

Architectural Education at the Crossroads

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Every year since I began teaching in 1987, I have heard (or have been told directly, and usually with great passion) that architectural education is at a crossroads.

The first time I heard it, at the ACSA Annual Meeting in Chicago, I was convinced that the speaker was absolutely correct, that in fact 1987 was the year architectural education would start being dominated by women! I was excited and took the brave news home to my female colleagues. As of now, there are still only three of them on our 27 person faculty, and they continue to await the revolution.

The next time I heard it was at an ACSA regional conference in Colorado not long after. This time we apparently were at the crossroads of hermeneutics and exegesis in architectural education, an intersection I blew through on a gust of hot wind; no doubt the theory police are still seeking me today.

I heard it again two years ago at an ACSA conference (can you imagine) in Orlando. But this time, as a jaded veteran of 5 years, I paid no attention. By then it seemed to me that architectural education must do nothing but heave from intersection to intersection, never making the lights—a perpetual visitor at the crossroads of the universe.

Imagine my surprise, then, to find myself late last Fall describing architectural education as being at a crossroads. I nearly choked on the words as I spoke them. Nevertheless, upon later reflection, the conclusion seems inescapable.

There is little debate that the nature of architectural practice is changing, and changing rapidly. The proliferation and growing sophistication of computer technology; the continued splintering of the profession brought on by the legitimization of subspecialties such as interior design, landscape architecture, and construction management; the lingering specter of litigation: these are only a few of the processes which are reforming the structure of the profession. And none of these even begins to address the welter of new social issues which architects must address in the coming years: an aging population, the green “revolution,” virtual reality.

If the profession is to engage these issues in any substantive fashion, it is axiomatic that architectural education must

address them as well, or at least prepare its students to do so.

For me the revelation that a crossroads had been reached came not as a result of concern about any of these issues individually, but related to them as an aggregation. Taken individually, any one could be seen as part of the natural evolution of the profession (or for that matter, any profession which purports to occupy itself with matters of broad public concern). We can handle a green revolution without a substantive change in the way we teach students to think about architecture. Environmental sensitivity has long been a strong suit of the profession—this is simply another manifestation of that.

But taken in combination, the breadth of the changes in the profession is staggering. More than ever before, Architects are being asked to balance a menu of expertises that would be a challenge for any three or four other professions. In fact, it is clear that the Architect as master of all trades is a concept that is no longer feasible, or even relevant. The medical, legal, and engineering professions offer interesting parallels: they long ago all but abandoned the notion of a practitioner who could claim expertise across the entire range of their disciplines. Would you go to a patent attorney to handle your divorce? Would you go to a proctologist for radial keratotomy?

Their educational systems are likewise structured to encourage specialization through internship and graduate study.

Yet in most architectural schools, a system of professional education that has been handed down to us essentially unchanged over the last 50 years (or changed more by outside influences—such as university general education requirements—than inside evolution) still prevails. Given present academic and professional structures, this seems increasingly inadequate, even inappropriate.

We no longer are training students for a professional world dominated by sole practitioners, or even small offices. We no longer are training students for a professional world dominated by residential commissions. We no longer are training students for a professional world where the job market is expanding or even stable. We are training students for a professional world where they will be expected to

change jobs more than 5 times in their career. We are training students for a professional world where they will be expected to spend less than 25% of their time (on average) in the design arena. We are training students for a professional world of global internets and virtual conferencing. In sum, we are training students for a professional world where flexible and critical thinking will be their greatest asset, rather than simply a fast pencil or good modeling skills. The question before us today: does our current educational system promote, or even allow for the attainment of these skills?

Barely. But more important, because the system is based on increasingly arthritic paradigms, the opportunities for evolutionary change become ever more restricted.

Thus we find ourselves at that crossroad I tried so long to avoid. Do we cling to an educational system that has served us well, but is now showing visible signs of distress? Or do we substitute it for something less familiar—and therefore more risky and frightening—yet possibly more responsive to current reality? This is a question which actually goes far beyond Schools of Architecture. University education as a whole is a matter of intense national debate. The battle over the role of the Western Canon is only one aspect of the controversy.

For architects, much of the argument comes down to issues of babies and bathwater, with camps staked out on either side of the tub.

Before we all get wet, here is a plea for a moderately radical position.

Architectural curricula are changing, whether we like it or not. The introduction of new technology, the changing role of the profession, and the nature of the American university system are putting tremendous pressure on the traditional 5 or 6 year educational programs found in most Architecture schools. For instance, responding to public pressure over educational standards and costs, the Arizona Board of Regents recently voted to limit all undergraduate degrees to a maximum of 120 credit-hours of course work. The 4 year section of our 4+2 structure currently requires 132 hours, and many faculty would like to swell that number with other courses they feel are “essential” for a proper professional education. It isn’t going to happen. We can rant and rave, gnash our teeth, and completely ignore the issue of whether the regent’s actions might in fact have some merit. We can try to teach students absolutely everything there is to know about being an architect in 6 years. We can offer them even fewer credit hours for their studio work than the ridiculously burdensome equation we now employ. Or we can skip the whining, the Pollyanna, and the legerdemain, and do what architects do most effectively: we can innovate.

Instead of fighting the changes, we should move out in front of them to create a model which will serve not only us, but the university community in general. Let’s take our rightful place: the center of liberal arts curricula everywhere—as the last great humane education and profession. What other discipline offers—requires—of its members such a broad base? To be competitive, Architects must know

something of literature, the arts, science, mathematics, and economy. Ideally, they would speak more than one language, appreciate cultural richness, and be conversant with the realities of statecraft (at the local, regional, and national levels). In short, the ideal architect is a latter day Renaissance man or woman. The same is not necessarily true of engineers or accountants, salespeople or secretaries.

But how do we accomplish this? How do we go about educating this uber-professional? We don’t. And herein lies the key to our solution, the yield sign at our crossroads.

No one architect can be all of these things to all people, or even a majority of them. We must stop trying to educate as if that were a real possibility—which to a lesser degree is what we do with present curricular structures. The successful office, the successful corporation, the successful government operates as a grouping of groups, a teaming of teams, not a vast undefined tissue of individuals. This is not to say individuality can not exist or be cultivated, far from it. Individual expertise and ingenuity give a team the flexibility needed for success. However, it is the ability to merge those individual talents that makes a team a winner, and identifies leadership.

Thus, rather than try to educate each of our students as if they were going to be specialists in every area, let’s educate them so they can move comfortably between those in which they choose to concentrate and those with which they have only a passing familiarity. Better yet, let’s educate our students to be the leaders in our hypothetical groups, the ones who can marshal diverse talent into an operational synthesis.

How to do this?

First, retire the curriculum. The 5 year B. Arch. has outlived its usefulness. It is the product of professional and educational structures which were developed more than 50 years ago. Very little in the world of architecture resembles that of 50 years ago. Why should our educational system? Further, the 5 year B.Arch. is one of the most seriously impacted curricula to be found anywhere on university campuses, with majors often restricted to only one or two open electives during the entire period of their residence—hardly the way to encourage intellectual and academic growth. A true 4 + 2 (or 3) model emulates other professional programs like Law and Medicine, and offers undergraduates the opportunity for substantial exposure to subject areas outside the professional offerings in architecture. Finally, it matches more closely University educational standards and funding models.

Second, liberalize the curriculum. Increase the requirement for courses which emphasize critical reasoning, writing, and verbalization skills. These, combined with moderate quantitative ability, are the tools of managers. These are the tools that have led business leaders to increase substantially their recruiting among Liberal Arts majors at universities across the country. Ultimately, these are the tools the profession will need to utilize in order to survive. Rather than accomplish this through specifying classes, however, we should allow students to choose courses within

emphasized core areas, such as analysis, communication, and quantification.

Third, make design and technical courses elective after a certain point. As initially difficult as it may be for us - and all architects - educated to this point to accept, there should be nothing sacrosanct about design as part of architectural training. We know that not all architects are going to be designers—in fact, office economics would suggest that fewer and fewer of them will be. Further, the day to day drafting skills necessary to staff the production office of the past are increasingly the province of more specifically trained (and much less expensive) technical school labor, and an increasingly smaller cadre of computer draftspersons (smaller because the capacities of the machines continue to increase at a nearly exponential rate). The simple truth is that the economy is going to need fewer and fewer traditionally trained architects. Or, in a bleaker scenario, it will need traditionally trained architects who are willing to work for less money—much less.

For this reason as well as the others enumerated above, it is imperative that we offer our students the opportunity to train themselves for a place in the profession that may be outside the normative presumptions of current architectural education—which points inevitably toward a reassessment of the traditional core of our curriculum. If not all architects are going to be designers, why must we train all students as if they were going to be exactly that? We must train people to be architectural technology managers, capital managers, and construction managers. We need to supply offices with marketers, real estate analysis specialists, and linguists. And we need to do so in a manner that will make the students who are following these specialties feel at home within the discipline, not a substandard subset.

Design and technical support courses must become elective (or perhaps honors) classes in the future. The benefits would be multiple. First, it would allow schools to restrict design classes to only the most promising design students, without denying the rest an education in architecture. Those whose design aptitude was less evident could concentrate in

other important areas such as environmental science, architectural engineering, or governmental relations. If they continued to harbor a desire for design training, they could try for admission to a graduate level design sequence. If they found themselves to be happy in another area, they would be granted an undergraduate degree with a concentration specifically noted on it. Such a degree would have to have equal weight to those with more traditional design or technical specification. Those who lost interest altogether could leave the program as more architecturally sensitized individuals (how bad would a world of these people be?). This streamlining would allow schools to manage studio enrollment easily, and also satisfy university requirements for equal educational opportunity. Non-designers would not be getting an inferior education, merely a different concentration. And the profession would find itself with a body of able individuals prepared to address the challenges of a fluid marketplace.

We have initiated a limited version of such a program this year at ASU. Though design is still the centerpiece of our curriculum, a flexible array of electives allows students to tailor their programs of study much more to their personal interests. The student response so far has been phenomenal, with electives being chosen from more than 30 curricular areas around the university, and students working on minors in subjects ranging from business to recreation planning to philosophy.

These sorts of changes will require an attitudinal sea change on the part of the profession and educators alike: those with more traditional training will need to change their attitude and understanding about what architect is. Such a reassessment should not be difficult, particularly if such changes are designed with input from both the profession and the academy.

These sorts of changes demand we look at architectural education in an entirely new way, as if we have reached a familiar place, but the details have changed somehow: a crossroads, if you will, at the intersection of the past and the future. Buckle your seatbelts, we're in for a bumpy ride.

