathy: Dar al-Islam Mosque Madrasa (Abiquiu, New Mexico)**
Emilio Ambasz: Casa de Retiro Espiritual (Seville, Spain)
Pre-Modern architecture: Mont-Saint-Michel Abbey (Normandy, France)
- [7] **Louis Kahn: National Assembly (Bangladesh)**
Pre-Modern architecture: Cologne Cathedral (Germany)
- [8] **Tadao Ando: Hill of the Buddha at the Makomanai Takino Cemetery (Japan)**
Pre-Modern architecture: Sant'Ivo alla Sapienza (Borromini, Rome, Italy)
- [9] **Steven Holl: St. Ignatius Chapel (Seattle)**
Pre-Modern architecture: Palazzo Strozzi (Florence, Italy)

Product

The work should be formatted to fit in 11”x17” or, alternatively 20”x20” sheets. Several sheets may be necessary to complete one building investigation. Students are strongly encouraged to employ hand-diagrams over tracing paper to study the given buildings. Consider the time given, your team composition, and the consistency across your 2/3 studies to strategize your best analytical approach. In addition to the sheets, you will summarize the discovered architectural conditions in a MATRIX. You will present this work along with clear conclusions to the class in a 20 minute long lecture format (15 min talk + 5 min Q&A). Both MIRO and PPT presentations are expected. Please, do include the most representative images of the buildings being studied.

Grading

The weight of Assignment 4 is 30% of course grade.

References

- Nader Ardalan and Laleh Bakhtiar, *The Sense of Unity: The Sufi Tradition in Persian Architecture*. Chicago, IL: Kazi Publications, 2000.
- Nader Ardalan, Julio Bermudez, Prem Chandavarkar, Alison Snyder, and Phillip Tabb, “*Transcendent Architecture. A Pilot Study of Works, Conditions & Practices*”, unpublished manuscript presented at the ACS6 Symposium in Toronto, Canada (2014). For more, <http://www.acsforum.org/symposium2014/papers/ARDALAN-ET-AL.pdf>
- Julio Bermudez, “*Introduction*,” in *J.Bermudez: Transcending Architecture*. Washington DC: CUA Press, 2015.
- Francis Ching, *Architecture: Form, Space, and Order*. Hoboken, NJ: Wiley & Sons, 2007.
- Roger Clark and Michael Pause, *Precedents in Architecture*. Hoboken, NJ: Wiley & Sons, 2012.
- Eric Jenkins, *Drawn to Design*, Basel, Switzerland: Birkhauser, 2013
- Simon Unwin, *Analyzing Architecture*. New York: Routledge, 2009.