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Allow me to begin with the, certainly debatable, position that all architecture is, at some level, an act of translation. The work of the architect is literally translated from one medium (drawing) to another (building). The intention of such work is often inspired from the long history of our built environment as well as other fields of inquiry. And the reception of our work, as we all know even from reviews in school, is always open to interpretation. In a sense, we remain in the long shadow of the Tower of Babel. In this short essay, I will try to open up a few issues that have, I am certain, been unpacked in much more detail through the course of this issue of the *Wentworth Architecture review*. To do so, I will propose an architectural triad of translation. The first topic I will discuss is the translation from drawing to building. Much ink has been spilled around this matter and I will not attempt to give perspective to the relationship between drawing and building, but rather simply question a few assumptions (1.) Next, I will discuss the translation from architecture to architecture. This is often misunderstood as “precedent.” Here again many assumptions exist and my intention is not to dissect the particularities of each architectural translation. Instead I attempt to understand why one translation is better (or worse) than another. To conclude I will discuss ways in which architects have translated ideas external to the discourse of architecture.

From drawing to building

As we know, architects do not make buildings; they make representations of, and instructions for, the making of buildings. In our somewhat litigious professional world, the ideal model for the translation between drawing and building is that of transcription where the drawing is precisely congruent to the built artifact. Similar to Morse code, in which a system of sounds literally stand in for letters to form words, the contract document is intended to directly relay the proposed building. The system of representation, as in Morse code, is not affected by the intention of the building – objectivity, in fact, is the goal and purpose. Differences between drawing and building do, however, exist. Issues of fabrication, installation timing and technique, material behaviors and tolerances, as well as the relative abilities of contractors, make the direct interpretation between drawing and building impossible. Interpretation, it seems, is always required.

Historically, this translation was seen as necessary, and even celebrated. Filarete (Antonio Averlino) speaks about this in his 15th c. treatise, *Libro d’architettura*. He suggests that from conception to realization, a building will change. Further, there is a potentially enriching process involved in turning the drawing into a physical structure. He used the analogy of the architect as both mother and midwife. A building, according to Serlio, gestates for seven to nine months (roughly the same time as a thesis, by the way) during which time the architect dreams about the building. Finally the project emerges as a drawing or model that then must be reared through construction and finally inhabitation. In this regard, the drawing is not a one-to-one notation of the intended reality. The drawing was never, and could never be, the work itself. The drawing, rather, was more similar to a musical score, open to multiple performances.

Even a few centuries later, the relationship between drawing and building was still not direct. Palladio’s drawings, famously, do not

match the built work. This was by no means a mistake of construction. It was rather that, for Palladio, the status of the drawings conveyed the intention of the work and not simply instructions for making. One example, of many, is the Basilica in Vicenza. Palladio first translates the plan of a Roman Basilica into a town hall for Vicenza. The drawings show his intention of symmetric and properly proportioned rooms. The proportioning relates back to the model of the basilica as well as a cosmological ideal and thus guaranteed meaning. The reality of the built work, however, could not be further from the truth. The existing plan of market stalls, not renovated by Palladio, does not come close to the purity of his proposed plan as seen in the *Quattro Libri*(1570).

The status of drawings, as informing but not directly determining a future project that relies upon an act of translation from the craftsman remained in many parts of the world, even into the previous century. Indeed, in matters concerning the actual making of a building, the craftsmen were still intuitively “right” and did not rely upon drawings to build. This relationship opens up the space that architectural representation may be something more, or at least other, than instructions for building. Piranesi, the 18th c. Venetian architect certainly understood this when he proposed the Carceri etchings. In both versions, we see representations that do not have the expectation of a built project. Many examples exist over the past 200 plus years since Piranesi etched architecture; the hallucinogenic imaginings of Lequeu and Boullée; Gandy’s dystopias; the formalisms of the Russian Constructivists; Theo van Doesburg’s painterly expressions of plastic space; the comic book capers of Archigram; even Mies van der Rohe, that paragon of professionalism, produced many collages that expressed more intention than instruction. More recently, Libeskind translated his inner Piranesi just as Doug Darden revived a long dead Lequeu. Each of these representations still needs to be interpreted, but the mode of translation is not metonymical, between drawing and building. Even if, as in the example of Doug Darden’s Oxygen House, the resolution is as technically competent as it is imaginary. Important to consider in the examples listed above is that the images constructed are not beholden to a future construction. This is similar, one might argue, to the work many students do in studio.

From architecture to architecture

There are many examples of architects translating from architecture. The Greeks translated caves into funerary mounds and sacrificial tables into Temples (2.) Palladio took from the Greeks, Wren took from Palladio, Chambers took from Wren, Bulfinch took from Chambers and somehow this stream of translations of a funerary monument and ritual platform has been combined in the Massachusetts State House to represent the Commonwealth. The question one might ask, then, is as follows: how it is that we can differentiate between translations? Why is one translation better than another? Why is the Museum of Fine Arts, which is an almost direct transcription of the Temple of Athena Nike in Athens, praised, while similar translations occur all up the strip in Las Vegas and are, at least amongst architects not named Izenour, Venturi or Scott-Brown, less praised amongst the architectural cognoscenti?

My position, as stated at the outset of this essay, that the architect is translator par excellence, seems to fly in the face of common wisdom



^ Timothy Szczebak | Boston at night

surrounding the originality of the architect. The above examples of the MFA or State Capitol building are surely from another time. As a student, is not originality and novelty praised above all else? Precedents are always bandied about, but more often as a crutch for the critic than the legal standard of an attorney. Contemporary students are often asked to look at precedents, but never copy them. That would, somehow, be considered cheating, or even, worse, a stain on your design street-cred. Much of this attitude pervades that favorite book of young architects, Ayn Rand’s the Fountainhead. Paging through my own well worn copy, I found this nugget of a quote:

Nothing is given to man on earth. Everything he needs has to be produced. And here man faces his basic alternative: he can survive in only one of two ways—by the independent work of his own mind or as a parasite fed by the minds of others. The creator originates. The parasite borrows (3.)

Who would want to be such a parasite?

Le Corbusier, it seems, would. He is said to have stated directly, “A

good architect borrows, a great architect steals.” He, of course, drew from painting and developed his own architectural agenda as based on the production of automobiles, the rationale of airplanes, and the efficiency of ocean liners, as well as previous architecture. He was also, of course, not above stealing directly. His quote about architects was most likely lifted from Picasso who proposed that, “a good artist borrows, a great artist steals.” Picasso, may have been borrowing from the poet TS Elliot who suggested that:

One of the surest tests [of the superiority or inferiority of a poet] is the way in which a poet borrows. Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different. The good poet welds his theft into a whole of feeling, which is unique, utterly different than that from which it is torn; the bad poet throws it into something, which has no cohesion (4.)

The question remains, however, how is one translation better than another?



As a student on tour in early 19th c. Rome, Henri Labrouste was fascinated, as many architects since, by the Greek temples at Paestum. Young Henri, however, noticed that one of the temples had an odd number of columns on what was typically considered to be the front façade. This, he know, could not be case, because a temple front always had an even number of columns so that one would enter on center. He then caused further [architectural] uproar by claiming that this was not a temple, but was a basilica whose purpose was of public gathering. It acted, he argued, as an album that chronicled civic events, literally through the writing on the walls. Further, he was fascinated by the shifting qualities of light found in the section of the building.

On his return to Paris, and in between late nights with Victor Hugo, Labrouste designed the Sainte-Geneviève library, completed in Paris in 1850. According to Labrouste, the project is a translation from his studies at Paestum. He considered the public library, a relatively new program, to be a refigured basilica. The library was to be a place of meeting and lively discourse – the newfangled gas lamps were literally to be kept on all night. The parti of the two buildings is almost the same, the library has two levels but the entry orientation and sequence are similar. One enters the library on center of the long end, moves through shadow and, again, literally, into the light. The same sequence from light to dark to light was seen in Labrouste’s section of the temple Hera. The structure is certainly of the nineteenth century as is the iconography of the building. Just as at Paestum, this building is covered with text. The names of authors are inscribed on the exterior recto verso to their location on shelves inside the library.

The act of translation between an ancient Greek temple at Paestum

and a nineteenth century library in Paris is one of rewriting, not simply rewording. Issues such as program, form, qualities of light, iconography, structural performance, and intention are all refigured from the old to the new. This, I would argue, is similar to James Joyce rewriting Finnegans Wake into Italian. Rather than simply translating the words into Italian, Joyce rewrote the text so as to capture all of the puns, word play, structure, and even sound and cadence of the original text into a new language. The context reveals a new expression, while the richness and depth of the original intention remains.

As we are all well aware, there are at least two further iterations of Labrouste’s library here in Boston. The McKim Mead and White version completed roughly fifty years after it’s primary source in Paris contains many of the same elements – the writing is on the walls, but the names have changed. The program is the same. The urban setting, both are separated from an iconic religious building by an open space, is strikingly similar. The entry sequence is almost exact, however, Sargeant provides a much more American iconographic program. The building in Boston is larger and includes a courtyard, something not present in the original. Here the translation is much more traditional. One can easily recognize the source, but the translation is certainly given a new context. It is similar, perhaps, to reading Hugo’s Notre Dame in English. The story is recognizable, but does not rely only upon reference to the primary source.

Completed in 1972, Phillip Johnson’s translation is a different kettle of fish. Johnson copied the parti of the McKim version but shifts the circulation around the courtyard. The program is essentially the same. The roofline and material palette are similar to the original – each was, however, stipulated by the city. Lost is the play of light

through the entry, the scale of the main reading room, the text on the walls, even the iconography has been left out. Johnson’s transmutation relies more upon the play of scale and an ironic wink-wink-nod-nod to the original. There are arches, you see. And they are big, really big. I would argue that this mode of translation is more akin to reading a comic book version of Hugo’s Notre Dame. The import of the original has been skewed so as to lose much of the meaning. Johnson’s library needs the source to make the ironic reference, while the richness of McKim, Mead and White’s does not.

From other to architecture

The third mode of architectural translation I will briefly discuss is the translation of ideas, tactics, strategies, forms, and positions from outside of architectural discourse into architectural production. This is probably the trickiest as architects are famous for knowing a little bit about a lot until we know less and less about more and more until finally we know absolutely nothing about everything. Nonetheless, architecture, as a form of cultural expression, has historically drawn deeply from other fields of inquiry. Literature has given architecture a program with which to play. The monsters at the garden in Bomarzo, for example, are most likely translations from the *Hypnerotomachia Polophili*{1499}. A few centuries later, that same architectural treatise was the basis for a house by Reiser and Umemoto and the basis of a complete re-writing by Alberto Pérez-Gómez. In each of the projects (though not the re-writing) the narrative informs the movement through the house in a manner similar to picturesque gardens of the eighteenth century. In other examples, such as de Bastide’s *La Petite Maison*, architecture is setting for the story. But isn’t there more than setting to story? Peter Eisenman has attempted to translate ideas from linguistic theory, most notably Noam Chomsky and later Jacques Derrida. The result of which was a good bit of intellectual word play but some rather poorly constructed plywood and EIFS boxes. John Hejduk’s masque projects, certainly building upon the masques of Inigo Jones as well as the tradition of the commedia dell’arte, offers more than setting. Hejduk introduces characters, plot, subjects, and objects that act as a cast of players in the stage of the public, if imaginary, realm.


Painting has been a source for architects at least as early as the beginning of the previous century. Issues regarding representation in painting and architecture are much more longstanding. The Schroeder house by Reitveld was certainly influenced by Mondrian’s painting but may not be a translation as such. Hejduk’s Diamond House series certainly was. Here, issues of scale, material, and reference are disregarded while compositional, spatial, and iterative ideas are explored. Early in the twentieth century the Futurists’ obsession with speed was translated across all sorts of media, including architecture. Malevich and other constructivists were also busy painting, though their work became the source for another architect, Zaha Hadid. Prior to the parametric turn (with Patrik Schumacher) her work, often described as original, was literally recreating the aesthetic of the Russians.

The relationship between architecture and music is also longstanding. The theater for Vitruvius acted as an instrument in which musical theory guided the planning of the seating. Geometric proportioning systems underlay both forms of expression through at least the end of the seventeenth century. Architecture as frozen music has been a thesis topic, it seems, ever since. Iannis Xenakis

attempted to translate the emotive as well as mathematical in his Philips pavilion (1958). Libeskind’s Chamber Works (1983) was more interested in the notational than the mathematical. Perhaps less effectively, the Stretto house (1991) by Steven Holl directly maps the score of piece of music by Bartok directly onto a site. Missing is the active performance of the piece. Cue the frozen music, again. Nature has also provided a model. Architecture as the translation the order of the universe provides the basis for almost every culture. More recently, architects have again become obsessed with biomimicry – a different sort of game all together. At least since Galileo, there has been a critique of the direct translation of natural form into constructed form as based on issues of scale and material performance. That said, architects as diverse as Horta, Calatrava, and more recently Tom Wiscombe at SCI-Arc and Neri Oxman at the MIT media lab, continue to translate biological form into architectural form.

Clothing too has long been a source for architectural production. Alberti argued that architecture was akin to the public dress one wore. Perrault used the analogy in the quarrel of the Ancients and Moderns – that we dress differently now and therefore we should build differently. Le Corbusier made the same argument against the decorative arts and with the same analogy. More recently, architects are making the correspondence between the clothes we wear and the “skin” of the buildings. Future Systems unabashedly translated Paco Rabanne’s disc dress for their Selfridges building (2003). The Fabric Tower by Atelier Maferdini (2008) offers a similar approach. According to Manferdini’s website the 150,000 sq.ft. housing tower is, “an articulate response to the site’s natural landscape and its minority cultures, expressing a contemporary, progressive, creative, and original vision of local traditions.” The local tradition to which Manferdini is referring is the elaborate silver head dresses worn by the minority Miao women. One can easily understand Manferdini’s interest. The headdresses are elaborately woven silver and offer a veritable history of the wearer. Families begin saving for the head dresses when the girls are young. The actual fabrication of the headdresses may take months and in the end may end up weighing three or four kilos. Though I would not argue the elegance of Manferdini’s solution – how does one argue elegance? – Manferdini’s translation from the headdresses to the housing tower is a somewhat open translation. There is an obvious scale difference between a headdress and a tower; the original import of the headdress (as a historical record) is lost; radically different materials require different approaches to fabrication, structure, and production. The examples above are just a few of the many that exist. Within such a context, can we ask if the Architect/Emperor is wearing any clothes? / Notes p. 126





Do architects need to translate? If so, why?

What is being gained, or lost, by making translations?

Are some strategies more effective than others?

Can a good translation make a bad building?

Can a bad translation make a good building?

I'll leave it up to you decide.



## Notes - References

**From page 12. "The on-site architect: Millimetric translations in construction" by Johnathan Foote, PhD.**

1. Vasari, recounting the words of Michelangelo, Vasari, Vite (Milanesi 1906: VII, 270). Translation by author.

2. Alberti, De re aedificatoria 2.26 (Rykwert, Leach, Tavernor 1988: 3); translation slightly modified by author. Rykwert, Leach, Tavernor (1988) render the final line as, "the carpenter is but an instrument in the hands of the architect". However, a more correct reading of the Latin is: "the carpenter's hands (fabri manus) are but an instrument to the architect".

3. Mario Carpo (2011). *The alphabet and the algorithm*. Cambridge, Mass: MIT Press, pp.137. Marvin Trachtenberg has upheld the criticality of Alberti's theory in our current chasm between designing and building in Marvin Trachtenberg (2005). *"Building outside Time in Alberti's 'De re aedificatoria'"*; RES: Anthropology and Aesthetics, 48, pp. 125; Marvin Trachtenberg (2010). *Building-in-time: From Giotto to Alberti and modern oblivion*. New Haven: Yale University Press; and Marvin Trachtenberg (2011). *"Ayn Rand, Alberti and the Authorial Figure of the Architect"*, California Italian Studies: University of California. pp. 6-8.

4. Carpo 2011: 26; Carpo's notion of original and copy should be situated among his work in the evolution of architecture during the rise of the printed image in the 16th century, his topic in Mario Carpo (2001). *Architecture in the Age of Printing*, translated by Sarah Benson, MIT Press: Cambridge, Mass. In this work he argues that the wide-spread distribution of the mechanically reproduced, printed image led to a nominalization of architectural knowledge. For a recent rebuttal of this see Michael Waters (2012). *"A Renaissance without Order: Ornament, Single-sheet Engravings, and the Mutability of Architectural Prints"*, Journal of the Society of Architectural Historians, Vol. 71, No. 4, Special Issue on Architectural Representations 2 (December 2012), pp. 488-523.

5. To make this argument, Carpo relies on a deterministic tie between media, technology, and culture. From this, the recent shift from identical copies (mechanical reproduction) to algorithmic variety has opened up space for a new kind of digital craftsman. Serial objects are not related by sharing identical shape but through a common 'body plan' or genetic origin, thus giving infinite variety within a common, parametrically driven model.

6. Andrew Saint (1993). *Image of the Architect*. New Haven: Yale University Press, pp. 42.

7. Saint 1993: 42.

8. Jean-Louis Cohen, in his introduction to Le Corbusier, *Toward an Architecture* (Goodman 2007: 22).

9. "...la fraction de millimètre intervient ", Le Corbusier, *Vers une architecture* (Goodman 2007: 243).

**From page 20. "Curious Architecture: Translation of Technologies and their impact in the future of Architecture and Design" A conversation between WAR, Andrew Payne and David Pearson.**

1. Marshall MacLuhan's *Understanding Media: The Extentions of Man (1964)*

2. Patrik Schumacher's *Parametricism as Style - Parametricist Manifesto* (2008)

**From page 62. "Entramados" by Francesco Stumpo**

1. Morgan, David, extract from *"Secret Wisdom and Self-Effacement: The*

*spiritual in the modern age"* *The Sublime*. Cambridge, MIT Press 2010.

2. Barthes, Roland. *"Semiology and the Urban."* *Rethinking Architecture: A Reader in Cultural Theory*. Neil Leach. London: Routledge, 1997.

**From page 76. "Lost and Found: John Hejduk and the Specific Autonomy of Drawing" by Robert Cowherd.**

1. K. Michael Hays, "Hejduk's Chronotope (An Introduction)," *Hejduk's Chronotopes*, ed. K. Michael Hays (New York: Princeton Architectural Press, 1996), 7-22.

2. K. Michael Hays, "Critical Architecture: Between Culture and Form," *Perspecta* 21 (New Haven, The Yale Architectural Journal, 1984), 15-29.  
3. The list of academic leaders coming out of The Cooper Union, we add Kyna Leski (class of 1984) at the Rhode Island School of Design, and Jeffrey Hou (class of 1989) at the University of Washington. Criswell Lappin, *"Hejduk's Legacy: A Great Teacher's Influence Reaches Far and Wide,"* *Metropolis* (August/September 2003), 122-23.

4. Kenneth Frampton, *Modern Architecture: A Critical History* (London: Thames and Hudson, 2003).

5. The notion of "reflexivity" grows out of a series of "Second Modernity Seminars" taught since 2003. See: Robert Cowherd, "Notes on Post-criticality: Towards an Architecture of Reflexive Modernisation," *Footprint: Delft School of Design Journal: Agency in Architecture: Reframing Criticality in Theory and Practice* 4, <http://www.footprintjournal.org/issues/show/5> (Spring 2009), 65-76.

6. Lauren Kogod points to this expansive interpretation of "critical architecture" as a "disciplinary Anschluss" annexation of what the editors and others would see as decidedly outside its discourse. K. Michael Hays, Lauren Kogod, Michael Osman, Adam Ruedig, Matthew Seidel and Lisa Tilney, "Twenty Projects at the Boundaries of the Architectural Discipline Examined in Relation to the Historical and Contemporary Debates over Autonomy," *Perspecta* 33: Mining Autonomy, eds. Michael Osman et al. (New Haven: Journal of the Yale School of Architecture, 2002), 68-70.

**From page 80. "Metaphrasis, Metamorphosis, and Traitorous Translations: A New Taxonomy of Relationships between Architecture and Gastronomy" by Zenovia Toloudi.**

1. Florida, Richard. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*. Basic Books, 2004.

2. One of the first appearances of DIY in academia has been probably the "Instant House" by Prof. Larry Sass, MIT, also presented at MOMA.

3. The author concludes the essay by presenting the characteristics of the professional amateur, lacking disciplinary precision, making exceptions to rules, generating knowledge by elision, contingency and essentially converting what is considered as "outside" context, "inside" one. In Shumon Basar, *"The Professional Amateur" in Miessen, Markus Shumon Basar, and Hans-Ulrich Obrist. Did Someone Say Participate? An Atlas of Spatial Practice* (The MIT Press: 2006), 33.

4. Sonia Livingstone and Ranjana Das try to understand the transition from the man sitting on the sofa and watching TV (then) to the man sitting on the sofa and multi-tasking (now). Passive television audience is no more relevant in the digital times since Internet users are more active. At the same time it is impossible to distinguish when someone is

part or not of an audience since audiencing is dispersed and embedded in many social activities. In Livingstone, Sonia and Das, Ranjana. "The end of audiences? Theoretical echoes of reception amidst the uncertainties of use." Paper presented at the Transforming audiences 2 Conference, University of Westminster, September 3-4, 2009.

5. The following paper is based on material presented at the "Lost in Translation?" Graduate Symposium at WIT Architecture organized by Marc J. Neveu, January 2013.

6. Metaphrases is the plural form of metaphrasis.

7. Many thanks to Marc J. Neveu for giving this reference.

8. Rappolt, Mark. Greg Lynn *FORM*. New York: Rizzoli, 2008.

9. BSA Space. "Exhibition // Community Design Resource Center (CDRC) Gingerbread House Design Competition." Last accessed October 1, 2013. <http://cdrcboston.org/what-we-do/gingerbread-design-competition/>

10. Architizer. "The Most Delicious Designs From Architizer's Gingerbread Competition!" Last accessed October 1, 2013. <http://www.architizer.com/blog/the-five-most-delicious-designs-from-architizers-gingerbread-competition/>

11. a. Find recipe. Look on Martha Stewart. Find one. <http://www.marthastewart.com/339021/molasses-gingerbread-cookie-dough>  
b. Go around Boston looking for sugar canday to decorate with. Got to Crate and Barrel and buy cookie cutters.  
c. Make elevations of all aspects of the house.  
d. Try initial test of cutting out elevation and bake. Doesn't work.  
e. Bake larger sheets, etch elevation in. Use microplane to shave pieces down to size.  
f. Drink.  
g. Make icing. Twice. Based on this recipe: <http://www.marthastewart.com/284120/royal-icing>. On tasting it too often, never make icing again.  
h. Slather icing on house, realize this was a mistake. It's never going to look like early morphosis models.  
i. Cry a little.  
j. Compensate by adding many little trees, a lot more frosting.  
k. Dust with icing sugar for 'snow' effect. "

12. Grimley, Chris, e-mail message to author, January 11, 2013. "...Crank House takes a simple stacked program and shifts both the living and sleeping areas to create a porch on the entry level, and a small roof deck for the uppermost floor..." In overcommaunder. "Hometta." Last accessed October 1, 2013. <http://www.overcommaunder.com/?/work/Constructs/Hometta/>

13. Lynes, Andy. "La Carême de la Carême." Last accessed October 1, 2013. <http://www.historytoday.com/andy-lynes/la-car%C3%A4me-de-la-car%C3%A4me>

14. Carême, Marie-Antoine, and Allen S Weiss. *Le pâtissier pittoresque*. Paris: Mercure de France, 2003.

15. Pinnick, Avital. "On Desserts and Deserters: A Note on Victorian Banquets." Last accessed October 1, 2013. <http://apinnick.wordpress.com/tag/careme/>

16. According to John F. Sherry Jr. the brand provides simplicity that results to a cultural nationalism, what is called McDonaldization, Coca-Colization, and Disenyfication. In this line of thought, one can add Zahization, Gehrization, and other demo nstrations of architectural nationalisms. In Toloudi, Zenovia. *"Architectural Taste and Identity: Experimenting with PICANICO game*. Doctoral Dissertation, Harvard University, 2011.

17. Kafka, Franz. *The Metamorphosis*. Translated by Ian Johnston,

Lindenhurst, NY: Tribeca Books, 2011.

18. Banihashem, Monet, e-mail message to author, October 9, 2013.

19. "...We needed a name for what we were doing and for the symposium itself. I proposed "molecular gastronomy," but Kurti, as a physicist, feared that this assigned too much importance to chemistry [since some culinary transformations can be explained macroscopically], so we finally agreed on "molecular and physical gastronomy...." In This, Hervé. *Building a Meal: from Molecular Gastronomy to Culinary Constructivism*. New York: Columbia University Press, 2009. p.11-12

20. Kwinter also discusses tectonics together with chemistry: "These two forms of expression, chemical and tectonic, are of exactly the same order of physical reality. It is a testimony to the diagram's action that such diverse properties can be called up and released. And it is no small revolution in design to have apprehended this simple but critical fraternity." In Kwinter, Sanford. *"The Judo of Cold Combustion"* in *Atlas of Novel Tectonics*, 2006

21. A summary of the lessons learnt: Lesson 1: Technique is Promiscuous, Lesson 2: Methodology is an Unnecessary Burden, Lesson 3: Technology is Poignant when Sublimated, Lesson 4: Experience is Multimodal, Lesson 5: Orthodoxies must be Challenged, Lesson 6: It's all Good. In Ruy, David. *Lessons from Molecular Gastronomy*. Ed. Mark Foster Gage and Florencia Pita, Log 17, NY: Any Publications, 2009.

22. Ibid, page 32.

23. Pierre Hermé, "The Architecture of Taste." Lecture at Harvard Graduate School of Design, Cambridge, MA, November 27, 2012.

24. Hermé also discussed his single one collaboration with a designer to construct the dessert that also appeared in the event's poster. Ibid.

25. Eco, Uberto. *A Rose by Any Other Name*. Translated by William Weaver. *Weekly Guardian*, January 14, 1994.

26. Cabré, Alberto, "Food and Architecture: a Parallel Process." Lecture at "Structural Bites" course, Wentworth Institute of Technology, Boston, MA, November 5, 2012

27. Despite a series of reasons (such as creativity, precision, use of materials/ ingredients, having a final product/ outcome, existence of an audience, use of layers, packages) that link gastronomy with architecture. Ibid.

28. Alvarez, Mariela, e-mail message to author, October 9, 2013.

29. Tasty Plan. "Grilled Summer Salad." Last accessed October 9, 2013. <http://tastyplan.com/post/56732352337/grilled-summer-salad>

30. Lehrer, Jonah. *Proust Was a Neuroscientist*. Boston: Houghton Mifflin Co., 2008.

31. Allen, John S. *The Omnivorous Mind: Our Evolving Relationship with Food*. Cambridge, Mass.: Harvard University Press, 2012.

32. Project on Spatial Sciences, "Three States of Hors d'Oeuvres." Exhibition at Harvard Lab, Cambridge, MA, October 7, 2010.

33. Livingstone, Sonia. "Relationships between Media and Audiences: Prospects for Audience Reception Studies" in Liebes, T and Curran, J. *Media, ritual and identity: essays in honor of Elihu Katz*. London, UK : Routledge, 1998, pp. 237-255.

34. "While the convergence of these five positions provided the major impetus behind reception studies during the 1980s, the recent 'ethnographic turn', which shifts the focus away from the moment of textual interpretation and towards the contextualization of that moment, draws into the frame a sixth tradition. This involves the detailed analysis of the culture of the everyday, stressing the importance of

'thick description' as providing a grounding for theory, together with an analysis of the ritual aspects of culture and communication (Carey, 1975) and the practices by which meanings are re/produced in daily life (de Certeau, 1984).” Ibid.

35. Tschumi, Bernard, and Museum of Modern Art (New York). *Event-cities*. Cambridge, Mass.: MIT Press, 1994.

**From page 88. "Ponderland" by Scott Graham, Olivia Hegner, Kate Lux and Deborah Massaro.**

1. Martin Heidegger, “Building, Dwelling, Thinking,” and “Poetically Man Dwells,” in *Rethinking Architecture*. Ed. Neil Leach, London: Routledge, 1997, 100-109 and 109-119

2. “Function and Sign: The Semiotics of Architecture,” in *Rethinking Architecture*. Ed. Neil Leach, London: Routledge, 1997

3. Terry Eagleton, *The Significance of Theory* , Cambridge, MA: Basil Blackwell, 1990, 24-38

**From page 90. "Light: The Discovery of Poetry in Architecture" by Aaron Weinert.**

1. Recognition in developing this exercise is given to Wentworth Professors P. Kendall, J. Lee-Michalszyn, I. Strong and Z. Toloudi.

2. Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*. Wiley + Sons, 1996.

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4. Louis Kahn, “Silence and Light”, 1969.

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**All Content**

Rima Abousleiman (BSA ‘15)  
Samantha Altieri (M.Arch ‘13)  
Alexa Ashton (BSA ‘15)  
Christopher Bataglia (M.Arch ‘14)  
Edgar Barroso, Guest  
Christopher Bonarrigo (BSA ‘14)  
Andrew Calnen (BSA ‘15)  
Michael Cerbone (BSA ‘13)  
James Cleveland (BSA ‘14)  
David Cook (BSA ‘17)  
Robert Cowherd, Professor, Ph.D.  
Danielle Decarlo (BSA ‘15)  
Stephen Demayo (BSA ‘13)  
Panharith Ean (BSA ‘15)  
Mariah Erickson (BSA ‘15)  
Christopher Foley (BSA ‘15)  
Jonathan Foote, Professor, Ph.D.  
Sinead Gallivan (M.Arch ‘13)  
Scott Graham (BSA ‘14)  
Olivia Hegner (BSA ‘14)  
Ryan Kahren (M.Arch ‘13)  
Travis Lombardi (M.Arch ‘14)  
Kate Lux (BSA ‘14)  
Gregory MacGlashing (BSA ‘14)  
Sarmad Marzuq (BSA ‘14)  
Deborah Massaro (BSA ‘14)  
Matthew Murcko (M.Arch ‘14)  
Marc J. Neveu, Professor  
Vien Nguyen (BSA ‘15)  
Adam Parsons (M.Arch ‘14)  
Andrew Payne, Guest  
David Pearson, Professor  
Troy Peters, Professor  
Richard Pignataro (M.Arch ‘14)  
Steven Prestejohn (BSA ‘15)  
Victor Proops (M.Arch ‘14)  
Julie Rahilly (M.Arch ‘14)  
Michael Remondi (M.Arch ‘14)  
Pablo Rivera (BSA ‘15)  
Corey Roberts (M.Arch ‘13)  
Francesco Stumpo (BSA ‘14)  
Timothy Szczebak (BSA ‘15)  
Liem Than (M.Arch ‘13)  
Zenovia Toloudi, Professor, Ph.D.  
Nick Voell-White (M.Arch ‘13)  
Ethan Webb (BSA ‘13)  
Aaron Weinert, Professor  
James White (M.Arch ‘13)  
Jacob Wilson (BSA ‘15)  
Craig Zygmund (M.Arch ‘13)

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Samantha Altieri (M.Arch ‘13)  
Alex Cabral, Instructor  
Steven Hien (M.Arch ‘13)  
Bao Nguyen (M.Arch ‘13)  
Antoinette Hocbo, Guest  
Valerie Maccarone (BSA ‘15)  
Michael McElderry, Guest  
Stephanie Rogowski (M.Arch ‘10)  
Anthony Sanchez (M.Arch ‘09)  
Jared Steinmark, Professor  
Rob Trumbour, Professor  
Aaron Willette, Professor

**Rhythms of the city**

Ricardo Avella, Guest  
Michael Barago (M.Arch ‘14)  
Ignacio Cardona, Guest  
Manuel Delgado, Professor  
Andrew Ferrentinos, Professor  
Jessica Gardner (M.Arch ‘14)  
Heather Gill (BSA ‘13)  
Alexander Hernandez (BSA ‘13)  
Spencer Howe (M.Arch ‘14)  
Margarita Iglesias, Professor  
Amy LeDoux (M.Arch ‘14)  
Natalia Linares, Guest  
Victoria Lowell (M.Arch ‘14)  
Francisco Paul, Guest  
Mariana Otero, Guest  
Julie Rahilly (M.Arch ‘14)  
Nathaniel St. Jean (M.Arch ‘14)  
Ariadna Weisshaar, Guest

