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ESTABLISHED BABY BOOMERS PRACTICING ARCHITECTURE TODAY ARE EATING THEIR YOUNG AND SQUELCHING THE TALENTS OF FUTURE GENERATIONS OF ARCHITECTS. AS A RESULT, TODAY'S YOUNG ARCHITECTS MUST FIND ALTERNATIVE WAYS TO SUCCEED IN THEIR CHOSEN PROFESSION.





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PHOTOS MATTHEW KENNEDY

In the first chapter of his *Ten Books on Architecture*, Vitruvius advises that a young, emerging architect must know how to draw, be versed in geometry and arithmetic, be a draughtsman able to use the square and level, and be able to calculate the budget of a building and properly balance it against its aesthetic symmetry and proportions, all in addition to possessing a wide knowledge of history, art, music, philosophy, medicine and astronomy. As well, he must be able to apply principles concerning drainage and party walls to a building design. In our age of “tweets” and “blobs,” one might very well ask what Vitruvius may have added

OPPOSITE DALHOUSIE UNIVERSITY ARCHITECTURE STUDENTS USED CNC TECHNOLOGY TO DESIGN THIS SHELTER WHICH GLOWS BENEATH A MOONLIT SKY.

to this list if he were around today.

For if there is one thing that Vitruvius is clear about, it is that there is no one thing that an architect is, but rather a multitude of things, and as such, the skills and knowledge that are part of an architect’s education could enable him to work in another field if necessary. Not unlike Ayn Rand’s hero Howard Roark going off to work in the granite quarries in *The Fountainhead*, the architect is at times forced to be ambidextrous, or nimble, so that he is able to work in an allied profession to architecture when times are tough. Colleagues of mine worked in construction while trying to find

their next job at a firm, while I myself worked at a model-building firm as well as giving architecture walking tours between jobs.

My first-year architecture school class was in fact a rich mix of people whose previous erudition was not directly related to architecture. If there was ever a true instance of Mark Twain’s “never letting your education come between you and your schooling,” this was it. Language majors, microbiologists, business students, and of course artists, painters and musicians made up my first-year class, with those actually having worked in firms making up a small percentage.



TOP AS PART OF DALHOUSIE'S COASTAL STUDIO, A GROUP OF ARCHITECTURE STUDENTS DESIGNED AND BUILT LAMELLA, A HELICAL PERGOLA THAT IS AN ELEGANT AND SIMPLE EXPRESSION OF FORM. ABOVE A DETAILED VIEW OF LAMELLA AS IT MEETS THE GROUND.

This then is Vitruvius's "incidental education"—all those branches of knowledge that emerging professionals bring to the table in their architectural education prior to or in addition to their formal architectural studies.

To paraphrase a Beatle, architecture is what happens while you're busy making other plans, and the actual activity of architecture in contemporary practice, with its construction and contract documentation, makes it easy to miss the thing that has attracted new interns to architecture, the jewel that—regardless of its bureaucratic baggage—still continues to inspire and attract

young and talented minds to the profession, as it has since the time of Vitruvius.

At a time when our profession is reeling from the startling realization that a whole generation of architects may indeed now be lost given the length of the recession—a recent statistic has purported that the true unemployment figure for architects is more like 24 percent—there is a glimmer of hope in seeing that the generation immediately following it is aware of this coming gap in the profession, and is rising to the challenge of filling the void.

Such is what we can gather from the likes of Dalhousie architecture students Matthew Kennedy, Sam Lock, Clayton Blackman, Mark Erickson and Andrew Choptiany, whose collaborative works both at and beyond Dalhousie University's Faculty of Architecture and Planning have already demonstrated a vigour and design ethos of treading gently

on the earth while making a definitive architectural statement that evidences the influence of Nova Scotia's rugged east coast vernacular. Gaining invaluable experience while still in school, the students participated in the Coastal Studio, a well-known design-build studio led by architecture professor Ted Cavanagh that explores ecology, culture and traditional technical knowledge through design-build projects across the province.

These future architects have realized a formidable body of work in their design studios, along with the significant adjunct of a built structure for a children's summer camp on Prince Edward Island which they all helped to design and build. The camp structure appears to be an instance of Matthew and Andrew being at the right place at the right time. While they were camp counsellors in 2009 (Sam, Clayton and Mark joining them the following year), the provincial government donated 13 acres of land to the camp, and as such needed more permanent structures to be built.

Taking a year off from school and working independently from Dalhousie, the students employed many of the passive design principles they learned under Cavanagh's guidance while in school, taking advantage of the flat, treeless landscape next to the ocean, and using locally grown dimensional lumber and wood siding. With a two-month construction budget, the collaboration between the architecture students, camp counsellors and contractors has resulted in a sensitively scaled building in the landscape, with the intent that further similar structures may be realized in the not so distant future.

In addition, this collaboration has yielded Lamella—the students were largely responsible for the detailed design development of this CNC-milled wooden structure both reminiscent of a beehive and Buckminster Fuller's geodesic structures. Using this emerging form of technology, the group created a helical pergola to cover a walkway outside the Dalhousie Architecture School for *Nocturne*—a light festival that happens in October in Halifax.

CNC, or computer numerical control, is a technique used to create geometrically complex and repetitive building components. In this case, wood was used, though other malleable materials can also be employed such as resin or MDF board. Using SketchUp to model the form in this instance, this data was then sent to the milling machine. The CNC machine at today's modern school of architecture is now *de rigueur*, and is as valuable a tool in today's young architect's tool kit as the wood shop was in days gone by.

The recent staggering unemployment of architecture students and interns will not be without some serious ramifications in the near future. This on top of a recent slowdown in the number of interns getting registered upon graduation has architecture associations in both Canada and the



CLOCKWISE FROM ABOVE DALHOUSIE ARCHITECTURE STUDENTS DESIGNED A LINEAR BUILDING FOR A CHILDREN'S SUMMER CAMP ON PRINCE EDWARD ISLAND DURING A ONE-YEAR HIATUS FROM THEIR STUDIES; THE CANTED-ROOF WOOD-SHINGLED CAMP STRUCTURE GLOWS BRILLIANTLY IN THE LANDSCAPE; HUMOUROUS GRAPHICS ANNOUNCE THE BOYS' AND GIRLS' WASHROOMS.

US scratching their heads. With the verdict still out on the success of the transition to the new NCARB 4.0, reducing the number of licensing exams from nine to seven, there is serious concern for a healthy base of new architects to inherit the design profession once most of the baby boomers retire within the next decade. The profession of architecture on the whole might do well to ask itself what it is doing to attract a new generation to the profession.

So while the other shoe may not yet have dropped, the word on the street is that high schools are telling their graduates of the coming drought in the profession, and as a result the architecture schools are overflowing both nationally and internationally—though it's worth noting that postsecondary enrollment has generally increased as a result of there being no jobs. Works by the likes of these Dalhousie architecture students should not go unnoticed, as it is an optimistic indication that there may still be a glimmer of hope on an otherwise uncertain professional horizon.

With computers allowing for the cross-pollination of architecture with new and growing fields of technological advancement, today's website or video game designer could be tomorrow's new virtual architect. For if there is one thing that the computer age has given us, it is the



rapidity with which we can create, proliferate and disseminate information about buildings. That the youth of today understands this more than any generation before is no secret, masters as they are of the new "invisible city" (to borrow from Italo Calvino), with all their social networking and creation of virtual worlds.

Architecture's next great challenge then is to make the transition from the printed page to binary code, much as Gutenberg's invention of the printing press revolutionized the dissemination of ideas through books. This will not merely happen by having a knowledgeable staff who can use

AutoCAD and Revit, 3D Max Studio or SketchUp, but by educating a generation about all those tangents to architecture that may be pursued as part of their schooling, whether painting and exhibiting in a gallery or composing and performing a concerto. Ours is a nimble profession, and as such, those who would rise to the challenge will hear the call, regardless of the need to sell paint or build furniture to pay the bills. **CA**

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