REFLECTIVE PRACTICE AND EXPERIENTIAL KNOWLEDGE IN DESIGN EDUCATION/PRACTICE

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ABSTRACT:
In the realm of art and design; experiential knowledge could be considered as an essential part of design education as well as in design practice, as a teacher and a practitioner of design the author claims that a student of design should obtain two types of knowledge during his design education, the transferable knowledge and the experiential knowledge. These two types of knowledge would significantly construct the creative ability, innovation and ethics of a professional designer.

In her paper Kristina Niedderer stated that many researchers in art and design and related fields perceive experiential knowledge or tacit knowledge as an integral part of their practice¹.

One of the most important devices that generate the experiential knowledge in both design teaching and practice is Reflective Practice.

Thompson argues that reflective practice is the process of drawing out learning from our experience, to be able to distil useful learning points that will guide our future practice from our current or recent practice activities².

In his practice-led research thesis the author also investigated Reflective Practice as one of the most applicable structured self-evaluation methods that could be deployed in evaluating the design process.

This paper endeavours to address the importance of Reflective Practice in generating the Experiential Knowledge in both design education and practice through two case studies that explore the author methodology in design teaching as well the reflections evolved through his own practice with full analysis and outcomes.

Keywords: Reflective practice, experiential knowledge, tacit knowledge, Creative Design, transferable knowledge, innovation

INTRODUCTION TO REFLECTIVE PRACTICE

The Arts and Humanities Research Council’s definition of research provides a distinction between research and practice.

‘Creative output can be produced, or practice undertaken, as an integral part of a research process but equally, creativity or practice may involve no such process at all, in which case they would be ineligible for funding’

Similarly the role of the PhD has been discussed in the AV/PhD seminar series funded by the AHRC and reconciling the difficulties of the objectifying the subjectivity of the practitioner has become part of the PhD process, has led to protocols and regulations applied widely in practice-led research.

Paul Clark found his PhD project ‘approached performance from both the position of the theorist and that of the practitioner’. Other disciplines to employ reflective practice have informed the debate.

One of the most recent studies in the topic from a different discipline is that of Thompson’s The Critically Reflective Practitioner. In her book Thompson argues that:

‘A significant element of reflective practice is the process of drawing out learning from our experience, to be able to distil useful learning points that will guide our future practice from our current or recent practice activities’.

However, Thompson’s main contribution on the topic is about the critical reflective practice. She argues that reflection on practice should be combined with a critical position from the practitioner himself. Thompson says that:

‘Working in an uncritical, non-reflective way is a pretty poor basis for professional practice. Being professional involves drawing on professional knowledge and value basis and having professional accountability. Each of these is very relevant when it comes to critically reflective practice’.

Moon defines reflective practice as ‘a set of abilities and skills, to indicate the taking of a critical stance, an orientation to problem solving or state of mind’. And the notion of practice-based research in art education leads Michael Biggs to focus ‘not on outcomes that

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3 Biggs, Michael. 2003, The role of ‘the work’ in art and design research, Practice as Research in Performance (PARIP) www.bristol.ac.uk/parip/biggs.htm Accessed: 2009


7 Ibid, P.162

are simply the product of art classes, or that use art materials, and thereby become labelled as art; but rather on outcomes of socially accredited value.\(^9\)

There are well-established positions about reflection in practice from practitioners such as Donald Schön (1983) and the academic Carol Gray (2004). In his book *The Reflective Practitioner* Schön speaks of reflective practitioners who are not just skilful or competent but "thoughtful, wise and contemplative", whose work involves "intuition, insight and artistry". Drawing on our intuition we do what feels right. It is an emotional response that complements our knowledge and what we understand about a subject, and which enables us to act in a situation\(^10\).

Carol Gray noted that Schön proposes that much of the activities made by professional practitioners are personal knowledge, not usually articulated, sometimes indescribable and that they rely on the improvisation learned in practice\(^11\). As Gray noted recently:

'Schön identifies that the professional's inability or unwillingness to articulate this kind of knowledge has led to a separation of academic and professional practice.'\(^12\)

Gray also suggested that one of the consequences of this separation has been that research about practice has tended to be carried out by other academic research such as art historians, educationalists etc, from an external perspective.\(^13\) This research strongly agrees with this notion, and the reference for that (which has been addressed earlier in this study) is that most of the studies made in murals were not made by professional practitioners, actually they were written by art historians who took it from a historical or a political perspective.

This paper agrees with the previous positions of professional practitioners. However, the author own position within the above-mentioned positions is that the basic knowledge generated through this study is based on the following methods:

- Synthesis of knowledge drawn from the literature gained through the author researches
- Analytical knowledge that has been gained through a number of field research conducted in Italy, Egypt and the UK and also through the analytical study made of a number of contemporary murals in these countries.

Reflection on practice is the main device this study adopts to generate personal knowledge. The reciprocation between theory and practice and the documentation of the process would articulate this personal knowledge. This paper seeks to make this personal knowledge overt.

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\(^9\) Biggs, M., 2003, The role of 'the work' in art and design research, Practice as Research in Performance (PARIP) www.bristol.ac.uk/parip/biggs.htm Accessed: 2009


\(^12\) Ibid

\(^13\) Ibid
and transferable, by describing and analysing two case-studies that would address both the author practice and his design education methods.

Gray supports this position as she argues that:

'Reflective practice, therefore, attempt to unite research and practice, thought and action into a framework for inquiry which involves practice, and which acknowledges the particular and special knowledge of practitioner'.\(^{14}\)

Many studies, books and journal articles have been made to discuss the notion of reflective practice in different disciplines such as that of Thornton’s The Artist Teacher as Reflective Practitioner\(^{15}\), or that of James’s Reflection Revisited: Perceptions of Reflective Practice in Fashion Learning and Teaching\(^{16}\). The common aspect in most of these studies is the robust relationship between reflective practice and teaching. One of the main aims of the current practice-based study is to generate knowledge that could be applied in both practice and teaching of contemporary murals.

This paper discusses the initial thoughts, the on-going process and the final results of two case-study designs made in two different approaches. These approaches enabled the author to possess an analytical reflection on the outcomes of these designs in order to articulate the argument of this paper about the importance of reflective practice in both practice and design teaching.

1.1 THE DEVELOPMENT OF THE DESIGN PROCESS

A case study in the author’s practice

In his PhD practice (chapter 4) the author In considering how to improve the design methods and reflecting on how a contemporary mural might look based on the compositional structures theory\(^{17}\), he noticed that some discarded materials left in the studio (after cutting the cardboards used in previous designs) in their random organization suggested a couple of unique compositions that were coincidently observed. These compositions merited recording. Using a digital camera, these random compositions were recorded and then being rearranged using other materials from amongst the studio contents, such as unfinished paintings or sketches. A series of photos were taken to record each composition made and the outcome of this visual process gave rise to the compositions in fig. 1 series.

There was no intention or specific thoughts about what role these compositions might perform in the design process, but the author was quite sure that they would be more than

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\(^{17}\) Abdelrahman, A,. 2009 Compositional Structure in Mural Design, PhD thesis, Bedfordshire University, UK
useful in the future designs. Reflecting on his practice, the author began a continuous process of recording and analysing critical incidents in the practical experiments to be used in the future. This process has been noted in the author’s Studio Journal and proved to be a significant development in the research and has become an important tool in most of forthcoming practical experiments\textsuperscript{18}.

The photos titled under Fig.1 set show 8 out of about 16 compositions that were developed using the same approach. An analysis of these compositions gave rise to a new visual concept in the author practice, namely the interaction between positive and negative space. This particular concept is commonly used in interior design as well as in architectural theories, as most of the architectural theories are arguing the relationship between positive and negative spaces. This concept has added a new dimension to be considered in the author’s practice.

The idea of making a mural part of the physical contents in the architectural space would attain the ultimate integration between the mural itself as a site-specific piece of artwork and its architectural context.

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\caption{Fig 1A}
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\begin{minipage}{0.4\textwidth}
\includegraphics[width=\textwidth]{Fig1B.png}
\caption{Fig 1B}
\end{minipage}
\end{figure}

\footnote{\textsuperscript{18} Ibid}
This concept was then tested in a practical piece for the MA students’ final show. The exhibition took place in one of the large galleries that has a number of large walls. One of these walls was selected and a series of photographs from various angles were taken. Then a mural design for this particular wall - based on the compositions mentioned. Using Photoshop program the initial design was developed (fig 2), then transformed into a physical state using found materials and scraps taken from the authors own and other peoples’ studios (fig 3). A picture was taken for the physical composition and put back to make further digital enhancements that developed the final design (fig 4).

The pre-made panels that had been produced in the studio were then moved to be installed on the actual gallery wall, where layer panels had been constructed, the negative spaces cut from boards and the various off cuts imply the existence of an absent, 'positive' object. From these the authors constructed a wall with and around ‘negative’ spaces. As a mural painter/designer the author work depends upon the size, shape and surface of walls and in this work he was attempting to effectively make the wall vanish. The main concern was the tension between the internal compositional integrity of the work and the ways in which it related to and interacted with the space. This was partly why the author used ‘negatives’ from which to construct the work. Rather than covering the surface of the wall the author subverted its materiality by completely integrating the original surface within the multiple layers of additional surfaces. In this way the wall disappears into the composition and the surrounding space (fig 5).
Fig 2 the initial design

Fig 3 Picture of the initial design after being transformed into a physical state by using found materials and scraps taken from my own and other peoples’ studios
Fig 4 the final design after being digitally enhanced using Photoshop

Fig 5 the final stage of the mural design (close shot and wide angle) at the MA exhibition, Hat Factory Gallery, Luton, Bedfordshire. 2006

Although the mural seemed to be radical and abstracted, it still retained a classical compositional approach. The viewer would start from a launching point (focal point), which is the circle on the left side, and then go down with the diagonal line that emerged from the triangle and the red area below, and then would follow the path as demonstrated in the diagram (fig 5).
Using installation technique in the previous design was a substantial alteration which gave me the potential to execute the design in a tangible three dimensional state. This gave a unique presence to the mural and led to it being seen as part of the architectural space not just a piece of artwork that had been added to the space or hung on the wall. The author found this technique an expressive medium for extending his long-standing practice of mural design/painting. It also made him start to be much more speculative about the site-specificity of the mural he designs.

This mural was the first attempt to physically test the notion of frameless mural the author suggested in his PhD research, the whole space defines the mural limits which subsequently integrate the mural physically to the space. The deconstructive concept is also presented in this mural; the use of a traditional pictorial composition (with a focal point) in such overlapping approach generates real physical depth rather than the conventional illusionist pictorial space. The overlapping nature of this installation enforces the concept of deconstruction.

The feedback the author had from the audience who attended the exhibition was generally positive. In spite of the variations that each individual might interpret from the visual information available in the mural, most of them perceived it (in terms of its pictorial composition) in a way similar to that demonstrated in fig 5. The author was very keen to ask each viewer where s/he might start to explore the composition and where to end.

Fig 6 A diagram demonstrates the path that would be followed by the viewer’s eye as perceived by actual viewers

Furthermore, one of the viewers commented that the door on the left was often ajar which had an effect on the viewer as it made it evident that this wall was not a ‘solid’ outside wall
but an internal skin. This made the layers more evident. The same viewer also commented that the space in front of the mural seemed to ‘belong’ to it as well as the space behind. This significant observation was a sign of a favourable outcome that this mural has fulfilled its site-specificity.

The author applied the notion of reflective practice on his teaching methodology as one of the approaches that would help generating the students’ experiential knowledge, the author claims that the most significant part of the total knowledge students gain through their art and design studies comes out of their practice where the rest of their knowledge could be gained through transferable knowledge, visual and theoretical researches.

The following example articulates how the author applied the reflective practice theory in his teaching through the mural design course, the example also explores how the student developed one of the mural designs she made according to the knowledge generated through the design process.

1.2 A CASE-STUDY THAT EXPLORE THE AUTHOR METHODOLOGY IN DESIGN TEACHING

This is a case-study that demonstrates the development of a mural design process for a designated wall at the faculty of Applied Arts, Hewlan University, Egypt made by student Sama Medhat in 2012.

The course of mural design at Decoration department, faculty of applied arts aims to provide the students with the essential knowledge and skills that would enable them to develop contemporary Site-Specific mural designs using different styles and techniques of 2D design.

In level 3 final project students are asked to select one of the faculty internal walls to develop a site-specific mural design for it considering all environmental and architectural settings in their designs, all students were asked to encounter the following methods in developing their designs:

- Taking a series of pictures for a designated wall from different angles within the space and then uploading them into the computer.
- Making a set of initial designs (sketches) taking the site of the designated wall into consideration (including the picture plane of the wall). These initial designs also take into account the compositional structure of the surrounding architecture
- Scanning the initial designs into the computer to be digitally enhanced and to be coloured where applicable.
- The final stage was to select the most relevant design that would meet both the visual and conceptual criteria identified for the nominated space, and then to digitally fit the design into the wall and make the final enhancements. These would include: the lighting effects and textures required to emphasise the physical nature of the design.
The pre-mentioned technique would enable the students to test and analyse their designs hypothetically using computer aided programs, which would make it much easier for them to address the advantages and disadvantages of their designs in relation to the architectural and environmental settings, that would subsequently enable them to decide which design would be the most appropriate for the designated wall. In doing so open discussion sessions took place regularly for the students to analyse their works and to articulate the development of their works. Also the notion of self-evaluation was a method the author devised to encourage the students to establish their own criteria in judging their works which would enhance the experiential knowledge to evolve.

Sama was one of the active students who developed a series of successful designs for one of the main building inside located at the centre of the faculty compass. Sama was not quite certain in her initial sketches about what elements she should use or the appropriate pictorial composition to implement (tonal or linear composition) as seen in figure 7 & 8.

![Fig 7 Initial sketches of Sama Medhat's Project](image7.png)

![Fig 8 Initial sketches of Sama Medhat's Project](image8.png)

The notion of site- specific mural was significantly confusing for most students which made them try different approaches to achieve this aspect in their designs. For Sama the issue was to decide how to fulfil the site- specificity aspect in relation to the architectural characteristic of the building which seems to be really poor in terms of its architectural style.
After a number of trials and discussions, Sama developed a series of designs that paid more attention to the composition of the mural as seen in figure 9.

The composition was basically inspired by the architectural and the landscape surrounding and facing the wall, Sama tried to echo the structural elements located around the mural in her composition trying to fulfil the site-septicity aspect of the mural. After agreeing on the composition Sama had to place it digitally to the wall and test the advantages and disadvantages of the design as seen in figure 10.

Fig 9 the initial design, pencil on Paper, Sama Medhat 2012

Fig 10 first attempt to digitally fit the design on the designated wall using Photoshop, Sama Medhat 2012

It was clear enough form the first trial that the composition itself is good and fits the wall in relation to the surroundings; however, the colour scheme used seemed odd and separated from the whole scene. Sama then had to set a new colour scheme for the design and also pay more attention to the landscape around the mural. Through the development of her design, the open discussions, and self-evaluation Sama gained more knowledge and experienced the elements that would make her design more successful. Thus, she retained
the basic composition and transformed the radical shapes into a cityscape as seen in figure 10.

Fig 11 the final design, Gouache on paper, Sama Medhat 2012

Using a different colour scheme and transforming the composition into a cityscape mural, Sama also echoed the landscape surrounding the mural to emphasise the relation between the design and the space around it.

The final step then was to digitally place the design on the designated wall using Photoshop technique to find out whether it fits and fulfil the site specificity aspect or not. Figures 12 & 13 demonstrate the final mural design placed on the designated wall.

One of most effective methods usually used in this course is establishing a studio journal; all students are asked at the beginning of the course to set up a studio journal that would embrace all their works, ideas, researches and insights. The studio journal acts as a live record that demonstrates the student progress during the course and would remarkably preserve all experiential knowledge evolving thorough the course stages.

Throughout the open discussion took place during the course, the regular reviews of the studio journal and the tasks given to the students to analyse their works and the comments made during the discussions, Sama and her colleagues established their own criteria of assessing and evaluating their own works, they also had the chance to address the advantages and disadvantages of their designs. The reciprocation between the theoretical part of the course presented through the lectures and the open discussions and the students practice was crucial in generating their experiential knowledge which was significantly reflected in the development of their final designs.
Fig 12 the final design after being placed on the designated wall, Sama Medhat 2012

Fig 13 the final design after being placed on the designated wall (the opposite angle), Sama Medhat 2012
1.3 RESULTS AND RECOMMENDATIONS

In the context of this study the author investigated the notion of reflective practice in both design practice and design teaching. The main aim was to articulate the importance of reflective practice theory for practitioners and academics as one of the most significant devices in generating experiential knowledge. The two case-studies investigated and discussed in this paper illustrated with evidences Thomson’s argument where she argued that the significant element of reflective practice is the process of drawing out learning from our experience, to be able to distil useful learning points that will guide our future practice from our current or recent practice activities\textsuperscript{19}; hence, the result of the points raised in this paper could be summarized in the followed:

According to the two case-studies discussed in this paper, reflective practice could be classified as one of the most important devices that generate experiential knowledge in both design practice and design teaching.

1. In the development of this study, digital technology and computer aided programs proved to be significant tools that would help in testing and evaluating the design process at all stages.

2. Observation, self-evaluation, analysing the feedback that comes from the viewers/consumers (in case of practices) or from the instructors (in the case of design teaching) are keywords to achieve successful designs in less steps.

This study would also recommend the following points:

1. Further studies in reflective practice in relation to the design teaching are required.

2. As a teacher and practitioner in the field the author recommend that the notion of reflective practice should be studied in the postgraduate level for research students in art and design schools as a powerful source of critical practices.

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