



New Math for Architecture Schools

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The labour unrest at York University and U of T goes deeper than wages. It is about a functional obsolescence in academia that is based on a feudal hierarchy our society can no longer afford or endure.

A while back I was at a design awards reception and had a chance to catch up on things with my architect colleagues who represent both academic and professional dimensions of the discipline. We spent most of our time speaking about the new math for architecture schools and I gained a lot of interesting insights I now want to share with core faculty at Daniels, especially in view of the current labour unrest on campus.

First, I was not aware that the number of course hours needed to obtain a first professional degree in architecture has been shrinking these past several decades. Here at Daniels, all of the course hours needed to obtain an M.Arch. degree over a 3 -1/2 year period is 122. (This is calculated by taking the contact hours of every course in each of the 7 semesters – 12 hours for studio, 2 hours for core courses and electives). The national average in 2000 was about 148 hours, and when architecture was a 5-year undergraduate degree at U of T it was close to 170 hours. This means that educators must deliver a growing body of knowledge within a diminished timeframe. Upshot: What will be taught must be prioritized because teaching everything, even superficially, is no longer feasible, and will become less so going forward since what architects need to know is expanding.

Second, architecture schools used to be at the forefront of the professional discipline and faculty complements comprised leading experts in both academic and applied fields. My colleagues reckoned it was somewhere during the mid to late 1990s that schools started losing their edge. Their dominance began being eroded as professional practice embraced the integrated design process and involved multi-disciplinary teams deploying state of the art software to design buildings. Architecture schools, by and large, cannot compete against the budgets of large, multi-national design offices that often joint venture with specialist consultants to deliver projects of unprecedented complexity and sophistication. In many ways, the societal need for more sustainable architecture became the demise of the academy's dominance because the rising stars from emerging design, technology and ecology disciplines were being snapped up by professional offices, thus fewer of them were ending up in front of the classroom.

Third, schools of architecture are not in a position to quickly reverse their diminishing status and relevance. Based on accreditation requirements and academic policies, it takes some 5 years to institute significant curriculum reforms, and overhauling (re-tooling) faculty is in the order of 30 years corresponding to the typical career span of most tenured academics. While the move to sessional contract faculty can bring in new blood, this cohort does not advance the research mission of the institutions, and these temporary workers seldom participate in critical committee work. Somehow, schools of architecture must hope their tenured faculty members will remain at the leading edge of their respective fields over their entire careers. For these reasons, architecture schools are not as nimble as professional practices in adapting to change, and the rate of change in architecture is increasing at unprecedented rates.

Fourth, starting with the deep recession in North America during the 1980s when architectural practices were decimated, architecture schools have increasingly become divorced from the making of buildings. Specifically, young faculty were not afforded the opportunity to pursue creative professional activities via building production and had to find other venues such as history/theory, criticism, speculative design, installation, curation, etc., more along the lines of traditional scholarly pursuits, in order to gain tenure. As a result, in most of today's leading schools, it is clear by the faculty composition and the nature of option studios and electives that the discipline of architecture is having less and less to do with building. It is more important to talk around, write about and speculatively visualize architecture than to actually design and build, even on paper, an architectural artifact. Often, installation art has taken precedence over technical and ecological subjects in many leading schools of architecture across North America. It is not too far fetched to surmise that in its most esoteric echelons, the discipline of architecture no longer has anything whatsoever to do with building and has become quite disassociated from the profession.

Fifth, for all of the moves to graduate level first professional degrees and tenured faculty who are supposed to engage research across the full spectrum of the architecture discipline, society does not see any appreciable improvement in building quality or performance. Unlike the medical profession, which is improving the quality of life and life spans of the citizens whose tax dollars fund medical education and research, architecture has failed to demonstrate that the built environment is better, more affordable or more sustainable than it was a generation ago. Whether it is or not is not the issue, it is how the public perceives the societal relevance of the profession in regards to improving the average citizen's quality of life via the built environment. Architecture is too insular and self-referential to resonate with the public.

And these five factors are what is behind the new math for architecture schools. If it is not possible to teach the full spectrum of architecture subjects, if schools cannot attract leading edge faculty, if today's curricula cannot keep pace with developments in the field, if architecture education has less and less to do with building, and if society is not interested in better funding architecture education, what then is the future of architecture education and the discipline?¹

The new math for architecture schools suggests that a large cadre of sessional instructors will be employed to teach undergraduate programs, and that increasingly first professional degree programs will be delivered by a graying population of tenured faculty whose academic backgrounds are effectively frozen in time. The odd retirement will bring in replacements, but not necessarily tenure stream faculty, hence more and more elective courses and studios will be taught by people who are not part of an architecture school's research culture. In this sense, the writing is on the wall for architecture schools and for people who aspire to become professors at architecture schools. The high end of the academic programs in architecture will also become transformed because if getting a PhD in architecture means no hope of landing anything more than sessional employment on a year-to-year contract basis, there are few among the best and brightest who would find this to be an enticing proposition.

When my colleagues asked me how the architecture program at Daniels intends to adapt to this academic "climate change" I regrettably had to admit most of my colleagues are climate change deniers, based more on their behaviour than the views they profess, since they do not profess anything publicly. The faculty is divided into castes with faculty who only teach studios and seminars occupying senior administrative positions and assigning workloads. The lowest caste is the contract sessional faculty and they, along with all but the highest of castes, are exempted from decision or policy making. Our governance model is dated, our committees are largely dysfunctional and there is almost no time devoted to discussing these issues in a forum that includes all affected stakeholders, particularly the students. About half of our faculty meetings are cancelled because everyone is too burned out to attend.

¹ The proof is in the pudding for many of the issues highlighted herein. For almost two years now Daniels has struggled to recruit a second technics stream tenure stream faculty member. And in one of the wealthiest regions in Canada enjoying some two decades of a booming real estate market, Daniels cannot fundraise the money needed to realize Dean Sommer's vision for One Spadina. It is obvious there is a major disconnect between aspiration and reality, entitlement versus social relevance.

Daniels is whistling past the graveyard pretending a move to an iconic location subsidized by a retail undergraduate program will perpetuate an educational model that was obsolete in the 1960s, let alone the 21st century. But we may actually be doing better than other architecture schools in Canada, although there is no way of knowing because we do not deploy performance metrics and indicators in keeping with management science best practices. If the student health survey is any indicator, we are far from being healthy. Put in a nutshell, Daniels is a high cholesterol faculty that does not exercise its constituency to meaningfully engage the future.

In my view, Daniels embodies the new math for architecture schools and it will be interesting to see how a discipline dedicated to design will itself design a solution to these pressing issues and a sustainable future for the discipline at Canada's oldest school of architecture. The challenges are quite formidable because real funding to universities is decreasing with students paying for a larger proportion of their education. Professions are putting pressure on institutions to deliver students that are better prepared to enter the workplace. The cost of living in cities that host architecture schools is rapidly escalating due mostly to the cost of housing and transportation. And the salaries of intern architects are typically insufficient to manage massive student debts while providing for a reasonable quality of life. After what are largely seen as highly stressful years in school to obtain a first professional degree in architecture, future graduates will be cast into a highly competitive, globalized job market with marginal rewards for all their hard work, sacrifice and dedication. How will architecture schools continue to compete for the best and brightest while maintaining high standards of research and teaching? How will they convince society to continue funding programs that cannot demonstrate they are making the built environment better for every one, not just the one percent of society?

What is clear in our emerging post-industrial society is that there will be winners and losers and the disparities between them will become ever widening, often to the point of social collapse. Architecture schools, by virtue of the depth and breadth of their discipline, and affiliation with professional accreditation bodies, will have to bridge this convoluted divide. Whatever means are deployed, there will also be winners and losers within the architecture schools themselves, as everyone inside of them eventually learns to do the new math and comes to realize it's a zero sum game unless society, not the architecture discipline, can be convinced to change the rules.

For an interesting perspective on an antidote to some of today's problems facing academia, check out:

<http://www.theglobeandmail.com/globe-debate/academia-has-to-stop-eating-its-young/article23296659/>