



MATTER: Excess vs. Optimization

Matter, as a foundational subject, is a relatively recent addition to architectural curricula. Typically, matter has either been a subject of practice-oriented courses on material science and construction, or as the province of philosophers and scientists. Architecture only occasionally accesses thought on this most fundamental subject. Matter increasingly stands as a subject itself.

There appears to be a recurring tendency toward optimization in all aspects of architectural production, from parametricism to sustainability. How might we encourage a more optimistic, even libertine approach to the subject of matter and its consolidation into material formations in design practice, one where more efflorescent and excessive expenditures of material support behavior and logic championed by scientists and theorists of complexity? Conceptual principles and polemical directions not immediately tethered to the practice of building come to the fore: behavior and performance, composition and organization, and economies of expenditure are issues fundamental to matter that have gained increasing traction in the academy.

How, then, might the architectural academy properly incorporate previous scholarship and contemporary speculation on matter into its own pedagogy? Beginning with the proposition that matter comprises the foundation of any architectural object, this session calls for rigorous exercises in course construction on the subject of matter in architecture.

The Syllabus as Project

syl-la-bus : a summary outline of a discourse, treatise, or course of study or of examination requirements

—Merriam Webster Dictionary, 2013

Contemporary faculties of design are split amongst three constituencies: *designers*, *teachers*, and *design teachers*. So prosaic as to be intuitively obvious, anyone reading this observation (especially in the context of an ACSA publication) likely knows what each are and where this essay is

Jason Payne

University of California, Los Angeles

headed nearly immediately. Indeed, there will be no surprises here: What follows is the elevation of the latter over the two former, an argument in support of professors who teach well. Read on, though, for while the awareness may be apparent it does seem worth examining just how it is that certain design teachers do what they do so well.

But first, not just to be sure we're all on the same page but also to establish basic identities that will contribute to the definition of the design teacher, a brief description of the three types. The *designer* is as she sounds, a professional who has established herself as one in command of the intelligence and practice of the architectural discipline itself with a record of achievement reflected by a significant body of work generally well-received, an influential sense of taste, or both. The *teacher*, in contrast (and for our purposes here) is one whose strengths lie instead and disproportionately in the art of communication, in the ability to capture the student's imagination and to clearly articulate various principles of design to an audience. In the context of the academy each is incomplete in his own way, the first due to difficulty or disinterest in the complexities of imparting knowledge, the second resulting from shortcomings to do with the discipline of architectural design from wherever they may stem. Each is useful in his own way, as students tend to find their way around these weaknesses and often, in the end, draw upon their own imaginations to combine the strengths of each toward some sort of comprehensive picture of how a design project might be framed. It would be nice, of course, were all professors to have the range of skill and talent that occasionally combines the two but this seems too rare to expect across faculty populations. Instead, we have the uncommon case of the *design teacher* that is the combination of the two, from whom we can take certain lessons for how the design studio might best be taught.

Whether one leans more toward designer or teacher there is one device of the accomplished design teacher available for general use: the syllabus. Another obvious statement to be sure, but before dismissing it recall how many poor syllabi you've read recently. Seriously, of the last ten problem statements you've seen, how many would you consider accomplished acts of scholarly writing? One? Two, perhaps? This sounds about right, and if it is then we ought to have a hard look at this most basic - but essential - tool for disciplinary advancement that lies at the heart of design education.

The syllabus should be understood as a *project*. This is the hallmark of designers that are educators—they consider what they're doing in the studio to be a *project* not dissimilar to the projects in their office. As such, their syllabi are *designed* and—more than this—*designed objects* meant to stand alone, separate and apart from whatever preconditions they might have (school, curricular context, course requirements) as well as from the expected antecedents they hope to guide, namely, student design projects. Counterintuitive though this may seem, such autonomy grants the syllabus its fullest potential not only to serve these prosaic duties that are its basic responsibilities, but also to produce a lasting artifact in lineage with other strong syllabi that form the meta-project of architectural education.



Consider, for example, the syllabi created by John Hejduk first at the University of Texas at Austin (1954-55) and later at Cooper Union. These take what is now known as the Nine-Square Grid Problem, a compositional exercise invented by painter Robert Slutzky, and turn it toward architectural ends.¹ In continual use to this day by increasing numbers² of professors at schools as divergent as Prairie View A&M to Southern California Institute of Architecture, this problem has taken on the aura of foundational theorem in the education of hundreds of students of design.³ The mechanics and pedagogical value of the Nine-Square are well known and beyond the scope of this text. What is perhaps more important, however, is the way in which this ingenious exercise written in the form of a syllabus has taken on near-mythic status in the realm of architectural discourse for its power to move dialogue one way or another. Technically concise yet conceptually expansive, the Nine-Square lives on as Project far larger than most buildings, reinforcing the contested position that architecture is and always has been, after all, drawing rather than building. All of this from a humble syllabus.

In fairness, perhaps not all syllabi should strive for such stature, such accomplishments. After all, it seems unlikely that Hejduk had such aspirations, at least not originally. Take heart in the idea that such things sometimes rise naturally from modest beginnings so long as first moves are calculated as independent from limitations set by those sad arbiters of practical protocol that would have a syllabus describe nothing more than requirements to be satisfied. The syllabus must not prostrate itself at the foot of correspondence between its own instructions and a student's ability to manage them—let the student worry about that. Nor should it confine itself to the shortsighted dictates of professionalism in its various guises (and I say this in the context of an ACSA conference text!), for these things usually work themselves out. Instead, follow the oldest rule of good teaching: do what I do, not what I say. In the context of the academy this equates to making a project of the syllabus itself. ♦

ENDNOTES

1. Caragonne, Alexander. *The Texas Rangers: Notes from the Architectural Underground*. Cambridge, MA: MIT Press, 1995. 190-192. Print.
2. In truth, the popularity of this exercise has waxed and waned in tandem with the fashionability of the position and approach it is understood to represent. Regardless, its place in architectural pedagogy, however pronounced it may be in the work of any given moment, has solidified over time.
3. This includes, of course, students of architectural history and theory for many of whom this problem now exists as required knowledge.