Strategies for the creation of meaningful architecture:
The hinge between practice and academia

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There are numerous approaches to the creation of architecture. In this text I will be reflecting on several approaches that I have been involved with over various years of architectural education. From teaching the newly inducted at the first-year level, to tutoring in the final year of a Masters of Architecture course, the issues remain largely the same: what are the ways into creating (meaningful/appropriate) architecture that relate specifically to a set brief and situation? I hope to explore the ways which academia informs 'good' design in practice and how practice has the power to inform a richer understanding of the potential of architecture as a discipline apart from the constraints of the economic imperative. Part of this paper has been adapted from an earlier essay prepared for the Changing Trends in Architectural Design Education Conference held in Rabat, Morocco in November 2006[1], most notably the work on the continuum theme. It was co-authored with Leonidas Koutsoumpos, whose input and expertise on Artistotian ethics forms the basis for this argument.

Introduction

The issues of practice and academia are inextricably connected yet demarcated by the deepest of divisions. Often, the concerns of (either) one seem of little consequence to the other. Practice, with its inherent demand to respond to its economic imperative, expects academia to provide an inexhaustible supply of freshly trained 'talent', prepared to competently produce an endless volume of construction details. Academia, with limited time to share only the narrowest bit of knowledge in pursuit of educating the next generation of stewards of the built environment, have little time for the hard pragmatics of the practice environment. This suggests a certain binary relationship that surely does not exist, by and large, in this most extreme form. To invoke the metaphor of a continuum, with design/theory on one extreme and service-oriented practice at the opposite extreme, we can situate each architectural education institution and each architectural practice along that continuum appropriate to their individual philosophical attitude. It is safe to suggest that a majority of architectural schools would fall closer to the design/theory end while architectural practices would group to the opposite side of center. It is equally safe to suggest that there would be overlap in the middle as schools work to address the ever more vocal demands of industry, and conversely as public attitudes change about design and practices endeavor to cultivate rich, rigorous architecture in their work. The potential dynamic between practice and academia should be exploited to encourage more appropriate and meaningful architecture in both spheres of operation. Neither can exist without the other in any meaningful way.

It is useful to understand the motivation for engaging architectural pedagogy, from basic design to Masters courses, as a referent in understanding 'strategies for the generation of meaningful architecture'. The themes and issues that underlie the basic design course are evident in every aspect of architectural design, both in education and practice. Abstraction, composition, representation, notions of making, creativity, invention, to name only a few, are the cornerstone of any architectural proposition. There is a great deal of value for the designer to reflect anew on these principles in an evermore critical and informed way as they progress through their education and professional career. What follows is a recollection and reconsideration of certain personal teaching experiences. Logically starting at first-year design, where I have been Course Organizer and tutor, and progressing through until finally ending with reflections on the Masters of Architecture course, where I was a tutor for two years.

The Practice/Academia Continuum

"Architectural education has always been in tension with architectural practice. That is how it should be; practice sometimes gets complacent and education is there as a kind of conscience, trying to correct what seems to be going wrong. So from time immemorial the architect has been subject to learning in two quite different ways; theory in a classroom of some kind and practice, on the job or in the office."[2]

Broadbent asserts the relationship between practice and academia has a substantial history, if only in terms of duration, suggesting a tension that has "always" existed between these two domains of architectural conduct. As he offers no specific reference for this assertion, one might only presume it is simply speculation, albeit an assertion that is easily acceptable, particularly as it relates to our contemporary condition. More interestingly however, is his contention that another of the myriad roles of education is to 'correct' practice. There is inherent in such a position, a privileging of education over practice as evidenced by the fact that clearly the one (education) holds a higher (moral/ethical) ground over the other, and thus rightly sits in a position to make judgment as to correctness or rightness.[3]

In this paper, I will problematize the contemporary fundamental distinction between architectural profession (practice) and architectural education (academia). The common understanding, as evidenced by Broadbent and others, sees these two domains as separate, disconnected and even in opposition. While it is clear that a division exists between these two realms of architectural conduct, it is not enough to accept its authority, nor that it is an historic, chronic, or perpetual fact.

The Practice/Academia Continuum invoked here is not a new idea. The simple premise of the continuum suggests by definition, two strands of the same discipline put in relation one to the other seem quite similar, but whose extremes are fundamentally different. Aristotle was the first to explicitly contrast theory from practice; outlining the correspondence of theory with "contemplative life" and the relationship of practice to "political life".[4] Vitruvius, in his Ten Books on Architecture addresses the issue in Book I, Chapter I - The Education of the Architect.

> 1. The architect should be equipped with knowledge of many branches of study and varied kinds of learning, for it is by his judgement that all work done by the other arts is put to test. This knowledge is the child of practice and theory. Practice is the continuous and regular exercise of employment where manual work is done with any necessary material according to the design of a drawing. Theory, on the other hand, is the ability to demonstrate and explain the productions of dexterity on the principles of proportion.[5]

It is clear that Vitruvius was applying a rational understanding of the more philosophically eloquent notions of practice and theory from a few hundred years prior, but as he acknowledges "… it is not as a very great philosopher, nor as an eloquent rhetorician, nor as a grammarian trained in the highest principles of his art, that I have striven to write this work, but as an architect who has had only a dip into those studies."[6] Vitruvius' conviction of the importance to gain exposure to as broad a range of disciplines as possible, was understood to be a vast resource from which to draw insight, inspiration and knowledge; a clear necessity to combat the often incestuous confines of architectural activity. Importantly, however, there is also an acceptance of the limits of proficiency to which one can be expected to operate in these various spheres. Balance seems a key operative term; neither complacent in the rigors or learning, to coin Broadbent, nor forgetful of the fact that one is an architect; not a musician, astronomer, philosopher, etc..

The Practice/Academia Continuum[1]

PRACTICE ——— P R A X I S ——— THEORY
—— practice ——
—— academia ——
techne   contemplation:
episteme   'spectator'

1. A continuous sequence in which adjacent elements are not perceptibly different from each other, although the extremes are quite different.

Oxford American Dictionary, 2nd Ed., 2005

FIGURE 1

"Hence it is of little use to see theory and practice as competing abstractions, and to argue for one over the other. Intelligent, creative practices - the writing of theory included - are always more than the habitual exercise of rules defined precisely by its movements and trajectories. There is no theory, there is no practice. There are only practices, which consist in action and agency."[7]

Others have engaged this practice/theory relationship over the years but, Snodgrass and Coyne, in their recent book, Interpretation in Architecture, provide a clear structure for the understanding of the more traditional Greek meaning of this relationship.[8] Key issues to understand are that practice is derived from the Greek word praxis, which is the exercise of judgments and the making of ethical decisions by the exercise of 'practical reasonableness'.[9] Practice, in its contemporary invocation and more closely aligned with the Vituvian notion, relates more with what the Greeks termed techne, which is the making of something in accordance with knowledge that is consciously known or which pre-exists the activity of making; this sort of knowledge was referred to as episteme. In contrast, praxis, as a way of making, includes the the making of considered, ethical judgments as part of its process. There are two forms of this considered activity; phronesis and prohairesis. The first, phronesis, is the understanding of how to act in a given circumstance while the second, prohairesis, adds the complexities of choice and preference, which then heightens the influence of social and ethical considerations, as the consequences of the choices made are understood as having social and ethical ramifications. Theory is derived from the Greek term theoria, which for the Greeks was not something that precedes praxis, nor is it a set of abstract rules which govern the actions of the practitioner. To paraphrase Allen above, theoria participates in praxis; the two are inseparable.

Promoting a program for the 'meaningful'
Daniel Libeskind, in An Open Letter to Architectural Educators and Students of Architecture,[10] outlines a cry to the profession to save it from yet another crisis, he states:

"Architecture as taught and practiced today is but a grammatical fiction. Enough to see the gulf which separates what is taught (an how!) and what is built (and why!) to understand that somewhere a lie is being perpetuated. Only a sophistic method could

mask a situation where so many spend so much to do so little - with such damaging results."[11]

The letter ends with a declaration to his founding of the Architecture Intermundium in Milan, suggesting that he is on the case to right the wrongs. His suggestion that architecture had become an arena for the purveyance of opinion, "[h]aving relinquished love of the divine episteme in favor of opinion,"[12] thus diffusing its "potentially explosive content", blasts the contemporary tendency toward a theorization that is divorced from praxis. His use of the term episteme, without the employment of its more critical prohairesis, would suggest however that he is possibly more closely aligned with the 'corrupt' instrumental and manipulated architecture he is meant to be operating to remedy. Nonetheless, his call for a release in architectural education, and in practice for that matter, to explore and allow a "groundlessness which moves the participant in Architecture toward the void" is a call for real change in the way architecture is conceived, considered and constructed.

Since the drafting of Libeskind's letter, a great deal of consideration has been given over to notions of how best architects should be trained. There are today in the United States, two clear camps in architectural education; those that lie on the side of theory and those that lie on the side of practice. In this instance, I diverge from the previous reference to the Greek, as they constitute the desired model, and instead am invoking the more contemporary notion, that of research (theory) and pragmatics (practice). In the early 1990's, The Boyer Report was commissioned by the collateral organizations AIA, AIAS, NCARB, NAAB and ACSI[13] as an independent study into the profession of architecture. The aim of the study was to determine how architectural practice and architectural education could work more closely to enrich the experience for the students, assure well-trained graduates would be introduced to the profession and create a more 'unified' profession. The report, at 172 pages, outlined what are considered their "seven essential goals". Almost without exception, the goals were directed at ways in which academia could/should change to accommodate the needs of the profession, and never outlined requirements for 'practice' to engage in a deliberate and considered way in academia. Calls to integrate practice into the curriculum of academia through "participation by practitioners, clients and society as a whole" are rife but the imbalance remains

immanently clear as 'participation' often takes the form of sales pitches disguised as seminars. It's no wonder Libeskind rants about what he called the "process of de-culturation called education and practice [that] has eclipsed Architecture so far and so thoroughly by the fictions of 'common sense' and the 'real world'...."[14] And it is even more concerning when considering that the thoughts of Libeskind, shared amongst many others in academia, nearly a decade prior to the commissioning of the report, were seemingly brushed aside in preference for a more pragmatic program. Snodgrass and Coyne suggest "Praxis has been totally subsumed within techne, so that the problems confronting us,... are the province of technical experts (experts in techne),"[15] I assert this reflects the current situation in a majority of US schools of architecture as they work to respond to the 'goals' of the Boyer Report.[16]

Accepting that one of the charges of the academy in architecture is to prepare its graduates for productive participation in what is a professional, vocational industry, it is imperative the graduate be equipped appropriately in the ways of industry. That pragmatic concerns become a focus of the educational enterprise reinforces an already well established imbalance toward the techne, thus subverting any attempt to prepare the student to participate in praxis; that act of participation in theoria and making through a process of considered ethical judgments. Furthermore, to disconnect with the social and political program, within which architecture is wholly implicated, through the unbalanced employment of disconnected theorization is equally problematic. Again, the aim is to find a balance of practice in the studio, both within and outwith academia, that strengthens a relationship with both praxis and theoria.

Architectural Case Studies

What follows are a series of examples of how such a balance has been attempted in both a first and final year studio at the University of Edinburgh in the academic years 2004-6.

First-year

The first-year program structure loosely follows a critically reconsidered Bauhaus model that holds a fundamental encouragement and appreciation of the notion that 'making' is a key component in the process of learning. The course is an introduction to what architecture is, how it is understood, created, represented and how it sits in a greater social and cultural context. It is about challenging preconceptions and affecting new ways of thinking and understanding; it is the foundation to a way of critical thinking. This is done through a series of short projects which introduce certain fundamental notions of two and three-dimensional abstraction, figure/ground analysis, spatiality and drawing conventions and the representation of work.[17] The students work in pairs from the outset and continue throughout the year working in small groups, only occasionally working in full autonomy.

At the first-year level, a student/teacher relationship exists that is perhaps less than ideal, in that we do follow what has been termed the "transmission model" of pedagogy. This model sees students as empty vessels waiting to be filled, or as "... blank screens

FIGURE 2: *AD1, University of Edinburgh, Group work/collaboration*

ready to receive unmediated transmissions of skills and information as delineated by experts".[18] With every effort at being objective,[19] I do not believe we accept the notion that the students are 'empty vessels' or that they are (necessarily) in their intellectual infancy, and as such believe we are assuming a more ethical starting-point in our student's education. However, I am aware of the possibility that we may, from time to time, be transmitting 'unmediated' information and that this reinforces a certain hegemony as students blankly accept the authority of the tutor - clearly a situation that should be openly acknowledged and probably avoided.

The students engage in praxis as a result of a deliberate encouragement to learn by doing, to challenge their own preconceptions, to work as part of a group, not focusing only on their own self interests, and to engage in a rigorous intellectual exercise that highlights their role as architects in a greater social and political framework. Granted, the connection with the pragmatics of practice and an understanding of techne and episteme is limited, but these things are easily taught and easily learned as part of a comprehensive architectural curriculum. It is praxis, and more specifically the notions of phronesis and prohairesis, that are both more difficult to teach and more important to impart as a way of operating at this stage in their education.

The deliberate effort here is to encourage students to confront ethical issues in a considered way. Projects are designed to put the student in a position to confront self-centered ideals and to realize the political and ethical consequences of such positioning. Students are indulged in their first 'architecture' project, allowed to be both client and designer in a remote location devoid of immediate and obvious cultural and social influences. That project is then followed by a live/work project embedded in the city where notions of public and private interface and participation in an urban, socio-political environment, with its inherent physical, social and ethical concerns become paramount. The student's are encouraged throughout to understand the historical and contemporary role of architecture in the context of the city. For a project to be considered successful, the student must, whether deliberately or not, operate in praxis way.

FIGURE 3: *MArch2, University of Edinburgh, Mapping the gaze of the statue on City Hall - Budapest. Liam Ross*

Final-year (MArch2)

The projects represented herein are part of a final-year architecture thesis program at the University of Edinburgh. The deliberate encouragement to engage praxis in this course was never stated. There was, however, an inherent call to operate in a rigorously ethical way, as political agents making competent architectural propositions within an urban context. As such, it could be said that praxis too was central to our way of working.

Each year, students are taken to a city and encouraged to investigate the specific nature and qualities of that place. Specifically in this case, through the rubric of "borderlands". In this instance borderlands encourages a search for difference, areas in dispute, places of demarcation, unmediated or mediating territories and territorialities that illustrate techniques of exchange through either material expression or by the talemate expressed by territorial division. Importantly, the search for such territory does not presuppose a need or desire to fix or alter the landscape of the city per se but rather a desire to expose and celebrate the richness of the discursive and dynamic nature of the city.[20]

The course is taught with an end requirement for an individual proposition, but a great deal of the initial and investigative work is executed in small groups. The demand for an engagement in the political enterprise is inherent in the theme of borderlands; if

its not already clear that Architecture is inherently a political enterprise. One of the many vehicles used in the interrogative process is 'mapping'. The process of 'mapping' in the architecture studio is an active, creative process whereby information about a place is gathered and graphically represented in a meaningful way. The uses of the resultant 'map' vary depending on ones particular philosophical or theoretical impetus and reveal the author's emergent political and ethical positions and ambitions; it offers an early glimpse into how the student's are participating in praxis, or not. These images can be employed to inform potential sites and/or programs for intervention, connections to other areas of influence or interest or even may suggest or inform formal languages for the design of buildings. Information is layered to create an image densely infused with multiple meanings; politics, prejudice, spirit, environment, and social issues to name only a possible few, share ground with traditional cartographic information and planning information.

While the process of mapping has considerable utility, it also is encumbered by a number of potential shortcomings. Access to meaning contained within the image will doubtless be limited. If the author were to provide a code book for the map, explaining the various motivations, gestures, decisions and graphical moves, there is no certainty that its meaning would be any more accessible to the viewer. The danger lies when a skilled rhetorician uses their talents in mapping to hide any of a variety of shortcomings in their proposal, or worse, nefarious intent. James Ashmore, a student experienced with this mapping process, makes this valuable retrospective observation:

"The power of a map as an accurate depiction of information may be compromised by the susceptibility of the mapmaker to graphic conventions and the composition of the map as a stand alone image. Graphic adroitness can subordinate factual accuracy. The image exists on paper with a completeness and coherency, but the marks may represent a different space to that which we experience."[21]

While not willing to take the view that mapping is a fallacious act, it is necessary to contrast the strengths and weaknesses of the process to be able to maximize its utility. Mapping is a tool for interrogating (a) place and when considering how one practices, can reveal a great deal about how they praxis as well.

FIGURE 4: *MArch2, University of Edinburgh, Repairing the Breach - Istanbul. Neil Jarvis*

FIGURE 5: *MArch2, University of Edinburgh, Grand Galata Bazaar Bridge - Istanbul. Nigel Peake*

Conclusions

It is clear there exists a separation between contemporary architectural practice and academia; this is not a new phenomena. It is of little help for people such as Broadbent to assert a patriarchal role for academia as a means to keep architectural practice in line; this negates the fundamental fact that academia is responsible in the first instance for educating and training the architects it now feels it has to police. Clearly, as we all soldier on toward developing the perfect balance, it is no doubt useful to consider, as Stan Allen suggests, that "… there are only practices", in architecture; the understanding of which allows greater appreciation for the center ground on the continuum, where a delight in the extreme ends can continue to constructively influence a vibrant move forward in both practice and academia.

The assertion in this paper is simple; we should be training students to be competent (technically and theoretically), socially and ethically engaged agents aware of their role in a greater socio-political framework. In our first-year studio, the process begins through a series of confrontations and opportunities to evolve ethical positions while learning fundamentals of the vocation through a framework that demands negotiation and collaboration while allowing, indeed demanding, personal commitment and individual output. The opportunity to engage in a sustained education in praxis is limited in this context and thus can only be seen as having moderate impact on the students' ability to make informed judgements, but it is a start. The strength of the final year comes through a clear expression of intent and an environment where questions are encouraged and norms challenged. The final year provides an opportunity to practice the way one expects to 'practice' upon graduation. As the programme for MArch is dense and rigorous, it is difficult to explicitly engage questions of praxis. This in no way suggests the programme suffers from any lack; quite the contrary. It can only be hoped that the guiding principles of the studio, with a focus on an authentic, interrogative, socially-responsible rigor and with an emphasis on praxis as a means of production, will prepare the students to contribute as agents in the creation of meaningful architecture.

NOTES

[1] Ballantyne, Keith & Leonidas Koutsoumpos. "Architectural Practice and Academia: the praxis and theoria continuum" in "Changing Trends in Architectural Education" Al-Qawasmi, Jamal and Guillermo Vasquez de Velasco, eds., *Proceedings to CSAAR International Conference*, Rabat, Morocco, 14-16 November 2006. p. 267-279

[2] Broadbent, Geoffrey. Architectural Education in "Educating Architects", Martin Pearce & Maggie Toy, eds., London: Academy Editions, 1995, p. 10.

[3] As I thumbed through my thesaurus to see some other synonyms for the word 'correct', it becomes clear that his choice of terminology must have been deliberate and that 'practice' is the errant teenager in need of constant monitoring for fear of his misbehaving.

[4] Lobkowicz, Nicholas. *Theory and Practice: History of a Concept from Aristotle to Marx*, London: University of Notre Dame Press, 1967, p. 4

[5] Morgan, Morris Hicky, trans.. *Vitruviius: The Ten Books on Architecture*. New York: Dover Publications, Inc., 1960, p. 5.

[6] ibid. p. 13 I acknowledge similar limitation herein as well.

[7] Allen, Stan. *Practice: Architecture, Technique and Representation*. Routledge, 2000, p. XVII

[8] Snodgrass, Adrian and Richard Coyne. *Interpretation in Architecture: Design as a way of thinking*, London: Routledge, 2006, pp. 111-15

[9] ibid. p. 112

[10] Libeskind, Daniel. An Open Letter to Architectural Educators and Students of Architecture, *Journal of Architectural Education*, Vol. 40, No. 2, Jubilee Issue - Winter, 1987, p. 46

[11] ibid.

[12] ibid.

[13] Boyer, Ernest L., and Lee D. Mitgang. *Building Community: A New Future for Architecture Education and Practice : A Special Report*. Princeton, N.J. : Jossey-Bass Inc Pub, 1996. AIA - American Institute of Architects; AIAS - American Institute of Architecture Students; NCARB - National Council of Architectural Registration Boards; NAAB - National Architecture Accreditation Board.

[14] Libeskind,. Op. Cit.

[15] Snodgrass, Coyne. Op. Cit., p. 113

[16] Similar reports have been generated by the RIBA in the UK as well, the latest being "Tomorrow's Architect", published in 2002 by the RIBA. The key difference between the Boyer Report and those in the UK being that the RIBA report is one in a series of regular assessments of the condition of the academic situation and is not a reporting of the findings from a commission organized to respond to the 'crisis' identified in the US. Interestingly, Tomorrow's Architect does show the beginnings of a widening gap between practice and academia. Architecture in the UK currently maintains a (tenuous) position as a cultural institution. The difficulties between practice and academia are likely to become more exaggerated as architecture continues its shift from a (marginalized) cultural to a predominantly economic industry.

[17] Of course this is only a partial list of the 'fundamentals' addressed throughout the year. The first project, broken into four parts, tackles these fundamentals in a very deliberate way. The students accepted the work as being creative but

struggled to understand its place in 'architecture' as they were not 'designing buildings'. They come to the program fully inculcated in a system of education that is product-driven and have no appreciation for this notion of praxis and their responsibility to free thinking and participating in their own education.

[18] Crysler, C. Greig. *Critical Pedagogy and Architectural Education, Journal of Architectural Education*, Vol. 48, No. 4, May, 1995, p.210

[19] I acknowledge that Interpretation theory shows objectivity to be an impossibility, but one can nonetheless try.

[20] Ballantyne, Keith and Dorian Wiszniewski. *Grand Bazaar and Great Exchange: The Architecture of Exchange in Istanbul*. Paper delivered at UIA Congress, Summer 2005.

[21] This note was taken from James' final report for his M. Arch 2 thesis project at the University of Edinburgh. While he may not be 'expert' on the matter, his criticisms hit directly at the most obvious potential problem inherent in 'mapping'.