Producing critical thinkers, designing critical objects: re-examining the role of critique in architectural education
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'In theory, there is no difference between theory and practice. But, in practice, there is.'

Jan L.A. van de Snepscheut

One of the most often-repeated aspirations of the contemporary university, to 'teach students to think critically', has been recited to the point of ubiquity in course and subject outlines, in schools of architecture as elsewhere. But this immediately raises a series of questions. What exactly is the benefit, for example, in 'thinking critically', why is it such a desirable attribute, and why in spite of all this does it seem so ill defined? More specifically for the purposes of this paper, does this critical capacity have a particular relevance for the education of architects?

On one level, the answer to this is obvious: the act and process of criticism takes a central role in architectural education. From students' self- and peer-criticism and critical evaluation of precedents during the design process, to the formal, juried design critique as a means of examination, design education is imbued at every level with an instrumentalisation of critical thinking. One might almost say that the student's development of an ability to make discernments and judgements about architectural quality is a key moment in their design education. But when and how is this ability developed? And how is it possible to teach critical thinking in a manner specific to architecture? This paper will set out to examine these questions, with particular reference to the ways in which education in design may be meaningfully linked and integrated with education in architectural history / theory, as well as one possible way in which the academy might be more directly and meaningfully connected with practice and the profession.

The paper is structured into three short sections. The first is an exposition of the 'train of thought', the broader ideas, observations and motives, that led to the formulation of this paper in the first place. This seems only appropriate in light of a general working definition of critical thinking as the impulse to 'read between the lines', to analyse and identify the assumptions and biases that underlie any piece of writing, and it thus serves to set the paper's terms and frame of reference at the outset. The second section examines cases from the author's own teaching practice which serve to illustrate some successful, and some less successful, attempts to inculcate architecture students with a capacity for critical thinking. These examples also reveal some of the preconceptions that students hold about the role, and the efficacy, of criticism in architectural education. The final section of the paper draws together the observational analysis and anecdotal evidence of the first two sections, and uses them to speculate and extrapolate ways in which critique might be used to a more profound effect in producing critical architectural thinkers, who are, furthermore, equipped to design critical architectural objects.

It should be stated here at the outset that this paper is reflexive in character, and is based on the author's observation, experience and speculation more than on detailed argument and analysis. This is a result of the paper being a first, relatively tentative foray into a new research area. At this early stage it is essentially a discussion paper, an examination of the parameters of a new research question and of further work to be done on it, rather than a rigorous search for answers.

1. Criticism as a productive and constructive process

It is an unusual exercise to state the subtext of an academic paper at the very beginning, to lay bare the substructure and frame that is usually left hidden and implicit, if not actually concealed. But the fact that such a stripping back will be attempted here, and that it will inevitably and necessarily appear subjective and partial, even unscholarly, only serves to underscore the paper's starting point. There could hardly be a more commonplace observation, in this deconstructive age, than that every piece of writing is always already based on an array of assumptions, received ideas, and beliefs, up to and including those inherent in language itself. But without stepping out onto the treacherous and endlessly slippery slopes of postmodern relativism, where one uncertainty leads into interminable others, it is enough to state the three principal arguments and ideas that motivate this paper.

The first contention is that architectural criticism is a productive and creative activity, one that exists in a kind of symbiosis with the practice of architecture. In this conception, architectural practice and architectural criticism are mutually enriching and informing, neither is superior nor subordinate to the other, and architects and critics have the potential to engage in productive dialogue and learn much from one another. This conception has arisen in opposition to a more common and pervasive idea, of architectural criticism as a parasitical activity, one that preys and subsists upon the 'real' activity of architectural practice. This, in turn, appears to be yet another manifestation of the ancient theory / practice dichotomy, in this case slanted towards practice as the 'true' activity of architecture, and theory or criticism as its inferior, even actively stifling, shadow. Needless to say, a practicing architectural critic such as the author would and does have an interest in conceiving of criticism as itself a creative intellectual practice, one which is distinct from, but closely related and complementary to the actual design and construction of buildings. This, then, is the first motivation of the present paper: to argue from a position that conceives architectural criticism and architectural practice, or theory and practice more generally, as both parallel and intertwined.

The second contention – related to the first – is more specific to architectural education. Once again it springs from the author's circumstance as an academic teaching the history / theory of architecture to students who see design as the centre of their architectural education, and who often remain unconvinced, or at least unenthusiastic, about the value and relevance of history / theory to architectural practice. In converse to this, the author's assumption is that the field of history / theory does have an intrinsic value in architectural education, and that it has a particular role in informing architectural design. Furthermore, the author sees architectural criticism as having a unique potential as a pedagogical tool, one which can produce and demonstrate tangible links between history / theory and design. This would be one way, to state it baldly, in which the field of history / theory could clearly justify its own existence in the eyes of students, and demonstrate its own relevance and usefulness. Ideally, architectural criticism has the potential to synthesise and thus reconcile theory and practice, by attending to actual architectural objects, bringing theory to bear in their interpretation, and locating them in a broader

conceptual as well as physical context. More generally, a critical sensibility also has the potential to challenge assumptions and received ideas about architecture, and assist students in developing other ways of thinking about its fundamental meaning, purpose, and nature. This, then, is the second contention: that architectural criticism appears to have the potential to break down certain established dichotomies and divisions – between theory and practice, between 'abstract' conceptual approaches and 'concrete' design solutions, between history / theory and design – that continue to condition architectural education.

This leads to the third and final contention upon which the paper is based, and the one that is most philosophical or ethical in nature. One of the aims of architectural education must surely be to develop practitioners who are reflexive, as well as being skilled and knowledgeable, and this reflexivity surely has a compass more broad than solely that of the architectural profession. On this level, the desire to produce critical thinkers would be one of the few vestiges of an older, less instrumental idea of the role of higher education. Rather than simply training in skills or imparting a body of knowledge, such a universal model proposes the university as the site where a populace of responsible, critical, engaged citizens is educated. Such citizens would not necessarily believe everything they see, hear, or read; they would question, doubt, and search for hidden assumptions, motives, and ideologies. They would recognise that the world is far more complex than some would have us believe, and that things are almost always other than what they seem. This is the same general project as the one initiated by the Frankfurt School's particular mode of critical theory – as Theodor Adorno might have it, it is the *responsibility* of the individual to criticise, to look beyond the *Schoene Schein* or beautiful semblance, in order to expose and acknowledge the ugly realities that often lie beneath its glassy surface. The third and final assumption of this paper, then, is that the inculcation of critical thinking in students is something of an ethical imperative. If it is to be truly effective, however, this critical sensibility must not be completely instrumentalised into a specific means-end relationship – it must involve more than the ability to make judgements about 'good' and 'bad' architecture, and encompass the ability to question and challenge the very meaning of architecture itself, along with every other manifestation of culture.

2. Reflections on critical teaching practice in architecture

All three of the general assumptions articulated above have served to inform the author's teaching practice, at the level of subject content, design, and assessment. For the purposes of this paper, two different subjects, taught (respectively) in the first and final year of a two-degree Bachelor of Architecture program, will serve as cases for discussion. Specifically, the author experimented in both subjects with assignments that were based upon critical examination and writing about architecture. The dramatic differences in the ways students were able to respond to these assignments at the beginning and at the end of the architectural education process is illuminating.

The first subject was called 'Thinking, Reasoning and Argument', and was a first-year core theory subject designed and taught by the author in collaboration with another academic. This subject, as its title would suggest, aimed to lay down certain basic understandings about, and skills in, academic thought. During the course of the subject, the students were asked to undertake a linked series of writing exercises, which built upon one another and were designed to train academic writing skills as well as practice critical thinking. The first was a basic exercise in library research, the second was a comparison and textual analysis of two pieces of critical writing about

the same building, and the third was an exercise in the research, description, interpretation, and criticism of a local building of the students' choice. The first two assignments were completed reasonably well. The third assignment, however, was handled spectacularly badly.

Almost without exception, the students' responses to this third assignment followed a common pattern: the chosen building was represented as the best and most important in the history of world architecture, and the architect was lauded as an inspired genius. This was accompanied by a loose melange of description (some original but mostly borrowed – and in many cases plagiarised – from other sources) and unmitigated praise. The students' work was also marked by the widespread belief that beauty is the essential criteria for judging success in architectural design, and given that beauty was widely considered to be in the eye of the beholder, then any one person's opinion was as valid as any other. This extended further into the idea that there was no such thing as absolute architectural quality or value, such as might be measured on an a-historical, canonical scale – all opinions were equally valid, and all judgements were therefore relative. Interestingly enough, and seemingly in contradiction to these other approaches, many of the students also appealed to authority, to an 'expert' opinion, in the apparent belief that there was a single correct *interpretation* of the building, or a 'right' answer about its *meaning*, even if not of its *value*.

Now while the poor standard of the assignments was dismaying at the time, there is much that can be learned from reflecting on why it was handled so ineptly. Of course, if there is any 'blame' to be apportioned, it must be borne squarely by those responsible for designing the assessment in the first place. But nevertheless, it is worthwhile to examine some of the many possible explanations for the students' responses. First and most obvious would be the fact that the students had not yet, in their first semester of study, developed the vocabulary and terminology to adequately represent architecture in writing. As the assignment was originally conceived, it was thought that an emphasis on individual, phenomenological experience would allow students an entry point to writing about architecture by de-emphasising the physical object, for which they had not yet developed a descriptive lexicon. But even though the assignment strongly emphasised such subjective experience, this was largely avoided by the students, who seemed to regard it as a 'soft', insufficiently rigorous, and above all 'biased' approach to architecture and the criticism thereof. On one level this simply illustrates a more general cultural bias towards the concrete object, and the prevalence of formalist approaches in the current journals. But more than this, it appeared that for many of the students, the inability to describe architecture was in fact merely the symptom of a larger inability even to *observe* it. There is an interesting chicken-and-egg debate here about which comes first, the vocabulary or the discernment, but the important thing to note here is that rather than adapting and applying what terms and expressions they *did* know from everyday life, many of the students turned to secondary sources, to descriptions written by others.

It is perhaps not surprising that, given that they had not yet developed a range of other frames of reference through which architecture might be critically approached, the students generally fell back on aesthetics, and particularly the category of beauty, as the primary indicator of the building's success. But what was startling was that so few of the students even seemed to realise that there could be other ways of critically approaching a building, or at least ways other than the opposite extreme - functional analysis. The idea that the critic might set their own terms of reference and criteria for assessment did not emerge at all and, risking extrapolation, it seems that this too would have been regarded as unacceptably 'biased' and 'subjective'. A general concern with 'truth', and the 'right' answer thus sat very uncomfortably beside an idea

of beauty as the primary criteria for judgement. Ultimately, it is clear that these first year architecture students had not yet developed the knowledge, skills, or critical apparatus to engage in primary architectural critique.

This was certainly not the case in another subject taught in the same year, which was a mixed fifth and sixth (final) year elective theory seminar entitled 'Reading and Writing Architectural Criticism'. The vast majority of the students who chose this class had been working in architectural practice for most of the period of their education, and many for much longer. They had, in other words, considerable practical experience and understanding of the profession of architecture. They had also, presumably, been exposed to a range of architectural precedents, and had a general knowledge of the buildings and principles that comprise the architectural canon.

In this subject, students had the option of choosing two of a range of eight possible assignment topics. One of these, which was by far the most popular choice, was a written comparison and contrast between two works of criticism about the same building, in light of their place of publication, voice, tone, implicit and explicit content, and other contextual issues. The second most popular choice was the option of engaging in primary criticism of a building, whether local or international, which placed it in some broader historical, theoretical, or cultural context. Now the fact that these two assignment topics were so well subscribed is interesting in itself. But it is even more illuminating to consider the differences between the ways these were completed by final year students in comparison to the similar (although of course much more rudimentary) assignments undertaken by the first year students.

The first point to note is that the advanced students had clearly learned enough to know what it was that they didn't know. Or even if they didn't know *what* they didn't know, they knew *how much* they didn't know. They had developed a critical sensibility, through experience, which allowed them to see beyond the myth of design as inspiration, and into the complications, compromises and complicities that actually condition the design and fabrication of architecture. For this reason the students were very shy of making absolute critical judgements about the work of their apparent 'superiors', both because of a feeling that they didn't yet know enough to be authoritative, and because they saw the importance of being fully informed about a project before formulating any critical opinion. They had an awareness that the 'weaknesses' of a building may have been forced upon the architect by circumstances beyond their control. They had a definite sense, not only that one must be an expert to write criticism, but that the critic stands in judgement of the work, and that it is not appropriate for students to take this role – that this would, in other words, be hubris. Perhaps not surprisingly, the students were much more comfortable with making quantitative analyses of buildings – measuring greenhouse gas emissions, for example, or energy used in heating and cooling – than they were with qualitative judgements. But here was perhaps the most significant difference between the first and final years – while for new students a concern with objectivity and truth meant they distrusted judgment as biased, the graduating students saw that there are multiple ways in which a judgement can be formulated, and were concerned with the internal consistency and rigour through which such a judgement is made.

During the seminars themselves the class worked through a series of 'reading between the lines' exercises, where students were asked to gauge the target audience, level of commercialism, tone, voice, and critical/commercial objectives of a number of international architectural journals based upon cues other than just their content. This exercise was particularly effective in pointing out the many

interpretations that a given building can produce – all of them possibly valid – and the idea that criticism is also a constructive act that requires creativity and interpretation on the part of the critic. This in turn raised the idea that it might actually be part of the critic's role to foreground the artifice, to make explicit their own frame of reference (their expertise and knowledge, as well as their prejudices and preferences) as part of the critical process. By pointing out the myriad of ways in which a building can be approached – the many critical and interpretative tools and structures that can be brought to bear upon it – and by raising questions of voice, rhetoric, and the use of the personal pronoun, architectural criticism was revealed to be rightfully and *properly* subjective, that is, relative to each individual critic. This seemed to be the real reason why the students were reluctant to engage in primary architectural critique – it was not only out of a desire to avoid false pride, but also because, having worked in the profession and seen how complex and difficult and mediated by contingency architecture really is, the students were unsure of the correct criteria for analysis. They were anxious not to choose the wrong frame of reference, and thereby to end up, as it were, criticising an apple for not being a banana. And this, in turn, was one of the principal complaints that students levelled against the ways in which criticism was employed and formalised in their education – particularly in the design critique.

Conclusions, directions, and potential for further work

The contention was made at the beginning of this paper that architectural education, and the studio teaching system in design in particular, is imbued at every level with criticism. Perhaps the most obvious example of this, or at least the most spectacular, is the formal, juried design critique. Despite the rather sadistic overtones that the 'crit' can sometimes take on, and despite the clashing of egos that must frequently be negotiated, the ritual still holds a central place in architectural education. Its performative element, for instance, should not be under-estimated – it is not only the students' public presentation of their own design, but the public performance of criticism that makes the design crit such an important punctuation point in any student's architectural education. It is this performative element that makes the design crit so cathartic - both so unusual in educational circles, and so confronting. Ultimately, however, the unalterable fact is that the jurors are sitting in judgement of the work, preparing to decree it acceptable or unacceptable according to the (sometimes rather ill-articulated) criteria of the project at hand. It is this element of judgement that limits the possibilities of the design crit as a critical medium. It leaves little room, for instance, for in-depth interpretation and contextualisation – the necessity of concentrating on whether the design is *good* can tend to exclude consideration of what it might also *mean*.

More than this, the design critique in itself does not necessarily facilitate a critical capacity in the student. Many students seem to approach a design crit as a kind of lottery – if the ideal scenario is that the student already has a good idea of the strengths and weaknesses of their scheme, and that the jury merely reinforces these, the worst-case scenario is that the student enters the crit with no idea what will happen, and is surprised either pleasantly or unpleasantly by the turn that the jury takes. To a certain extent this scenario comes about because students sometimes perceive – either rightly or wrongly – that their teachers and guest jurors are biased, capricious, fickle, and easily swayed by irrelevancies. But it is also a result of the fact that observing criticism in action does not always translate into the ability to enact it first-hand, whether in relation to the student's own work or to that of others. Ultimately, then, the design critique is limited, as a critical medium, by several factors. Aside from the inevitable lack of time brought about by large classes and limited studio periods, and aside also from the limits of human endurance of even the

most seasoned juror, the fact that the jury is ultimately sitting in judgement of the work is itself limiting. In a sense the traditional design critique, even given its long tradition and hallowed place in architectural education, can be seen as a rather blunt and unsophisticated instrumentalisation of criticism.

It may well be true that architectural education is imbued at every level with criticism, but this can still be enacted on a very shallow level, which rests upon a series of unchallenged and indeed unexamined assumptions. Architectural education could perhaps benefit from less *explicit* and more *implicit* critique – namely in the design of studios and project briefs themselves, and in the way such projects are approached. In order for architectural education to be truly effective in producing critical thinkers, then, it is necessary that a critical sensibility be imbued at a much deeper level than simply that of judgement, and the ability to discern 'good' from 'bad' architecture. In the pursuit of truly reflexive practitioners, a critical sensibility must be present in the formulation of design projects and design briefs themselves. Critical thinking must be folded throughout design education, and not just serve as the icing on the cake.

Examining the foundations of architectural thought and belief, the grounds upon which our understanding of the discipline and the practice are based, does not necessarily mean undermining or 'deconstructing' these beliefs. It may simply mean acknowledging that such received ideas do exist, and acknowledging that they have a history and values of their own. But if the existence and nature of these underlying beliefs is not recognised, then it is surely true that an unexamined architecture is an architecture only half realised, in every sense of the word.