Orientation: Post-Formalism and the Beginning Architecture Student

Andrew R. Tripp

What is most personal is most universal.
- Carl R. Rogers

This is the problem from which I would start. Orientation.
- Berthold Lubetkin

Introduction

One of the most persistent and pernicious tendencies in the education of the architect is the acceptance of the idea that architecture is a ***visual art***; one that can be defined in essence as-- and therefore evaluated by-- visual elements (such as lines, planes, volumes, textures, colors, etc.), which altogether play a game of simultaneous contrast and continuity with the eye. Architecture has long been reducible to problems in the psychology of visual perception because of the assumption that it is somehow *about* visual perception. This is, of course, the aesthetic tradition of formalism, at least as it has been known ever since the publication of Lessing's *Laocoön* (1766). In apparent contrast to this tradition, there is the well worn idea that architecture is a ***performance art***; one that is concerned with successive movement and duration, much like literature, poetry, or theater. But when we contrast these positions we tend to forget that they are simply the two sides of Lessing's spatial-temporal analysis, and that both reflect the same compulsion to define universal formalist criteria for architecture; criteria that aim at transcending cultural change and difference, but in fact intend so from within the history of one specific tradition.

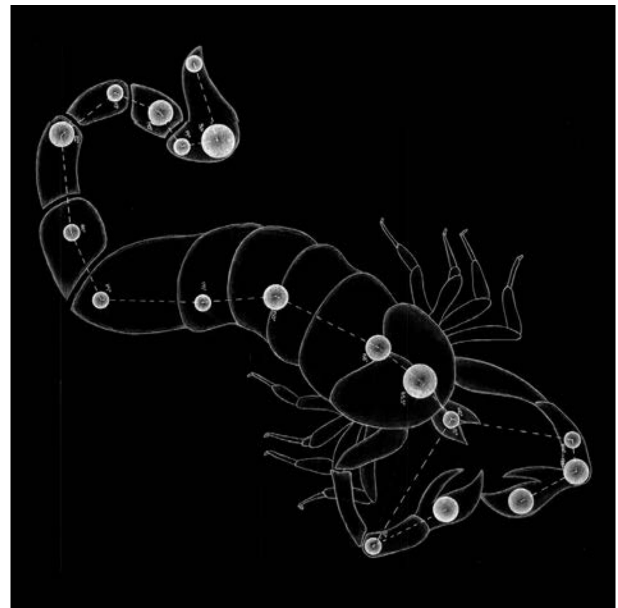

Fig. 1 "Scorpio: Constellation with brightness, distance, and figure" by Brooke Russo, Spring 2015.

Nowhere in the education of the architect is the pressure to give into this compulsion to define formalist criteria greater than in the beginning studio; when young students from various backgrounds are exposed for the first time to their capacity to create things and to the capacity for these things to represent meaning. But in studios defined by formalism, to what degree do these criteria come first to substitute-- and then ultimately replace-- the content of meaning? Take for example, the idea that young students might be 'learning to see' in the course of a beginning drawing assignment; are we not simply ushering

them into a 'visual culture' in which what they create is simply about what is seen. On the other hand, should we be so willing to throw out such a powerful and attractive tradition?

In an elliptical pursuit of such questions, I have come to rely on the writing of David Summers and his notion of a post-formalist theory of interpretation.[i] This paper represents one possible development of a such a theory into a beginning architecture studio project based on the theme of orientation.

Orientation

Rather than a ***formal*** understanding of a work of art or architecture, Summers proposes a ***conditional*** understanding. The term 'condition', originally from the legal discipline, carries the sense of a contract or an agreement: *I will do this on the condition that you will do that*. The core metaphor of its Latin root 'dicere' means 'to show' or 'to indicate' and therefore 'to point to' by means of language. A condition is a stipulation that makes an agreement possible. Conditions hold together things that are otherwise apart. One particularly potent condition, as he describes it, is orientation. Orientation is also a familiar term in architecture. In language, as we all know, the term is derived from the Latin word for 'east', 'oriens', from the verb 'orior', meaning 'to rise' or 'to appear', but which in another sense also means 'to flow', 'to move', or 'to run', as in a course, or a river (i.e., the Rhine in Germany). The term is associated with a deep sense of beginning and rebirth, and therefore also with knowing one's place and finding one's way. It is perhaps because of these associations that we use the term 'orientation' as a substitute for any "proper spatial relation to things and other people in the world."[ii] We call ourselves properly 'oriented' when we know where to go, what to do, or how to behave among others; and we are 'disoriented' when such things are unknown. Insofar as we choose to face or align with one direction or another, orientation can "entail values and polarities of values."[iii] In the most general way, we might ask: 'With what should we align ourselves? What should we face?'; or as architects we might ask: 'With what should this building align? What should it face?'.

For Summers, orientation, or more generally, alignment and facing, is a condition of social space. Consider a horizontal platform, what Alberti calls an area: "a certain, particular plot of land to be enclosed."[iv] Such an area might be said to present any number of potential alignments with its larger surroundings. Phenomenological thinkers teach us that when we stand within such an area, the cardinal alignments of our own body - its uprightness, facing, symmetry, handedness - register or 'dovetail' with those potential alignments. Summers writes that:

"Our actual facing presupposes some relation to a more or less limited area, and that area has the potential to be a definite place, in some relation to the implicitly indefinite world at large. Insideness, outsideness and some right, 'facing' relation between the two are conditions of social space before it has been specified as one social space or another. When such specification takes place, then our facing may also become a culturally specific 'course of action'. If a clearing has an upright stone opposite the side on which we enter, then the floor not only has an internal alignment, it also directs our attention, movement and actions. The alignment or external orientation of a place, which may further shape our facing, may be further determined by something of importance outside of the place itself, a mountain, for example, or the rising sun. In this way, literally by means of a social space, our alignment is made part of a larger embracing order, part of a cosmos."[v]

Cultures that bury their dead often align the body in right or proper relations to a larger embracing order. In ancient Egyptian burials, the dead were laid on their sides facing west. Early Christians were aligned to the east. Some cultures sought topographical rather than cardinal alignments, others saw a need for further distinctions. In northern Canada some Inuit men were laid facing the sea, with women facing the land. A whole anthropology of ritual alignments is available to the patient scholar.

In an aboveground setting, a fine example of orientation interpreted as a condition can be found in the Sacred Rock at Machu Picchu, where an elevated rectangular area flanked by two structures is concluded on one end with an upright stone that has been honed flat and cut to the precise profile of Mt. Yanantin in the distant background. The alignment of the mountain, the stone, and the opposite and open edge of the area defines a positioning around which the meaning of the space is structured. Entering the area, we can image how our body might 'dovetail' with the mountain by facing the stone. But the stone only appears as a profile or outline of the mountain *on the condition that* the alignment is achieved. Often, the mountain in the distance is obscured by weather, but the stone remains in its position as a substitute, a re-presentation of what is known but otherwise unseen.

In the European tradition, the Roman writer Vitruvius considered orientation or alignment to be a fundamental dimension of architectural ordering.[vi] In making the plan of the city or the house, he advised the architect to position certain parts relative to the east in order to promote health and convenience;[vii] but in the plan of sacred sites his statements were guided by a different intention. In a well known passage in book four, he writes:

"This is how to determine which regions of the sky the sacred houses (aedes sacrae) of the immortal gods should observe (spectare). If no

reason stands in the way, and given the unrestricted power to do so, both the house (aedis) and the statue placed in the cella are to look toward the evening region of the sky, so that a person approaching the altar to make offerings or sacrifices looks to the part of the sky where the sun rises and also at the statue in the temple. In this way, when people undertake vows they will gaze at once upon the temple, on the sun rising in the eastern sky (oriens), and on the statues (simulacra)[viii] themselves that seem to come-forth (exorientia)[ix] along with the sun and gaze back upon those praying and making sacrifices - which obviously demands that all the altars of the gods face east."[x]

Again, the interpretation of orientation is conditional; statues "seem to come-forth... and gaze back upon those praying" *on the condition that* the supplicant and shrine are aligned with the statue and sun. In this sense, and in reference to the image, all conditions are pre-existing. Vitruvius's proposal for a theory of orientation in sacred settings was concerned with structuring an agreement between an unseen other - the benevolent gaze of the gods (*deorum inmortalium*) - and the pious gaze of man.[xi]

The potential power of this format for agreement is put into relief by the sympathy between a change in alignment and a change in culture. Consider the case of the Acropolis, razed by the Persians, then later rebuilt after the Athenian victory with a second Classical Propylaia constructed along a new alignment framing the site of the Battle of Salamis in the distance. Consider Michelangelo's renovation of the Capitoline Hill and the realignment of the elevated platform away from the ancient and mediaeval city and toward the Vatican and the new Renaissance city. In such cases the change of alignment becomes the bearer of new meaning, a promise, but this promise is not always benign. For example, consider the case of the Aztec Temple Mayor, originally aligned with temples that faced west, directly at the causeway leading from the mainland onto the island precinct; but when the Cathedral of Mexico City was overlaid the alignment of the area was transformed such that the major direction was now north-south. So powerful was the meaning carried by the pre-existing alignment that the Spanish denied a conventional westwerk on the cathedral in order to avoid equivocation.

But for as significant as alignment is to architecture, it suffers from a divided interpretation. Today, in the discipline of architecture, 'orientation' typically refers to the science of positioning architecture in relationship to the sun and its energy with the intention to make the best use of this as a resource. We might call this scientific understanding of orientation its 'instrumental interpretation'. The mechanisms of this interpretation have been firmly in place ever since the birth of rational town planning; for example, in the Raymond Unwin's *Town Planning in Practice* (1909), and later in the *Zeilenbau* of the Frankfurt CIAM (1929), and then such technical documents as the R.I.B.A.'s *The Orientation of Buildings* (1933). We cannot ignore that our contemporary world is fashioned by-- and for-- an instrumental interpretation of architecture and the natural world. On the other hand, there always exists the potential for a 'conditional interpretation' that connects us in agreement with one another and with larger unknowns.

Projection

While this all may seem rather divorced from the immediate concerns of architectural education, it leads me to a question: Can we imagine a project that 'observes' both an instrumental and conditional interpretation of architecture and the natural world? And can we do so without doing violence to the idea of one or the other?

This question was the motivation for a beginning architectural project about orientation, given to students in their second semester at the School of Architecture at Mississippi State University in the Spring of 2015. The title of the project was 'An architecture of several orientations'.

In part one, 'Alignment with the macrocosm', students researched a set of astral bodies - the earth, the moon, the moon-constellation, and the sun-constellation - as they 'appeared' at the place and time of their birth. In projective drawings, they described the spatial relationships between the three distances implied in the alignment of these bodies: first, the position of their body; then the position of the sun and moon; then beyond these, at the distance of the zodiac, the associated constellations and their figures. Students developed techniques associated with polar coordination, but also techniques for rendering distance, direction and duration. Indeed, just as there were three scales of depth, there were three scales of duration. However, for the sake of brevity, students were only asked to draw these bodies in their precise spatial and temporal relationships over the course of twenty-four hours.

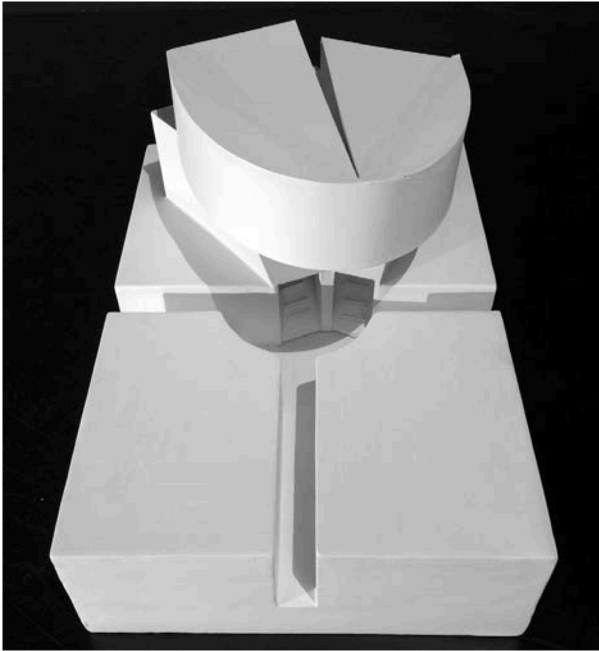

Fig. 2 "Final proposal" by Garland Willcutt, Spring 2015

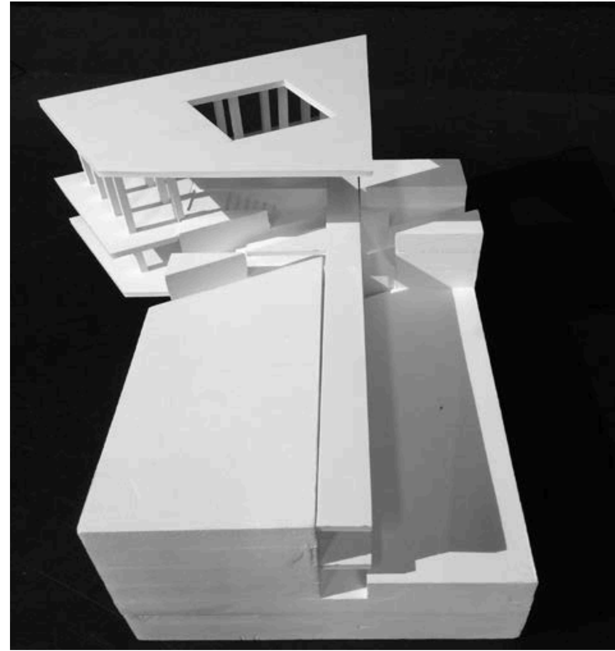

Fig. 3 "Final proposal" by Asher Paxton, Spring 2015

In part two, 'Alignment with the microcosm', students researched the measurements and profiles of their own body - as it existed in the flesh. In drawings, they described the numbers and ratios between the members of their bodies, but also how these relationships accorded with the anatomical orientation of the body - its sagittal (right-left), coronal (front-back), and transversal (top-bottom). From these ratios and directions, students developed a rhythmic orthogonal grid that was to be applied onto an invented site, which was developed separately from a series of abstract but scalar parameters.

In part three, 'Spaces and stories', students synthesized the two previous parts; putting together their polar coordination of directions and distances with their orthogonal grid onto their scaled site. In doing this students were asked to create lines, planes, and volumes conditioned by three kinds of alignment; one according to the zodiacal horizon, one according to the topography of the site, and one according to the cardinality of the body. Students imagined that their spaces were inhabited by 'observers', but here the metaphor of the observer was meant to extend beyond visual perception and mean something more like the way one might be said 'to observe' a holiday, with-- and for-- others.

Finally, students were asked to use their final proposal to tell a story about the events that could be included in their proposal. To our surprise, at the final review, nearly all of these stories began in the same manner: Hello my name is ___ and I was born on ___ in ___ . The students then proceeded to describe how their proposal observed alignments with particular events of real significance to them, which they then relied on to compartition their spaces into a variety of possible uses at particular times. At the final review, rather than a history of their compositional processes and procedures, students presented, without prompt, the relevance of their own biography to their proposal. Despite an otherwise 'impractical' project, the students found very 'practical' content in describing their own origins as a basis for creating architecture.

Conclusion

Here is a question that perhaps I could have started with: Who is the beginning architecture student? Should the beginning architecture student be a student of the visual arts or the performing arts? The philosopher Paul Ricoeur teaches us that the answer to the question 'Who?' is always a narrative, and that the way we judge such a narrative is in the way in which we depict ourselves in relation to others. In relating a narrative, and furthermore one founded on a respect for their individual origins, the students hinted at alternative criteria for comparing and judging their work, and ultimately confirmed, at least to me, that what is most personal is likely also what is most universal.

Notes

[i] On the idea of post-formalism, see: Summers, David: "Conditions and conventions: On the disanalogy of art and language." in Kemal, Salim and Gaskell, Ivan. *The Language of Art History*. Cambridge: Cambridge University Press, 1991.; "Form and Gender." *New Literary History* 24.2 (1993): 243-271.; "'Form.' Nineteenth-century metaphysics, and the problem of art historical description." *Critical Inquiry* 15.2 (1989): 372-406.; *Real Spaces: World Art History and the Rise of Western modernism*. New York: Phaidon Press, 2003.; and "The 'Visual Arts' and the problem of art historical description." Art Journal 42.4 (1982): 301-310.

[ii] Summers, *Real Spaces* 181.

[iii] Ibid.

[iv] Alberti, Leon Battista. *On the Art of Building in Ten Books*. Trans. Joseph Rykwert, Neil Leach and Robert Tavernor. Cambridge: The MIT Press, 1989, 8.

[v] Summers, *Real Spaces* 182-3.

[vi] In my interpretation of Vitruvius's text, I have adjusted existing translations of the Latin using the transcription of the British Museum's Harleian 2767 manuscript published in Frank Granger's translation of *Vitruvius On Architecture* (Cambridge: Harvard University Press, 1931/1998). For guidance, I have turned to Ingrid D. Rowland's recent translation of *Vitruvius: Ten Books on Architecture* (Cambridge: Cambridge University Press, 1999), as well as those passages most expertly translated in Indra Kagis McEwen's *Vitruvius: Writing the Body of Architecture* (Cambridge: The MIT Press, 2003).

[vii] According to Vitruvius, in the plan of the city, the architect should avoid the alignment of marshes and winds arising from the east, see: Vitruvius 1.4.1, 1.4.11, and 8.2.3. Then, in the plan of the house, the east is the most appropriate position for private bedrooms, libraries, dining rooms, and mangers, see: Vitruvius 1.2.7, 6.4.1-2, 6.6.1, 6.6.5, and 6.7.3.

[viii] It is important to note that the term *simulacrum*, translated above as 'statue', can- and perhaps should- be understood in relation to its wider significance as 'image' or even more generally as 'representation'. In *De architectura*, the context of the term *simulacrum* suggests several different meanings. On several occasions, Vitruvius uses the term to refer to sacred statues of specific deities, see: Vitruvius 1.1.6, 2.9.13, 7.5.2, and 9.P.16. Elsewhere he uses the term to refer to sacred statues in general and the architectural adjustments required to accommodate the approach toward them, see: Vitruvius 4.3.4, 4.3.8, and 4.9.1.

[ix] The notion that heavenly representations arise rather than rise (*exoriri* rather than *oriri*) is repeated by Vitruvius only in his discussion in book nine of the sun's course through the zodiac, in which the term *simulacrum* takes on the meaning of 'constellation'. See: Vitruvius 9.3.1, 9.4.2-3, 9.4.6, and 9.5.1. In this celestial context, he is referring to the astronomical poem *Phaenomena* by Aratus of Soli, who he cites and likely knew through Cicero's translation, Vitruvius 9.6.3, as well as to the related tradition of "synchronic risings and settings" in which heavenly bodies drag each other along their course. On astronomy, see: Vitruvius 1.1.10, and 9.7.3.

[x] Vitruvius 4.5.1. "Regiones autem quas debent spectare aedes sacrae deorum inmortalium sic erunt constituendae uti, si nulla ratio inpedierit liberaque fuerit potestas, aedis signumque quod erit in cella conlocatum spectet ad vespertinam caeli regionem uti qui adierint ad aram immolantes aut sacrificia facientes spectent ad partem caeli orientis et simulacrum quod erit in aede, et ita vota suscipientes contueantur aedem et orientem caelum ipsaque simulacra videantur exorientia contueri supplicantes et sacrificantes, quod aras omnes deorum necesse esse videatur ad orientem spectare." English translation adjusted from McEwen (2003), 173.

[xi] McEwen has made a compelling case that, while this passage does not accurately report on Greek or Hellenistic temple layouts, it does reflect the tradition of Imperial Roman temples that follow from the Temple of Divus Julius built on the eastern end of the Forum Romanum and dedicated to Julius Caesar in 29 BCE, see: McEwen (2003), 174.