Destabilising the Studio – teaching architectural design in China

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ABSTRACT

Cooperative ventures in international education frequently involve transitioning students from one learning paradigm to another. This is particularly the case in joint programmes in architecture where lateral thinking and creativity, often assumed to be characteristics of western education, encounter a more didactic and teacher-focussed educational model in developing countries. This paper explores the strategies that have been employed in joint programmes in architecture developed between an educational provider in New Zealand and China.

Many Chinese students are accustomed to an education which emphasises not only the technical aspects of the discipline but also encourages them to generate responses to architectural problems based on a formulaic understanding of fundamental typologies. In order to prepare them for a more lateral and exploratory educational experience in the west it has proven necessary to first destabilise their understandings of the design process before introducing them to design studio projects typical of Australasian architecture programmes.

This strategy described in this paper has been developed over 6 years of experience in teaching joint courses in several universities in China, the students from which may transition into a programme in New Zealand and thereafter work globally. It is founded on an appreciation of work undertaken by the anthropologist Gregory

Bateson and others on how people model their experiences of the world and how the adoption of new models can enlarge human creativity. Derived from this a major subtext to this project is to develop in the students' minds the conception of architecture as a humanistic discipline by replacing a model which emphasises the centrality of technology and 'given' solutions with one concerned with a less certain and more flexible, more intense and more personalised involvement with the questions which the next generation of architects will need to answer.

INTRODUCTION

Teaching studio is invariably based on particular cultural paradigms. While these may often be suppressed in terms of the styles of architecture to which students are exposed or may be minimised in the social, technical or environmental content of the programmes inherent in the building types students learn about, the method of teaching is likely to be based on models that are founded on inherent cultural understandings. The current paradigm in western architectural education tends towards a lateral, exploratory model of investigation which at least claims to try and

develop individual insights and which allows and sometimes requires considerable latitude of students in their investigations and in their outputs.

All studios in architectural degree programmes set out to achieve generative change – change that enables students to learn how to create new behaviours and skills for themselves, and perhaps also for others with whom they work. This paper describes how work done in the field of psychology from the 1960s has informed a particular set of studio projects delivered to architecture students in China. It explains how relatively 'normal' Australasian studio projects are prefaced by projects specifically intended to destabilize the Chinese students' pre-existing understandings and to replace them with a conviction that architecture is unpredictable and open-ended. The principle behind such exercises is that a measure of uncertainty can be psychologically positive.

I. THE PSYCHOLOGICAL BACKGROUND

In the 1950s and 60s Gregory Bateson (an anthropologist, social scientist, linguist and semiotician who died in 1980) developed a series of multi-disciplinary projects on theories of human communication. His central premise was the interconnectedness of mind and nature and he was interested in what he called "the wider knowing which is the glue holding together the starfishes and sea anemones and redwood forests and human communities"[i]. It was this glue, he thought, that enabled us to make the kinds of connections from which we develop our "almost miraculous knowledges and skills"[ii]. The objectives of his projects were similar to the objectives which a creative teacher might follow in the design studio. Bateson was aware that all objective reality is interpreted through communications. There are multitudes of different possible interpretations which match any given objective reality and any interpretation is smaller than the objective reality. Establishing a model therefore diminishes the reality it is intended to represent in a sequence:

Reality ≥ Experience ≥ Interpretation of experience

In Bateson's conception each of us has a number of different ways or models of representing the world, and we base our thinking and behaviour on these models rather than on reality. His work has generated a significant following among psychologists and others. Thus Grindler and Bandler write [iii]:

"The therapist will work to create an experience with the active, creative participation of the client. This experience will be directed at the way in which the client has organised his perception or model of the world which is blocking him from changing. This experience will lie outside the limits of the client's model. The process… will provide the client with a new model and a new set of choices."

II. TEACHING AND LEARNING

Teachers can work with students so that they learn how to do things: to learn what the teacher knows. This behaviour, common in courses on technology, is useful in enabling the students to acquire competence in some of the things the teacher can do. In other situations teachers theorize situations, as in classes on architectural theory or perhaps history: they may tell you what they or others believe but they don't tell you how to do anything. Another and sometimes more powerful technique is described by psychologists as modelling, where students are encouraged to be like the teacher in some way or other [iv]. In all of these cases there is little interest in what ever might be the 'real' nature of things, or in what might be 'true'.

Psychologists explain this situation as follows:

"Human beings live in a "real world". We do not, however, operate directly or immediately upon that world, but rather we operate within that world using a map or series of maps of that world to guide our behaviour within it. These maps or representational systems, necessarily differ from the territory that they model... When people….experience… dissatisfaction, the limitations which they experience are, typically, in their *representation* of the world…."[v]

It is therefore the representation that must be adjusted, and expanded, before the way a student operates within the world of architecture can be transformed. This is necessary because the map of architecture which is transmitted in the Chinese education system appears 'real' because it is pragmatic. For students to operate effectively in an international context it needs to be changed to one that transcends pragmatism and is therefore more powerful, providing new choices in an unpredictable future: and the process of change may usefully start with a period of disconnection which destabilises previously-held beliefs leaving a clear field for new maps to be formed.

Aldous Huxley writes of the need to select the information that one will use to form a representation of the world, and the fact that the representation must not be mistaken for the world itself. He says [vi]:

"The function of the brain and the nervous system is to protect us from being overwhelmed and confused by this mass of largely useless and irrelevant knowledge, by shutting out most of what we would otherwise perceive … and leaving only that very small and special selection which is likely to be useful… What comes out at the other end is a measly trickle of the kind of consciousness which will help us to stay alive on the surface of this particular planet.. (but) this bedevils his sense of reality , so that he is all too apt to take his concepts for data, his words for actual things."

The task of the teacher of architecture in China is to initiate a process of re-envisioning and redirecting attention. But to do this the grip of the 'known' must be broken: there needs to be a shock, a period of destabilisation, before a new focus can be found. It seems important to not try to prescribe what that new focus might be: it is important to avoid uncritical assumptions that one's own way of operating is necessarily superior to that of one's hosts – even when they act in ways which might support such a belief, i.e. by choosing to enrol in a foreign programme of study. But equally freedom to hold different opinions is not the same as saying that there is no standard by which student work might be judged: but the judgement comes later.

It is important to state that this project or series of projects is not offered to support and sustain a belief that human creativity, still less the canons of architecture, are chaotic or unknowable, needing to be subject to an endless series of individual experiments bearing little or no relationship to the each other. On the contrary it is intended to set students on a path of development which will enable them to address the essential issues of architecture in the confidence that knowledge about them is, within limits, achievable. This particular exercise is not founded in a search for the freedom which, in John Gray's words, "is the freedom of inordinacy, an hubristic compound of antinomian individualism with a sentimental humanism which the Greeks would have despised had they been decadent enough to be able to imagine it." [vii]

III. ARCHITECTURAL EDUCATION IN CHINA

This project runs within the Chinese system of architectural education. This itself is set against the background of the tremendous construction boom in which an 'international' style of architecture has become ubiquitous throughout China.

There are over 100 architecture programmes in Chinese universities. They operate on a standardised model which is prescriptively delivered, with a set basic curriculum often repeated from year to year with little flexibility afforded to staff or students to construct new design projects. Considerable time is spent on 'non-architectural' topics such as physical education, military training, political philosophy and foreign languages, thus diluting the architectural content of the programmes.

The Chinese word for 'architecture' is *jianzhu* which also means 'building'. This lack of distinction between architecture and building reflects the understanding of architecture common in many Chinese universities, one which leads to an emphasis on the control of technology and the understanding of regulations. Relatively little time spent

in developing the abilities of students to think creatively. This is in spite of the fact, noted by Stanislaus Fung[viii], that the number of western journals available in China "has grown considerably". He continues to observe that "Chinese architects, students and teachers... (have) no common understanding of the purposes of architectural criticism". Where there is an attempt at 'conceptualisation' it is frequently banal and superficial (a phenomenon which is, of course, not unknown in the west). The didactic nature of Chinese architectural education is displayed in the fact that lectures may occupy up to 32 hours a week of students' time and studio design classes are not introduced until the second year of study and even then occupy no more than 6 hours a week. As a result there is little space for self-directed work or for reflection. Moreover students look to the lecturers to provide answers to problems, rather than to open them up and to invite speculative propositions about possible answers for discussion and exploration. It is no coincidence that one of the most commonly used books in Chinese architecture schools, and in offices too, is a massive sourcebook of architectural elements – apartment plans, doors, windows, balconies, roof scapes, etc. - which is sifted through by the inept in order to assemble projects.

It is unusual to see staff and students cooperatively discussing the conceptual, ethical or speculative issues associated with a design, nor for designs to be initiated to address local or topical concerns.

IV. THE JOINT COURSE

The Joint Programmes in architectural education within which the studios described here are offered were established in 2002. They operate in 4 Chinese universities: in Nanchang, Jinan, Shenyang and Beijing. The Joint Course involves Chinese students joining at the beginning of their study but not enrolling in NZ courses until the third and forth years. Projects are of one semester – 16 weeks – duration and are co-taught, with New Zealand staff responsible for a two week opening phase and then returning for another two weeks for an interim final crit just before the students complete and submit. The projects are graded separately by the New Zealand staff and the Chinese university.

V. THE PROJECTS

When the Joint Course started the projects offered were identical to those taught in New Zealand, and some were lifted wholesale from that curriculum. While this approach does acclimatise students to overseas patterns of teaching it was found that students took some time to adjust to western approaches to architectural education. The programme was therefore adjusted to provide for short projects offered a year earlier, in the students' second year of study, in order to introduce them as early as possible to the idea that architectural design was a lateral process which might usefully have unpredictable outcomes: in other words, that anything was possible. This is in deliberate contrast to the situation observed by Fung, and confirmed by the author of this paper, that "Chinese architects and teachers (have)

mistakenly (adopted) an image (of) knowledge as a 'massive tome' in which topics are distributed into static categories".[ix]

The first such introductory studio, designed to destabilise students' existing patterns of thought and to introduce them to a new model of learning, was the Piranesi studio. It was offered to students in their second year – but as studio design is not started in Chinese arch schools until then these students are design beginners. But they will have had some exposure to the local educational system and a process will have started described by Hannah Arendt: "The sameness prevailing in a society resting on labour and consumption (is) expressed in its conformity..."[x]

Students are first given a short lecture – about 20 minutes – on Giovanni Battista Piranesi and his work. They are shown examples of his drawings concluding with a series of images from the Carceri series. At this point they have no idea what they'll be doing or what the purpose of this, their first contact with western education, will be. Piranesi and his work are invariably new to them all.

The students are then asked to form themselves into pairs, once again without explanation. Each pair is then asked to designate one member as a "P person' and one as an "S person". Again there is no explanation of what these terms mean and requests for explanation are good humouredly declined. By this stage the students are puzzled but engaged by this process which appears to them like a game and quite unlike their previous experiences of learning about architecture. But the real pedagogical purpose is destabilisation, the attempt to create a *tabula rasa* devoid of familiar signposts: to start engaging with architecture from scratch.

Copies at A2 or A3 size of the drawings from Piranesi's Carceri series – large internal perspectives of imaginary prisons - are then distributed, one to each pair. They are then given 2 days to complete orthogonal drawings of the plan (by the "P" person) and the section (by the "S" person), both corresponding. This exercise is invariably entered into with enthusiasm, especially once initial issues such as the size of paper (large) and the medium (4B pencil, charcoal or crayon) are resolved.

After two days the projects are reviewed before the whole class. A supplementary brief is then delivered to the students: they have the two remaining days to redraw their work but now to populate their drawings in accordance with a programme of their choice. Prisons are generally excluded and Piranesi's etchings are transformed into hotels, fun fairs, warehouses, libraries and museums. At the end of this period the projects are again reviewed and a general discussion on the class work and on individual projects concludes the exercise. It appears to staff that the students have acquired a much higher level of energy in approaching their work, that they have at least started to become inspired by the experience that their own ideas can creatively inform a project and that conceptualisation necessarily, and delightfully, precedes resolution. Feedback from students is uniformly positive: from staff it is more muted, perhaps because it constitutes such a departure from the projects that they are used to. It may be also that staff find it harder to abandon the typical local model than their students do.

Alternative projects are in the process of development for delivery this year. They will be based on *Invisible Cities* by Italo Calvino and students will engage in a similar exercise to the Piranesi studio working in pairs to draw plans and sections of the environments described in this book.

VI. CONCLUSION

As well as seeking to shake students from a complacent acceptance of the educational model to which they are becoming accustomed projects such as this seek to move them to a higher level of activity. In terms of the schema of the philosopher Hannah Arendt this involves moving from labour, through the work of making (which is still bound by external necessity) to finally engage with the freedoms inherent in action unconstrained.

"It is in the nature of beginning that something new is started which cannot be expected from whatever may have happened before. This characteristic of startling unexpectedness is inherent in all beginnings and in all origins."[xi]

This paper leaves a number of significant issues unexplored: the ethical justification of implying that one model is better than another and the equally broad question of liberty versus control in education; the fact that destabilisation can be damaging as well as creative; the 'proper' balance of knowledge acquisition (which may occur within a closed process) and the development of creative skills; and the fact that projects such as the ones described above are generated with similar motivations in the west already, without the cross-cultural subtext of this situation.

In this experiment we may perhaps find an echo of John Stuart Mills' argument that "an education, established and controlled by the state should only exist, if it exists at all, as one among competing experiments, carried on for the purpose of example and stimulus, to keep the others up to a certain standard of excellence." [xii] Studio projects like this are intended to open a view of another model, perhaps better suited to the development of architectural thinking (however that may be defined) but perhaps just different. Being aware that there is a choice of models is almost always a good thing, especially when the discovery turns out to be both surprising and delightful.

REFERENCES

[i] Bateson, G., *Mind and Nature: a Necessary Unity*, Bantam Books, ..., 1980, p.

[ii] Ibid. p. ...

[iii] Grinder, J., and Bandler R., *The Structure of Magic II*, 1976, Science and Behaviour Books Incorporated, Palo Alto, California, p.29.

[iv] See Stevens, G., 'Struggle in the Studio: A Boudivin Look at Architectural Pedagogy', in *Journal of Architectural Education*, 1995, pp. 105-122.

[v] Grindler and Bandler. p. 3.

[vi] Huxley, A., *The Doors of Perception*, Harper and Rowe, New York, 1954, pp. 22-23.

[vii] Gray, J., *Gray's Anatomy: John Gray's Selected Writings*, Allen Lane, London, 2009, p.66.

[viii] Fung, S., 'Orientation: Notes on Architectural Criticism and Contemporary China', in *Journal of Architectural Education*, 2009, pp.16-17.

[ix] Ibid. p. 17.

[x] Arendt, H, *The Human Condition*, University of Chicago Press, Chicago, 1998, p. 214.

[xi] Ibid. pp177-178

[xii] Mill, J., S., *On Liberty and Other Essays*, Gray, J., (ed), The World's Classics, Oxford University Press, Oxford, 2009, p.118.