
ARCHITECTURAL EDUCATION AND DESIGN STUDIO TRADITION: CRITICAL PEDAGOGY AS PRACTICE

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ABSTRACT

Educating an architect is as complex as any other professional. The student, apart from design itself, learns many other relevant things and composes all that knowledge in the design studio, which is the most tested pedagogical practice in architectural education. The design studio is dominated by the design tutor, and this power structure has resulted in a particular dynamics that makes the student to treat the designer-trained tutor as a mentor. This 'guild-culture training', in which the student is not free from the biases of the mentor, silences the creativity of the student. The observation of a lack of self-styled approaches to design among the students is a result of this silenced studio tradition, which is defined as the research problem. By testing the strength of critical educational theory as a way of resurrecting the mystique of designing, we aim at contributing towards the development of comprehensive pedagogical tools for architectural education. We, taking samples of students from different years, have used observation, participatory observation and unstructured interviews as methods to collect data. The students are encouraged to perpetuate the intellectual and cultural biases of their colleagues and tutors in the learning critiques, peer critiques, design workshops, lectures, and peer discussions. Facilitating the making of a reflective practitioner, who sets own norms and objectives, is our objective, and this has proven to be a neutral process of learning in order to reform design education.

Keywords: *Student, profession, culture, value, and world view.*

BACKGROUND

Design studio has been the most widely used tool in teaching architectural design. It is a fact that the design studio has the potential to become the ideal experimental lab, in which both tutor and student could be facilitated with the learning and sharpening of a design process. However, the usual practice has proved otherwise as the practice-oriented design tutor often telling the student of design solutions, rather than preparing the grounds for the student to develop his/her own solutions. By presenting several alternatives, the tutor could use his/her experience to argue that the solutions put forward by the student would fail. This approach to design teaching is termed by Sri Nammuni (1991a:22) as- if I were you approach- for tutor assuming the role of a student to solve a design problem¹. As a result, there is no facilitation for creative thinking or for the development of a design process, but continuing of the ideology developed by the tutor who often is a successful practitioner. The design studio thus becomes a guild-culture training to turn the student in to an architect through enculturation rather than education. The loss of creativity in students' work could largely be attributed to this education. This is most noteworthy in the case of a diversifying student population².

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- 1 Sri Nammuni claiming this as a process of cloning rather than teaching notes, "In the cloning approach, we continue to treat students as apprentices teaching by example through giving of alternatives; if I were you solutions".
 - 2 Our survey finds that they represent different social, economic and cultural backgrounds as they come from different parts of the country.

In the conventional sense and application, the design studio has become a process of *knowledge transfer without new knowledge construction*, thus becoming as threatening as a cloning process. Teaching is transmitting knowledge but how far this higher education is relevant to the community and economy is not clear as the assuming of roles by the tutor does not facilitate student's quest to sharpen his/her own way of thinking. The tutor, without preparing the grounds for the student to find solutions, gives solutions himself/herself. The design teaching as such has become a non-research based education, heavily shaped by an embedded epistemology and social relationships that are often irrelevant to the said community and economy.

If we are to reform the design studio, in which students learn by doing, to educate architects with diverse skills, one has to note its capacity as an experimental laboratory. At the Faculty of Architecture, University of Moratuwa, we use the studio as the primary tool to teach design with added features, such as learning critiques, peer critiques, design workshops, lectures, and peer discussions. This is a response to our observation of the degradation of diversity in the design coursework. We have tested the new tool in which the student's work is discussed by teachers as well as his/her colleagues for an extended time. This revised mode of design studio may put immense pressure on students to come up with more rationalized solutions-rather than satisfying his/her tutor since now s/he is to defend against a larger crowd. In addition, the student is expected to philosophically-underpin his/her solutions thus questioning the process of making decisions rather than the solutions in order to defend among the peers. As a result, knowledge construction seems to take place, education dominating enculturation. At the same time, the power structure maintained in the studio is notably changed thus shattering the hidden dynamics that silences the student.

Learning critiques, which also act as a continuous

assessment of the design work, notes the identified shortcomings of the design studio as they are more than mere design studio. The workshops draw supporting knowledge on the specialization in design development. The peer discussions and critiques as well as group work provide the students with knowledge and confidence. As a whole these steps facilitate the process that turns the student into a self-critique of his/her own judgments. We find a notable improvement in their intension to develop an own design process. This research was carried out to scale the success or otherwise of these tools in order to further develop our way of improving the design studio- the mostly tested tool to educate future architects.

CRITICAL PEDAGOGY

Giroux (1993:81) notes that pedagogy is central to any political practice that takes up questions of how individuals learn, how knowledge is produced, and how the subject positions are constructed. In this context, pedagogical practice refers to forms of cultural productions that are inextricably historical and political. This assumption means a wider context of culture and society, and at the same time, empowering individuals of diverse backgrounds, achieving the development of human capacities and social betterment. Our very reason to fancy the critical pedagogy lies in its potential to empowering the student. The educationist shall understand the particular background of the student, thus bringing the cultural evolution of the student in to the centre of discussion, in order to direct the particular knowledge construction and to understand the particular knowledge transfer. This is becoming rather difficult in the context of student population representing a wider cross section of the society³. A design studio that promotes group work facilitates the formation of peers, thus opening up a forum for the students to identify their own values and appreciate others'. As such, this prepares the grounds for a broader pedagogical tool that assists the development of a design process,

3 The difference in the value systems among our students at the University of Moratuwa is rather wide as the gaps between rural and urban are rather great in the developing world.

over design solutions by bringing the evolved value systems into the centre of decision making.

Critical pedagogy is shaped by different schools of thought. These can be categorized in to two different approaches in order to clarify the distinctive nature of critical pedagogy. One is to look at how educational theories relate themselves to the wider socio-cultural context in terms of doing research and what the research is about. The other is to categorize the approaches to see the different educational theories posit the researcher in relation to the object of the research. The education shall adopt the student to the *world*, not just as a *good citizen* but more as a *critical citizen*: who has the ability to critically assess the status quo as well as the self disposition in that status quo to contribute towards its transformation. The design studio of guild-training, in which the tutor dominates the thinking process of students, may not successfully nurture the critical citizen. The particular notion that design teaching means informing the students how the tutor designs him/herself does not support the knowledge construction for failing to grasp the said wider socio-cultural context. The student may become a clone of the teacher and his/her designed built spaces will be rather inconceivable even for him/herself since the student, being forced to accept an *assumed-culture* in the process of enculturation, leaving behind his/her own way of diversifying architectural space.

Some critical pedagogues are concerned of the social vision in education, while the others are interested in specific pedagogical contexts and their instructional practices. Once this is applied in Sri Lanka, where gaps between teacher and student are rather significant, developing a practice that facilitates the empowerment of students is vital. Sole practical engagement in the individual and collective struggle for emancipation and transformation is not sufficient for this purpose. In an architecture school where we deal with a social enterprise, theory and practice play a key and an interdependent role. The educationists shall thus be informed of the

individual and the student-society both, and without the transformation of the both the knowledge construction may not take place. The design studio of one-to-one teaching hence shall be supported by group tutoring in which the tutor becomes a member of the group to facilitate this transformation. The critical pedagogy becomes highly illustrative with this respect and goes on to discuss the need to empower the student through education.

By looking at the epistemological foundation and view of the world that they construct is another way of looking at the present-day educational theories. There are three different approaches, concerning the knower and the known that can be distinguished as positivistic, interpretive, and critical. The positivistic views the world as *out there*, thus demanding the knower to gain objective knowledge; the knower is separated from the known. The interpretive approach argues that what we see about the world depends on how we look at the world, and as such strengthening the links between the knower and the known. The critical theory notes that both positivistic and interpretive fail to take into account that all research is based on a certain set of values, and therefore it may reinforce or undermine the status quo. The critical theory demands the research on education and pedagogical practices to be of self-reflective of its own presumptions, to have a moral imperative, to assess knowledge in its own context in which it is produced, and to be aware of its potential contribution to the transformation of the society towards a greater justice and emancipation. It is clear that the critical educational theory is committed to emancipatory transformation and social action, not only to categories facts. A critical educationist is therefore engaged in a *praxis* in which we take responsibility for history and for a vision of the world⁴. An educationist who follows the critical theory supports empowerment of each student. The peer discussions allowing the student to mingle with his/her colleagues as well as with the tutor without a strict power structure facilitates the building of self-confidence in the student.

4 Mc Laren & Hammer, 1989:50

Critical pedagogy also argues that educational theory and practice must take a definite stance against oppression, inequality, and injustice in the society. We encounter different issues in Sri Lanka with the student intake is increasingly becoming non-urban yet their architectural education discourses are more urban-oriented. They may be aware of their architectural heritage but, at the university, they are trained to value these from an alien point of view, which may be called *universal significance*. These students may not have had any firsthand experience of the built spaces they are required to design at the school. As a result, they look up to the tutor who assumes the role of the knower. The tutor, thus becoming a mentor rather than a facilitator as the field is totally unknown to the student, may not be benefited through teaching either. The students would not expect him/her to know anything new, and therefore the tutor is hardly challenged by the encounter with the student. Education seems to have lost its primary intension - knowledge construction⁵.

Our premeditated system makes the tutors to be somewhat critical pedagogues who are ready to learn too. As Eble (1988:9) notes, "Learning and Teaching are constantly interchanging activities. One learns by teaching; one cannot teach except by constantly learning". The design studio run by these tutors assimilate the students into the new society without challenging the students' own socio-cultural backgrounds and forcing them to accept the one that is claimed by the tutor as suitable for him/her to practice the profession. In these design studios the students learn to tackle the oppression, inequality and injustice. Their voices are heard, and their abilities to critically look at the world that they are about to enter are strengthened. This has resulted in a subtle power structure that allows the knowledge construction in both tutor and student. This improved strength to look at the status quo critically lays the foundation for the

facilitation of more creative and diversified architects.

EMPOWERING THE STUDENT

The critical theory notes the role of the school as producing and reproducing the status quo of culture and society. The question of how we constitute ourselves as human beings is central to the theoretical discussion of critical pedagogy. If modernism saw constituting ourselves through the acts of will alone, critical pedagogy informed by postmodernism, sees that human beings are partly constituted by their consciousness and partly by the conditions which are outside their consciousness⁶. Although the structural determinants are understood to have a significant role in an individual's life by limiting and shaping human action, an individual's task is not to passively adapt to the status quo. Among the tasks of critical pedagogy is to increase our understanding of how the self is constituted and to develop a critical language that enables us to both identify and create ourselves as active subjects in history and distinguish between our real needs and the manufactured desire⁷. The design studio should be improved to facilitate the tutor to become a critical pedagogue, who facilitates the aforementioned transformation.

Critical pedagogy recognizes that the empowerment of the oppressed as essential. Our challenge has been finding ways and means of empowering the different expressions of students, who may necessarily of different races or ethnicities but of more delicate social and cultural differences. As such, the tutor may not clearly understand the different cultural capital at his/her dispose. This is why we also discussed this issue with the tutors and time to time arrange seminars and discussions among them of design teaching. For example, we often discuss the size of a design tutoring team, time period, and the form of tutoring- mostly based on a continuous assessment basis⁸.

5 Many former tutors who quit design tutoring confessed to the fact that there were slim chances for their development, and that they were basically bored with teaching the same thing for years.

6 Mc Laren & Hammer 1989:49

7 *Ibid* p.49

8 The course book that is given to the tutors at the beginning of the academic year details out the breakdown of the continuous assessment.

An educationist of critical pedagogy would ensure the non-existence of oppression. As such, s/he understands the external as well as internal oppression, and how they shape social situations and communicative interactions. The most significant problem had been the backwardness of the students resulted by their lack of knowledge of the subject that is largely urban oriented. In Sri Lanka, where about 40% of the population lives in urban areas, our student population is largely rural⁹. As the teacher often pretends to represent urban and cultured in terms of his/her behavior or language or the appreciated value system as urban, the lack of knowledge of the discourse prevents the students from participating in discussions. The students tend to believe or forced to believe that they attend the design studio to receive knowledge from the tutor who knows everything. Our recent improvements find alternatives to this one-way traffic of knowledge through peer reviews, and group works. This also generates the feeling that there are opportunities to express their views so that there is no oppression. The opportunities given to the students to present their assignments and precedent studies in the class steadily strengthen their self confidence. This empowerment of the students, without losing their socio-cultural views and their venturing into a new era of their life, allows them to be as innovative as they want to be¹⁰.

It is important to note that the moral imperative of critical pedagogy is also a motif in discussion about the position, possibilities and responsibilities of an individual within the school. Our research data establishes that the oppression can be tackled through class room arrangements and through means of discussions among smaller groups. We also have observed that the group assignments bringing better results than the individual assignments. These new techniques did surface a wider array of diversity of opinions among students, thus preparing the grounds for the resurrection of mystique of creativity in architecture. Our test results suggest that the tutors who practice such group classes are often

popular among the students, and these students perform well. More importantly, the tutors have informed that they enjoy the design studio of this nature as they are forced learn more and more new things. On contrary, those students of the design studios that are dominated by tutors often lack self confidence and do not perform well at the examinations and afterwards. In addition, these tutors also find it hard to continue with their teaching assignments as they find it more or less like a dead-end.

If the tutor is ready to accept the existence of diversities and to appreciate the fact that the knowledge base is changing with the socio-cultural diversification, the empowerment could be easily accomplished. The issue would be the balance of power rather than completely surrendering the teacher's role as the catalyst of student empowering. The traditional transmission of knowledge or the pedagogy of disconnection is based on fundamental divisions of the elements: actors, processes and contexts. The school and the student are often disconnected from the world. What the student learns is predefined before the pedagogical interaction begins. The student's past, background, values, needs, etc. may not have any relevance. In this pedagogy of disconnection, the student is mostly uprooted from his/ her self in order to be *cultured* to become an architect. In the conventional one-way flow of knowledge, the disconnection between the actors is not only evident but also determined. Here, the student is not empowered at all but just given a knowledge which may not be relevant to his aspirations.

Critical pedagogy defines an alternative approach- the pedagogy of belonging. It is characterized by the connection between central activities, actors and contexts. School is seen as an integral part of culture and society. The student has a voice of his own, continuously evolved with his maturing. The school belongs to the world, student's past and future to him/her and the mutual communication makes

9 This situation has aggravated at the University of Moratuwa with more and more students joining from rural schools.

10 Empowerment of the self without regard to the transformation of those social structures which shape the very lineaments of the self is not empowerment at all writes Mc Laren (1988:76).

the student belonging to pedagogical interaction as an active agent. Our attempt has been developing a closer relationship in which both the teacher and the student as active partners in knowledge construction and transfer. This alternative approach will assist empowering both partners through educating each other.

EDUCATION AND SOCIETY

The key difference between traditional and critical educational theories is in their understanding of the relationship between education and society. Education is an agent of social and cultural reproduction. *Reproduction theory* is concerned with the processes through which existing social structures maintain and reproduce themselves. The main concern of the theory of reproduction is in how dominant classes are able to reproduce existing power relations in an unjust and unequal society¹¹. The idea of reproduction is based on the observation that educational research is not value-neutral activities, and therefore do not promote value-neutral knowledge. Hence the knowledge transferred represents the dominant society. The two main domains of the theories of reproduction are social reproduction that is concerned with the relationship between schooling and capitalist society in terms of the consequences of schooling, and cultural reproduction that deals with the school curricular and practices as a cultural field which mediates to reproduce class culture¹². Importantly, one's belief in producing an architect through a guild culture or through enculturation is the essential area re-emphasized by the critical theory. Our intensions have been to use the design studio as a key for the reproduction based on the cultural capital possessed by the student. We have directly dealt with the existing power structure of the design studio so that the student society becomes more vibrant and diversified. The strengthened student society has allowed the student to grow on his/her own, or develop his/her own design process.

The *Production Theory* on the other hand, recognizes the role of the school in social and cultural production. The theory does not see this process as solely determined by material and ideological structures, and therefore without the possibility for transformation by human action. This transformation is called social and cultural production. As the human beings are not passive subjects but can resist and accommodate themselves in a dialectical relationship to dominant structures, we find the fostering of individual self allowing sharing knowledge among students and teachers. The attempts to accommodate the power of each individual human agent: his / her self-consciousness, critique and action, brings better results in terms of rising enthusiasm among the students and the diverse qualities of their designs. In addition, we have also noted the growing confidence among the students, thus improving their capabilities of gaining the practical training and securing jobs. Their ability to make the correct judgments with regards to improving knowledge itself is a witness to the success of the paradigm shift in our architectural education.

Giroux (1983: 18) believes that it is not only the structure which determines us, but also that we, as agents, are capable of transforming the structure. The school, according to him, is the site where the struggle over production and reproduction takes place, and the power of human activity and human knowledge as both a product of and force in the shaping of social reality. Following his contribution in the name of border pedagogy, we find the means of producing heterogeneous and complex sphere of design teaching. Since these borders are more cultural and social than physical, the role of the teacher becomes clearer and constructive thus letting the students crossing over to other realms. In a Sinhalese-Buddhist dominated student population, we promote border crossing as our intension of demarcating the borders is to encourage critically understanding of the

11 Giroux 1981: 13

12 Giroux, 1983:86

cultural codes of others. The border crossing allows a better assimilation of the student to the world thus turning them into better-equipped professionals. Our attempts is to change the positioning of the student and teacher within the design studio, long-critiques in which students engage in peer reviewing, and group assignments have been introduced to reinterpret the power struggle in the design studio with much success.

CONCLUSIONS: MAKING OF A REFLECTIVE PRACTITIONER

It is obvious that design is a problem solving process. the designer has to be equipped with concurrent knowledge to address the assigned problems with an open mind. Training in an architecture programme through studio can help build an appreciative attitude.

The book *Reflective Practitioner* by Schon (1983) started a lively debate on architectural pedagogy. He argues that the common instrumental understanding of the professional knowledge is that general principles are applied to solve specific problems. However, it is difficult to describe the wide range of activities that a professional is involved in within this instrumental definition. It is not adequate for describing how professionals actually process and use their knowledge in a context that is inherently instable and not ideally organized. The lack of research in the field of architecture is the other concern, with the means of knowledge construction becoming rather uncertain. One may thus argue that the design studio can easily be the site of knowledge construction and transfer. We note that it is essential to reinterpret the design studio as a site of equal partnership of students and teachers to achieve this goal, thus empowering the student at the same time. The change of location of teacher and students as well as engaging in some projects together, the teacher could inspire the student but not necessarily mentoring.

Also, the gaps between the concept of professional knowledge and actual competencies required of practitioners in the field can be bridged up through such a reinterpretation. The

teacher of the design studio thus cannot be a pure academic, but more like an all-rounder in cricketing terms. The role of the educationist could then change towards the making the so-called reflective practitioner, who would quickly adapt to the situation using his/her own shared knowledge. This quality of the educationist, who brings his/her own experience as a practitioner, would be the force of inspiring and as such transferring knowledge in learning-by-doing.

The relevant professional knowledge is including something to enable an architect to be reflective in indeterminate zone of practice in an effective way. Schon argues that these can be ideally learned in a 'practicum', which is a setting where students learn by doing projects that stimulate to a certain extent the real-world practice. For Schon, the tradition of architectural studio is an example of epistemology and pedagogy which demonstrates the substance of his theory of reflective practice. Since architecture is a profession rooted in the artistry of designing, a competence all professionals shall possess, the best place for the training of the reflective practitioner or the practitioner who reflects-in-action is the design studio. The pedagogy of learning-by-doing in the design studio facilitates the best possible context for this type of training. The need to understand the power struggle and to modify the existing one-way learning system may be changed to face the uncertainty and the unpredictability of the world- thus enabling the student to reflect-in-action.

The day we understand our role more as a curator of a flower bed, watering, fertilizing and taking care of the plants, and appreciating their flowering, rather than fixing our own flower on those plants, the mystique of architecture could be resurrected. The addition of new features has been a result of this way of thinking. We have witnessed an empowered student body, development of diverse design process, and more creative designs.

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