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Factors affecting Critique in Architecture Design Studio: Evidence from Regional and Urban Institutes of Pakistan

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Abstract

Critique is essential to studio pedagogy, yet it lacks standardized guidance, with practices varying among instructors, institutions, and accreditation frameworks. To explore factors influencing critique practices in architecture design studios across regional and urban institutes, a three-day faculty development workshop was conducted with participants from six regional institutes. This involved presentations, role-play, group exercises, and follow-up interviews to gather insights from academics, practitioners, students, and administrators. Participants identified four key groups, including students, faculty, jurors, and administrators, that contribute to tensions regarding feedback style, timing, assessment, and studio environment. Enhanced role clarity, empathy, and structured briefs fostered better engagement and learning. The findings highlight context-specific dynamics in a South Asian setting. A flexible framework is recommended, detailing learning objectives, staged feedback mechanisms, faculty-practitioner coordination, critique documentation, regular faculty training, and student involvement to strengthen pedagogy and align with accreditation standards.

Key Words: Design Critique, Architecture Design Studio, Architectural Education, South Asia, Regional Institutes, and Urban Institutes

Introduction

At the heart of architectural education lies the design studio, where critiquing is the main pedagogical tool. Despite its importance, there is limited structured programming aligned with the critiquing process. Student feedback and observations of the faculty critiquing often highlight a communication gap in expectations. Based on the historic tradition of the Ecole des Beaux Arts and its atelier model, freedom, competition, and variety were key components that structured the mode of imparting design education (Carlhian, 1979). Several methods of instruction have been inherited from this to the contemporary architecture design studio. Variations in teaching methodology of studios are adapted based on the knowledge and experience of instructor(s), curriculum and program structure of the institution, and context of the student body. Academics and practicing architects, in different proportions, engage in juries, critiques, guest lectures, and informal exchange based on project works. Public and private sector architecture institutes as well as engineering and art-based design schools, vary in their approach to imparting architectural design. Differences are observed in time allocation, supporting the variety and quantity of practical and lecture-based courses. With multiple variations, the design studio remains a common thread across institutions, with critiquing as a central tool for all. Through critiquing, instructors impart their approach to design knowledge (Adams et al., 2016). They emulate designers' ways of thinking (Budge, 2016), as well as presenting client types for students in the process. They connect theory to practical knowledge in the studio. Thus, they provide a framework in which young designers develop a professional identity (Oh et al., 2013).

Literature Review

Studio education is described by Schon (1984) as a 'reflective practicum', that is, the studio is a learning environment that encourages action, analysis, and reflection on one's own work. Such a reflective practicum as a mode of learning is used by multiple art and design disciplines, as well as case-based social work (Hokanson, 2012). Factual knowledge gain is not the main agenda for studio education as in other reflective practicums. The central efforts are learning the skills of developing expression, learning by doing, analysis, synthesis, judgment, and creating justification for ideas.

The architecture studios involve project-based work on complex and open-ended problems, catering to diverse issues. They are aimed to encourage the use of precedent and holistic thinking, creative use of constraints, with representation as key through visual communication tools (Kuhn, 2001).

Critiquing settings vary with the number of students, public and private settings, and formal and informal sessions. Individual desk crits, group crits, informal peer review, and interim reviews are major settings for critiquing in the studio, while the final review or formal presentation jury is evaluative in nature, where an external jury evaluates the student work on its creativity and applicability.

Ranging from critique types, communication modalities, delivery types, and the delivery itself (Oh et al., 2013). These methods are employed in the context of different design phases, while remaining conscious of individual differences, knowledge scales, student responses, design artifacts, and learning goals.

Through the different critiquing sessions and settings, the student is expected to develop his/ her design understanding, relate theoretical and practical aspects of individual design, while exploring innovation and out-of-the-box thinking, a scoring factor among the jury. 'Out-of-the-box' criterion, however, carries a leverage of personal interpretation and aesthetic opinion. Its understanding and explanation vary across the board from students, academia, and professionals with their differing educational backgrounds and styles of teaching. Interestingly, in his publication, 'Architecture of the Absurd', John Silber (2007) elaborates on the 'absurdity in architecture' when built structures lack purpose and are celebrated for boldness. Some architecture precedents recognized for their boldness are not necessarily 'absurd' because they meet user requirements, functional necessities, and clients' demands. Some others may be called absurd or gimmick due to attached theoretical jargon, which may not fit the description of an actual building or may increase the cost of construction unnecessarily, considered befitting to 'innovative approach'. Attempting boldness in architectural design requires students to be motivated and inspired, to recognize opportunities in the design context.

Critiquing is a process of coaching that helps students develop a 'design thinking mindset', steering through trivial and non-trivial aspects. The process of questioning, probing, and directing aims at empowering students to think and learn independently and construct their own opinions about design (Carlhian, 1979; Goldschmidt et al., 2014). While students tend to become the audience within a studio learning environment, it is important to encourage and support their non-passive role, which can be determinant of the way the studio progresses (Oh et al., 2013).

Westerman (2006) and Yanchar (2015) prescribe that the studio may be seen as a social practice. Taylor & Sobel (2011) write about how when students experience something that they recognize as good, it can allow them to define themselves as good practitioners, within the context of the cultural framework(s) that exist there (pp. 19–21). As an ecosystem, the studio may be understood as a space where its users rely on each other for knowledge, and hence, all are equally empowered (McDonald & Michela, 2019). Thus, a space of dialogue nurtured by its instructors

may emerge to allow healthy interaction among peers and faculty. Power equations of instructors need to be balanced, since assessment of the design process and final outputs are major contributors to this tilt. Individual critiques are vital in the qualitative development of independent thought among students. For the students' self-cultivation, the interpersonal relationship between the studio instructor and student is vital (McDonald and Michela 2019).

Sensitizing students to their built environment, to appreciate and understand the constraints of construction, is also a prerogative of studio teaching. Moral goods taken from the studio environment are debated by academics to include the attitudes and behaviours of compassion towards people, in the studio and outside, clients and users alike. Terms like studio ecosystem, studio ecology, and studio culture used in research papers point to the impact of the studio environment, its openness, inclusiveness, flexibility, and ownership of place on the design development process of students. The creation of a larger, holistic atmosphere is positively tolerant, logically analytical, and relatable. The studio may be described as an ecosystem dependent on the environment and the various forces acting on it (McDonald & Michela, 2019). Managing and balancing the demands of students' development and instructors' self-cultivation may be seen as ways in which the two facilitate and complement the process of design development.

Critique can act as a point of access to share clues about their 'world of significance', perhaps through talking of everyday experiences (McDonald & Michela, 2019; Yanchar, 2015). The activity provides insight into the instructors' world of significance.

The architectural education system has evolved from an apprenticeship system to a studio-based learning environment. The design studio was seen as a 'learning laboratory where skills and values' could be linked to 'a spirit of open inquiry'. The extent to which this ideal is practiced in different architecture schools varies. Architectural education and the culture attached are ascribed to four aspects that shape it (Glasser, 2000); the studio, the faculty, the administration, and the profession. Adhering to modernist principles in varying ways, studios may not always maintain the spirit of open inquiry. Untrained faculty, working their way with limited understanding and practice in the field, may adhere in different ways to open-ended studio inquiry methods. Administrative frameworks, including admission and accreditation processes, may further impact the emerging studio dynamics. The following paper explores these aspects through an interactive and qualitative method.

Material and Methods

A three-day interactive workshop was organized and attended by 30 participants, including faculty members from seven educational institutions of Karachi, three of which belonged to the public sector and four to the private sector. Two participating institutes were from Jamshoro. The workshop was structured to address the challenge of critiquing design work for younger and mid-career faculty members, visiting faculty, and interested young architects. It aimed at analyzing processes, procedures, and teaching philosophies used in design studios to produce outputs based on benchmarks and expectations. The design brief and evaluation criteria usually outline these with clarity. In terms of geography and curriculum, the academic institutions represented by workshop participants were diverse. The mode of discourse was based on presentations, relevant research articles, and discussions among participants and practitioners.

Later, follow-up feedback from participants and additional qualitative interviews were conducted with professionals teaching studio, Head of Architecture Departments, and students in their final years to gauge their viewpoints on the role of critiquing in design learning.

The participants were divided into three-person groups, with each group consisting of people from different institutes, with varying levels of prior studio teaching experience. Reading material shared with participants was contemplated and reflected on. Using this, each group developed a framework for understanding architectural works. This was presented by all groups

and became the subject of discussion for refinement. The developed framework by the groups was then tested to critique the assigned architectural works of chosen architects, producing a variety of work. Interestingly, the frameworks suggested by the faculty were already in question with some of the famous architecture works, particularly postmodern architects. An intriguing observation, it pointed out that frameworks cannot be rigid but require flexibility based on student work and approach.

Responsibilities of faculty members in various architectural programmes are completely varied. The creation of design briefs in accordance with syllabi, selection of suitable sites for anchoring studio assignments, student briefing, design process supervision, upkeep of periodic student evaluation, record-keeping, awarding of sessional evaluation, and its justification constitute common routines. These demanding responsibilities call for a variety of abilities, credentials, experience, and intelligence. According to several observations, teachers with the correct attitude and demeanor have been observed to have a positive impact on the overall studio outputs. In contrast, worse than ideal outcomes may occur when faculty members fail to live up to any of the criteria. An open attitude to learning and positioning oneself to a directed rigor results in improved performance. The next phase of role-playing involved the group participants opting for different roles. The three-member group took up roles of student, juror, and observer. A previously completed student project was taken, examined, and then presented by a student role-player to a juror, while the observer noted the exchange and shared these in a presentation as the rapporteur. This created an insightful discussion. An intriguing discussion on studio pedagogy by eminent architects, working in academia in prominent positions, became the concluding session of the workshop. These opened up the administrative challenges and boundaries constructed by the overarching frameworks to design teaching. The opinions of the many stakeholders created an interesting and thought-provoking discourse.

Results and Discussion

Students, instructors, and the design studio environment comprise three key factors that make up the design studio ecosystem. In hindsight, the discussions by participants held at the workshop identified varying approaches and challenges that impact the studio teaching and learning environment. Four major groups were clearly identified were Academics, Students, Practitioners, and supporting administrative institutional frameworks that approach studio teaching in differing ways, shaping the studio ecosystem. Participants included 19 full-time faculty members, 4 from public institutes, 4 from private institutes, and 11 practicing architects involved as part-time design faculty. Peer architects and experienced teachers holding important positions in architecture institutes joined in for discussions at different times over the three days. Apart from these, qualitative interviews added insightful details and descriptions, interpretive knowledge, and facts to the material gathered from workshop discussions and observations. This segment aims to put forth the viewpoints articulated by the different groups, working toward studio outcomes.

Figure 1: Introductory lecture – Faculty Development Workshop

Figure 2: Group Discussions and deliberations

Figure 3: Presentations by groups

Figure 4: Senior Academics and professionals' discussions

Academics

Architecture design studios in private and public institutions hinge on studio coordinators, who may be academics, that is, full-time faculty from institutions, or part-time faculty with added key responsibilities. The instructor's skills, knowledge, experience, attitude, and methods all have an impact on the studio culture. The experienced instructor, a professional with extensive knowledge and experience, can guide the learners well, but their overwhelming remarks can also stifle their ability to think critically. When it comes to attitude, the instructor may be sympathetic or harsh, impatient or patient, or they may critique too much or too little. Sometimes, a confused student can be guided by a sympathetic teacher who listens patiently and responds with logical reasoning and objective analysis, but a harsh, impatient teacher may stifle a student's natural growth. The amount of feedback a teacher gives depends on the student's effort in the work. Nevertheless, the teacher must allow students independent exploration in work, directing but not imposing personal interests on students' designs.

Belluigi (2016) identifies numerous roles played by architecture design supervisors in the design studio. The master apprentice model is outdated, with further development of teaching environments fostering critical thinking skill development and individualistic expression. Workshop participants, including full-time faculty, spoke about the challenge where time management at different stages is important to structure the studio; at the same time, it can be taxing for slow graspers and artistically minded students to expand and scale ideas. Grooming creative ideas and harsh critiques may work against some students' confidence, while for some, it gives an alternate perspective. Academic faculty clearly focused more on their own capacities to articulate and inspire, and were skeptical of harsh attitudes sometimes adopted by external jurors that may damage the confidence of students. Full-time faculty were observed to be more conscious of the student psyche, stage of youth development, and sensitive to the impact of critique on students, while in contrast, visiting faculty and practicing architects highlighted the need for giving students a reality check, to question their motivation levels and their drive to learn design. This was an interesting debate, where each justified their grounds.

Critiquing was agreed to be a process where the instructor carries the essential responsibility for being a better articulator of ideas than the student. Prominently, the instructor's tasks were articulating design issues for different projects, encouraging students to observe details in the ordinary and expand its potential to an extraordinary, clearly indicating the various stages of design for the student to rationalize its breakup as scheduled and to cope with tasks assigned in the project. It was articulated that the complex process of critiquing must be understood through the lens of the multifold context. The context includes the design context, stage of the project, the issue it aims to address, and its articulation; the perspective of student understanding is another of its dimensions. The critiquing structure may be seen to carry two wider considerations: first, architectural design components, and second, the context of addressing design.

The design studio coordinator thereby structures the studio, as well as allows students the freedom to develop their ideas within this. This fine line of enforcing positivity and inspirational talk within a time-bound learning exercise requires a clear articulation of the assignment objective. Clarity in the learning objective can allow for better discussion and dialogue between student peers. Peer-to-peer interaction, dialogue, and sharing of research and ideas can inspire students each other for design and self-growth.

Qualitative interviews highlighted the methods in which academic design faculty structure their teaching methodology through the mediums of a) a detailed design brief and schedule; b) regular class discussions, apart from critiquing individually. These two methods reinforce project expectations, process segments, project preambles, and design skills. Open discussions allow students to share reviews, confusions, questions, and the process of critical thinking, reinforcing their understanding. They also allow the instructors to reinforce expected benchmarks and semi-defined stages. Additionally, digital media like Google Classroom and WhatsApp groups are commonly used for sharing information, important references, and prompts for discussion.

The critique on design is impacted both positively and negatively by the environment of the studio, changing roles between instructors and jurors, individual desk crit and jury, level of formality, and response of jurors and students. Desk reviews also prepare students to justify their work clearly before they face a jury. Interim reviews as pinups also aim to enhance this process. Thus, alternating desk reviews, internal and external jury presentations, together holistically aim to develop students' design and presentation skills.

The majority of instructors act as jurors in other design jury settings. Some of these juries may be intellectual or may be the complete opposite. Juries can try to stimulate real-world demands on working architects in addition to teaching students about verbal and visual presentations. Juries often do not proceed as expected. They might take a different course, either appreciating and praising too much or being hostile and ineffective. Charged dialogues can sometimes be highly engaging and have a good conclusion. It can offer students a useful learning environment. The instructor is there to guide the design development process, whereas the jury discusses the final product (at any level). The juror's task is to foster a culture of active listening and constructive debate about design, suggesting improvements, alternative approaches, and future directions. The jurors may be empathetic and help the pupils feel at ease, or may be intimidating; the trend for the latter has, however, been discouraged in design education in theory as well as in practice. To guide the student to a grade in accordance with the effort and talents displayed graphically and verbally, critiques and juries result in a grading scale.

Students

The approach, recruitment of students, curriculum design, and emphasis on engineering or art-based courses all differ among institutes. These impact the caliber of work produced by each institution. The context of the student body, a varying mix of youth of different educational, socioeconomic, and ethnic backgrounds, presents opportunities and challenges to studio teaching. Students coming from rural or different areas speak different local and regional languages that express architectural vocabulary in different ways. These pose a challenge in understanding and communication of the basics in teaching. Peer learning fills the gap in such cases. It may be straightforward to communicate with a group of students who have similar interests, but they won't have the same variety of experiences that come from peer learning. Peer learning, encouraged in studio settings, allows students' exploration of design ideas through sharing viewpoints.

Among the issues related to the student body are the number of students in a studio, their skill level, and their aptitude for learning and sharing, particularly for public sector institutes. Larger batches are challenging to handle, and individual feedback can't be given to every student, but with good organization, such students can gain better knowledge through peer

learning and sharing. The students' basic exposure, skill, and aesthetic level establish the studio's bar. The different types of students bring different dynamics to the studio that may be seen as an opportunity. Often, students struggle in some mediums of communication but take up others naturally, expressing their ideas. For students coming from non-artistic backgrounds, particularly engineering institutes, exploration of the medium can lead to better and expressive outputs.

While prescribed drawings are introduced to students, the challenge in design critique emerges from questioning the quality of work produced over quantity. Multiple methods used for design development; digital representation of process work can guide students to develop individual response to critique. Switching back and forth between modes of communication (diagrams, models, sketches, etc.) helps students in design development. It was unanimously agreed that digital media allow students from non-artistic backgrounds and skills to better represent their ideas. The challenge however remains in how students try to show their individuality in these. In qualitative interviews with students on how critiquing helps, and challenges faced, they unanimously agreed that one-on-one critiques helped them in questioning, sharing multiple ideas and developing their design with clarity, 'creating new knowledge and new way of seeing the project'. It 'helps to clear the air' and evaluate students' design position. Students highlighted difficult critics to be challenging to communicate with, those that are strongly opinionated and fail to see their perspective. They preferred critics who listened well. Initially, when design is ambiguous, students fear critiquing as a grading process and mentioned that clearly articulating the usefulness of critiquing as a process in developing design would allow them to develop their work better, openly and freely. Some appreciated having references, case studies, books as takeaways from crits.

Practitioners

The master apprentice model supports the practitioners' viewpoints when conducting a studio. Practitioners who teach tend to believe they are masters of their work and are serving through their engagement in the education process. They are usually less aware of the student psyche and less conscious of the impact of their words on young minds, even though they have been through this. They take up a position of authority, given their experience of design journey, education, and exposure. From this position, they critique student work. Similar to an architect's site visit, when working to create a good project, their approach in the studio is to direct the process to raise the bar, to push the standard. This may inspire many students, while confusing others. Working habits, time durations are questioned, and the means to end are revised to achieve a better end. With these attitudes, practitioners enforce critical thinking. Their reference to examples from the field provides students with glimpses of real-world practice.

Coordination between full-time faculty and practitioners is imperative for better liaison and studio output. In public institutions, the ratio of full-time faculty is higher, while practitioners are limited. In private institutions of architecture, this is vice versa. Either way, the role of practitioners in the studio critiquing process is an important one, since it brings in many practical stories of successes and failures to the studio pool of knowledge. Creating a healthy discussion and promoting dialogue on objectives and design issues of projects, ranging from academic knowledge, cases documented, and experiences from practice, can all drive toward a determined studio output.

Administrative frameworks

Critiquing as a tangible process faces several challenges regarding its understanding and recognition by administrative authorities dealing with higher education management. In Pakistan, three distinct entities regulate higher education, including architectural studies. Higher Education Commission (HEC) Pakistan regulates and facilitates architectural education for its mandate. It ensures quality assurance in degree programmes through multiple means. Curriculum review, assessment of faculty members, and review of teaching processes are some factors commonly employed in examining the status of architectural education. Like many other

agencies, HEC prefers quantifiable evidence pertinent to architectural studies to examine its performance. Critiquing is a process that is often not fully recognized for its value addition to architectural studies, especially in honing the capacities of pupils. Administratively, critiquing is reflected in the form of credit hours, contact hours, and course-plan descriptions. The contents of these prescriptions often miss the intensity of interaction between pupils and studio faculty, the inputs in the form of exposure visits, precedence studies, or contributions of invited peers to the studio. These review requirements are somewhat similar to the review of the national council or Pakistan Council of Architects and Town Planners (PCATP), the accreditation body that manages architectural education in the country. A panel of architecture academics and professionals is drawn to review architecture degree programmes, with the PCATP team conducting an on-location review. A report is submitted to the accreditation board. Upon final review and scrutiny of submissions through objectively verifiable indicators, the programme status is established.

The significant contribution of the critique process in several stages of studio work remains intangible. The contact hours spent in studio critique, course files, and other documentation maintained by studio teachers (including individual progress remarks and critique), and their performance progress are some evidence that quantify the existence of the critique process. Accreditation bodies like PCATP assign more importance to outcomes than the critique process.

Administrative mechanisms, including the presence of groups at different levels, work on the output evaluation of studio results in architecture. Correlation between student intake and studio outcomes was pointed out in interviews with senior administrators to be limited. The structured architecture teaching methodology leaves little room for unexpected outcomes. Simultaneously, it is agreed that student intake prerogatives may improve student potential for better professional outcomes. The administrative frameworks defined for the processes involved have the capacity to absorb the requirements of studio critiquing and jury process. These frameworks can be translated into processes after well-deliberated sequences of internal bodies.

It is often agreed that all the input invested in the critique process does not reflect in the design studio outputs. There are several reasons for this outcome. One, the pupil engages with the instructor through critique but rigidly follows his earlier approach without objectively reviewing the design critique. This situation is often caused due to errors of judgment, inability to properly grasp hints and feedback, as well as a communication gap. Two, the student may acquire incomplete and unsustained input from the instructor on his assignment and end up with an inappropriate direction in his design development. And thirdly, the thematic pre-occupation of the instructor strongly directs the pupil to follow the critique as precepts, developing his/her work in near total follow-up of the critique. This approach adversely affects creativity among students and limits their capacity to individually undertake design assignments. Judgement of outputs may also be seen as rigid. It is important for a studio to trigger the design process if a student shows progressive capacity for designing, which in itself is a good indication for gauging design potential. The process, thus, carries more weight than the product itself.

The crucial relationship between studio teaching content and methods was emphasized. When this connection is clearly established, communicated, and understood, the studio critiques and outcomes demonstrate positive results. Class discussions and references shared may show larger viewpoints on major design issues to highlight justification for teaching methodology, along with prompting multi-scaled directions for design development.

Recognition of the value of design critique takes place through pupil and peer-to-peer feedback. Students generally appreciate incisive criticism of their work, whenever done with the intention of improving the quality of design work. While the tenor of conversation may vary from case to case, sharp and insightful critique by instructors and visiting peers is generally valued by the pupils. There are various procedures to document this feedback. Design studio evaluation by course instructors at the term-end is one option to conduct an inclusive feedback session in a discussion. Broad feedback, including the views on critique, can be recorded. These comments

are often discussed in departmental meetings and appraisal sessions. Pupils also extend written / online feedback following the institution's policies and procedures. However, such feedback is used for management and administrative considerations, and not for qualitative studio-teaching improvement.

Conclusion

Within the design studio's social system, the participants play an important role; the instructors structuring the design teaching framework, and the students explore, and the practitioners bring current and practical knowledge to the studio, critically reflecting on existing practices. The student-teacher interaction is a two-way process where learning is interwoven through critiquing and discussion. Administrative frameworks are peripheral and discreet to the studio learning environment.

Critiquing processes are intangible aspects of the studio; however, studio outputs, content of discussion of juries indicate the quality of design teaching. The complex process of critiquing could be better recognized and appreciated for innovations in the multi-dimensional context, where the design context and student level are main considerations. Although critiquing is imperative in the process of design education, should it become part of the formal procedural structure to gain better recognition, and if so, how? While some structuring may be seen as important for achieving better results and design outputs, the need for studios to sync and address the context of student body intake in the process may be highlighted. Developing criteria for representation and individualistic expression in more than one language is an example of this.

The larger contextual responsiveness of architectural education is an important issue to address, as this can improve students' confidence in their own identity and aspirations, which need not be defined by Western ideologies. The relationship between student intake and studio outcomes is speculative and is an aspect that requires further investigation.

Recommendations

Design studio ecology is governed by studio participants, project, and methodology, besides its general physical environment. Clear articulation of project requirements, expected outcomes, process stages, and the teaching methodology helps students to comprehend the studio culture and system to connect with it as a learning opportunity. Creating a positively engaging, thriving environment for exchange and development of ideas in the studio lab with interactive student participation and peer dialogue makes for a studio culture. Display of empathy, rational analysis, constructive debate, and active listening contribute to studio culture. The studio environment offers space for expression, articulation, openness in attitude, and empowerment reflected in student outputs.

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