Compositional Structures in Mural Design
Towards a Site-Specific Deconstructive Mural Methodology

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October 2009

A thesis submitted to the University of Bedfordshire,
In partial fulfilment of the requirements of the degree of Doctor of Philosophy (PhD)
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Abstract

Murals have been the formal visual interpretation of the cultural, social and political life of all ages. Throughout they have been consistently combined with their architectural setting, for example, in ancient Egyptian tombs, in Renaissance churches and on the external walls of buildings in Mexico in the twentieth century. This is a central feature of mural painting.

However many contemporary murals do not integrate with their architectural settings, in other words, do not fulfil the site-specificity of the architectural spaces for which they were made. This means that the most important aspect that distinguishes murals from other types of painting is absent.

I studied and analysed a number of murals produced in the Italian Renaissance, Baroque and Rococo as this particular period is considered to be not only one of the most significant in the history of art but also a period in which painting and architecture were very closely allied as practices. In particular the radical developments in painting of pictorial space took place along side the developments in architecture. I argue that Renaissance murals could be described, using the terminology of contemporary art, as site-specific art. By identifying the relationship between pictorial space, architectural space and compositional structure I was able to test, through my own practice, the importance of these relationships in understanding the site-specificity of the compositional structure of murals.

To address the issue of site-specificity in murals, I investigated and developed a set of compositional structures through my mural practice that could be applied in the design,
execution, and teaching of contemporary mural design. I have developed the notion of a deconstructive method of mural design in which the illusory space of the mural derives its compositional structure from the architectural space in which it sited. I have applied it, tested it and refined it through the execution of a number of hypothetical and live mural commissions.

I believe that the approach to the study and practice of mural design I have developed from the perspective of a practice lead researcher contributes to the furtherance of mural design as both a profession and field of study. In particular the identification of compositional structures in mural design and the proposal of a deconstructive method contributes to our understanding of what a mural is as well as current notions of site-specificity in contemporary art.
Declaration

I declare that this thesis is my own unaided work. It is being submitted for the degree of Doctor of Philosophy at the University of Bedfordshire. It has not been submitted before for any examination in any other Universities.

Name of Candidate: Akmal H. H. Abdelrahman

Signature: 

Date
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I wish to thank my supervisors Prof. Alexis Weedon and John Stephens for their considerable help. I would also like to thank my friends, colleagues and former colleagues at the University of Bedfordshire for continuing their support. I owe a particular debt of thanks to Gavin Stewart, Angus Duncan, Gordon Hon, I also wish to thank the many academics, theorists and practitioners who have given generously of their time and expertise over the last few years; in particular, Makram Khoury, Steven Conway, Rebecca Delaney, Mark Layzell, Alison Goodyear and Patricia Allies. A special thanks is due to Prof. Carole Gray and Prof. Luke Hockley for their generous contribution in the improvement of the final thesis.

This thesis is respectfully dedicated to my wife Inas and my children Ali and Farida.
Chapter One: Introduction

1.1.1 Context of Study

In Egypt, murals are regarded as one of the most important and respected art forms. The very fact that the study of murals is taught as a discipline in Egyptian colleges articulates the significance of this art form in the Egyptian culture. During the past ten years there has been a programme of extremely high profile public projects, providing further evidence that murals are recognised as an important contemporary Egyptian art form. Many of these projects – some of which are large in scale, others smaller but still substantial – have been commissioned for tourist areas and public squares and buildings. Two important examples are the outer perimeter wall of the Military College Stadium in Cairo (fig 1.1, 1.2) and the perimeter wall of the Mustafa Kamel Hospital in Alexandria (fig 1.3,1.4).

This increased recognition of the cultural and artistic significance of murals in Egypt has been particularly evident to me as a professional practitioner in the field of murals for the past 10 years both as a designer and as a teacher at the Faculty of Applied Arts in Cairo. It has become increasingly clear to me that if murals are to continue to enjoy this degree of public support and at the same time develop as a substantial art form, which will have a lasting impact on the quality of our public built environment, it is necessary for practitioners and teachers in the field to conduct serious research into the aesthetic as well as the practical methods and techniques of the art form.

This concern has led to my research into developing formal methods of producing pictorial compositions and designing techniques. Through the identification of specific constants and variables in the comparative history of mural painting in Eastern and Western cultures I have isolated a number of underlying principles. These have been the basis of my practical inquiry which I have applied to my own work as a teacher and practitioner in the field in order to experiment and understand their effects and to extend my creative repertoire (fig 1.5,1.6).
Fig 1.1 and 1.2 represent two of about 12 murals that were made to decorate the outer perimeter wall of the Military College Stadium in Cairo. Designed by Mustafa Elshikh, Dr. Sami Abdullah (Faculty of Fine Arts, Cairo) and Dr. Diaauldeen Mohamed (Faculty of Applied Arts, Cairo). Commissioned by the Egyptian Ministry of Defence. The construction work was undertaken by the contractors” Ivac” 2004
Fig 1.3 and 1.4 represent one of the largest murals in Egypt (300 metres long and 5 metres high). It forms the perimeter wall of the Mustafa Kamel Hospital in Alexandria facing the Mediterranean. Designed by Prof. Dr. Abdelsalam Eid (a senior scholar and artist at the Faculty of Fine Arts in Alexandria 2002, 2003).
Fig 1.5
Mural design sketch by Marwa Ashmawy, 2004. This is a graduation project of one of my students that demonstrates some of the compositional techniques I had developed and applied in my teaching.

Fig 1.6
Mural Design by Mohammad Hamdy, 2004. It is also a graduation project that represents another sample of one of my student’s designs using the compositional techniques I developed and applied in my teaching.
The key focus of my inquiry is pictorial composition in mural painting. In the development of this research, I realised that most of the examples I had used in developing theories of pictorial composition had been of paintings. This is also the case in the approach to this type of analysis in art history in general where the structural composition of a mural is usually discussed in the same way as a painting. At the same time I became aware that there is often little relationship between the compositional design of contemporary murals and the architectural spaces for which they have been made. I believe that this is due to a lack of research undertaken by practitioners into the relationships between pictorial composition techniques and architectural space in the placement, design and production of murals.

In addition, I believe that there is a problem in the understanding of the compositional processes in mural design and that this problem begins in the institutes and academies where mural design is taught. During an academic seminar held at the Faculty of Applied Arts in Cairo in 2005 (where the discussion point was contemporary murals in Egypt) specialists within the area, such as Prof Dr. Omar El Nagdi and Prof Dr. Fathy Gooda concurred with me on this point. Both professors are well known and respected contemporary artists in Egypt and they nominated me to take on this research in a professional, scholarly way.

One of the major problems in researching this subject in Egypt is the lack of articles that apply any form of critical rigour to these types of high profile mural projects. The articles covering these projects usually tend to be descriptive rather than analytical, they normally express appreciation, praising the artists, sponsors and commissioning bodies. The notable absence in this is the critical analyses of the form, content or suitability of the projects. The absence of any critical discourse around the formal or aesthetic qualities of these major public art commissions means that no benchmark standards are developed against which future works can be evaluated. It is intended that this study and its dissemination will contribute to initiating a public dialogue on the quality and the future of this art form particularly in countries with traditions of large-scale public murals such as Egypt.
For example, with regards to the Mostafa Kamle Hospital mural (fig1.3, 1.4) in a recent article in Elarabi magazine, the author, M. Elnaser\(^1\) (an Egyptian artist), simply glorified the life and works of Dr. Eid, (the mural designer) stating that Dr. Eid had dealt with this huge mural in a very professional way using a post-modern approach. Elnaser then went on to add that Dr. Eid is one of the greatest artists in Egypt, and that he is the one who had designed and executed one of the most famous murals in Egypt, in Alexandria where a mixture of love and beauty produced this significant mural. He then said that this mural has the power to deal with the past, present, and the future, with a modern rhythm inspired by music and the language of art\(^2\). Elnaser’s article continued in the same manner describing the works of Dr. Eid. Whilst describing and analysing the mural itself, the compositional components and the design forms were completely ignored.

There are very few contemporary articles and books in English dealing with mural design as a distinct discipline and this presents a problem for the current study but is also a problem that the thesis aims to go some way to address. There is, however, more literature in which compositional structures are discussed and/or applied usually to paintings or early murals taken out of the context of the building and treated as paintings.

Books like *Mural painting* by Hans Feibusch\(^3\), and *Mural Composition* by John Pitman Weber\(^4\) were useful for this research because they have addressed some issues concerning the relationship between murals and the architectural context. This research aims to discuss this relationship in further detail and will consider further contemporary issues that emphasize the importance of the site-specificity of murals in relation to the architectural space.

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\(^2\) Ibid


1.1.2 Research Questions:

1. Is it possible to reach a set of principles that can assist in the development of an applicable methodology of contemporary mural design in which the compositional structure of the mural incorporates the specific architectural context?

2. Can these principles be achieved through a practice-led deconstruction of existing principles of traditional pictorial composition combined with responses to specific contemporary architectural contexts?

I use the term pictorial composition to refer to the arrangements of the main elements and forms in the picture plane as identified by Francois Quiveiger⁵. Using the term architectural context I specifically mean the structural characteristics of the architectural space. This includes any significant architectural features that distinguish this particular space (e.g. pillars, shape and style of doors and windows, dimensions etc). It also includes the utilisation of this space. The term compositional structure refers not only to the pictorial composition of a mural but also to the integration between this particular composition and the architectural space. Further explanation of the term is given in Chapter Two.

1.1.3 Aims and Objectives:

Aims and objectives of this study can be summarized as follows:

1. To identify and analyze the compositional structure of murals that were primarily developed in the Italian Renaissance in order to apply and test them in contemporary practice.

2. To create a body of work consisting of ‘hypothetical’ and commissioned mural projects that will develop my artistic insights into the structural relationships between pictorial and architectural space.

3. To reflect on and analyze these new insights gained through this practice in order to develop a methodology that can be applied to both the practice and teaching of contemporary mural design.

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1.2 Methodology

At the heart of this study is the researcher as a reflective practitioner and teacher. The theoretical basis of this study was arrived at through my practice as a mural designer/painter and as a teacher. The relationship between theory and practice is a central aspect of this study in terms of its content and the methods used. Although the written part of the study will use conventional academic approaches to theoretical research, it remains a practice led project and as such the methods used to make the work (as well as their function as investigative tools) will be essential aspects of the research.

Thus, I may summarize the methodology used in this research as follows:

1. Case studies
I have made several site visits in Egypt and in the UK to identify different kinds of contemporary murals (fig 1.7, 1.8). The mural samples were carefully selected to correspond to the main purpose of the study which is primarily the analysis of pictorial composition in relation to the architectural context. The analyses have been based on detailed examinations of the sites, recorded through photography and notes, as well as investigations into the history and context of the projects in public records and articles.

As an integral part of this research, I have also made site-visits to those places in Italy where a wide range of famous murals made during the Renaissance, Baroque and Rococo periods are sited. Many of the most significant and historically important paintings in the history of art where murals or paintings made for specific architectural contexts and were produced in these periods in Italy. My main focus of interest in these works is their site-specificity (this will be discussed in details in Chapter Two). I have photographed the murals, paying particular attention to their architectural context, categorized them according to their broader formal properties and then analysed them in order to identify the relationships between the pictorial composition and the architectural context (fig 1.9, 1.10). This analysis gave me a substantial and valuable source of visual evidence which I have used to support my theory of compositional structures in mural painting.
Fig 1.7
Cable Street Mural, 1983 by a number of local artists. London, UK

Fig 1.8
Stockwell Mural, Shelter walls on a traffic island next to Stockwell Tube Station giving a potted history of Stockwell. Designed by Brian Barnes (1998) UK.
Fig 1.9
One of the halls inside San Angelo Castle, Rome. Site visit to Italy 2006.

Fig 1.10
Chiesa di San Rocco, Venice. Site visit to Italy 2006
2. Literature Review

As a practice led research project, the approach to the literature review differs from the more conventional theoretical approach. As was shown in the context the initial approach to this aspect of the methodology was along conventional academic lines – to identify available texts and to position my own research in relation to these works. However as a practitioner I have also considered the work of other mural designers/painters as part of the literature review. I have similarly identified some recent studies that have been made in the same field and made a comparison between these studies and mine to articulate the differences in the approaches, key studies and the final results.

3. Practice

As I have stated above, this study has arisen from my practice. I have developed a number of hypothetical mural designs in parallel with my theoretical studies. As a practice-led study, producing such hypothetical designs was fundamental in this research. The reciprocation between practice and theory has partly enabled me to test and evaluate my findings. To be able to reach and accomplish these hypothetical designs, I had to go through a number of stages in the development process:

- Identifying and developing a number of pictorial compositions arising from the analysis of material drawn from historical and contemporary case studies and examples derived from the literature review.

- Identifying suitable sites for the development of hypothetical mural designs. This procedure involved surveys of potential sites that included photographs and sketches of appropriate surfaces, general architectural contexts and specific details and features. The surveys of the sites formed the basis of the compositional designs.

- Applying these designs digitally, using PhotoShop, onto their virtual architectural spaces to create virtual reality installations as explained in fig 1.11A&B. The flexibility and speed of digital technology in developing and visualising designs within their proposed context are particularly appropriate for extending my long-standing traditional practice of mural design. It has effectively enabled me to test and analyze the hypothetical designs I am developing in their potential architectural context and allowed me to make any further changes or amendments as needed.
Fig 1.11 A&B presents an initial ‘virtual’ design using the local shopping mall as the site. The designs made at that time were very conventional.

Arndale Centre, Luton, UK 2005
In Chapter Four there is a full description of the methods and techniques used to develop all the hypothetical designs made in this study.

4. Reflection on Practice

This study was primarily conducted from the position of the reflective practitioner-researcher. The idea behind producing hypothetical designs and in particular the use of digital technology was to allow as much freedom to develop my ideas through their application. I was able to review, evaluate and analyse the findings of my field research, in combination with my extensive experience of traditional mural practice, in their application in “virtual sites”. The intuitive aspects of the design process drew on my experience and practical knowledge of mural painting but the design decisions were also arrived at through a reflective evaluation based on the aims of the study.

I kept a studio journal throughout the study which was most effective as a tool to maintain focus in the reflective practice. In particular I was able to open internal lines of dialogue between the diverse aspects of the study for example notes and observations on hypothetical sites sat along side sketches and photographs made during field trips to Italy which in turn were next to notes on studio based practical experiments. The journal was particularly useful in maintaining connections between my reflections on hypothetical murals and live mural projects and was an essential evaluative tool in the development of the projects.

Additionally, a significant feature of this study was that I was commissioned by the University of Bedfordshire to execute two of the hypothetical designs I made as site-specific pieces for two spaces inside the University that I had designated as viable potential sites. The first one was undertaken in the Art and Design Department and the other one was produced in the Learning Resources Centre. These commissions have positively supported the theoretical part of my research as well as the practical one. The provision of constructive feedback from a diverse audience and viewers to a realised piece of work was essential for me as an evaluation tool for my findings throughout the research; this is discussed in detail in Chapter Five.
1.3 Summary of Chapters

Chapter Two investigates the most relevant aspects that describe, articulate and define mural painting as a site-specific art form. It also investigates the visual and conceptual aspects that correlate murals with their architectural context. It begins with a historical overview of both mural painting and pictorial composition and lists the most relevant previous studies made in the field. The chapter also includes an analytical study made through my site-visits to the most significant murals in Italy and the subsequent records, observations and practical experiments, which resulted in identifying the term ‘structural system’ in mural design. This chapter also discusses, in detail, the notion of deconstruction and how this might be applied in contemporary mural practice.

At the end of this chapter, I compare the previous studies from my literature review and the analytical study made through the site visits in order to identify the differences between them and also to articulate and emphasize the basic principles that I would use in my practical study in chapters 4 and 5.

Chapter Three is a critical study of murals addressing conventionality and modernity and examining the significant potentials that emerged from modern theories in contemporary architecture which would affect the production of contemporary murals in terms of compositional integration with the architectural space. As an essential part of this study, samples of the most significant contemporary murals in the West and contemporary murals in Egypt (especially those have been made in the last fifteen years) were recorded and critiqued using a critical template that was developed to highlight the compositional structural aspects of these murals in terms of their site-specificity to the architectural context. This provides a clear justification for this study as well as emphasizing the significant role that the art of murals can play in contemporary practice.

Chapter Four demonstrates the practice-based research methods adopted by this research program, laying out the nature of the design process; starting from the initial designs made through the reflective practice and studio observations and ending with the hypothetical designs made for site-specific places, to test and investigate the coherence between theory and practice.
Chapter Five explores actual applications and methods made by the end of the practical study undertaken in this research. It shows two public commissions that were installed inside the University of Bedfordshire (Luton Campus) and a third one that was developed for a youth centre in Luton for a proposed commission by Luton Borough Council. This chapter articulates the process by which these murals were developed and the use of both reflective practice and knowledge gained through this study in executing these projects.

Chapter Six concludes this thesis by affirming the research questions set out in the introduction. It draws together a number of conclusions from the practice-led inquiry and the research in order to find an answer to the study question. It revisits as well as confirms the hypothesis of the study. It also clarifies artistic outcome, expectations and recommendations.
Chapter Two: Site-Specificity and Compositional Structures in Mural Painting

2.1 Literature Review

2.1.1 Introduction

As shown in the previous chapter the mural as an art form has very deep historical roots and is still a significant part of Egyptian culture attracting public interest and government funding. As has also been shown in the examples of contemporary Egyptian murals the subject matter is usually historical or purely decorative rather than political as many modern and contemporary murals are elsewhere.

The concern of this study however is not the content but the form of the murals. The subject matter can change according to the inclinations of those who design or commission them but the formal qualities – the aspects of the murals that make them work visually - should be at least as enduring as the places for which they are made. The principles on which these formal qualities are based need to be as flexible as possible to accommodate the specific architectural conditions they encounter.

The study is not claiming to be asserting universal laws of composition that, if adhered to will ensure a successful design and if contravened will end in inevitable failure. The aim rather is to arrive at a critical awareness of the relationship between the design of the mural and the architectural space and to arrive at a set of useful principles that incorporate the idea of contingency and site-specificity. The historical review that initiates this chapter will be taken from a practitioner point of view not as a routine action that traces the history of murals. I will, rather trace how mural art has its site-specificity rooted in the history of murals.
2.1.2 Historical View

The traditional definition of a mural painting is that it is a painting on a wall, ceiling, or other permanent architectural surface whether this surface is internal or external. Significantly in this definition Mural is consistently associated through the history of art with architecture where walls and ceilings are commonly considered to be important features of any architectural context. Therefore, the visual and conceptual aspects of a mural are likely to be affected by the architectural style.

As Fiebusch in his book ‘Mural Painting,’ maintains “Every great style in architecture has had a corresponding style in mural painting.”¹ The history of art is full of examples that attest Fiebusch previous statement such as the Ancient Egyptian style (fig 2.1), and the Byzantine style (fig 2.2). Fiebusch also noted that the last style to bring new solutions to the general problems of building and to express the spiritual character and aspect of a whole period was the Baroque (1600-1700).²

This study seeks to establish a method which could be used to investigate Fiebusch’s statement that every architectural style should have a corresponding style of mural that correlates and emphasizes the physical and visual potentials of the architectural style.

The Baroque was followed by the Rococo and later the Neoclassicism style (1700-1800). Rococo emerged from the Baroque era. It was a time when new ideas about human existence were introduced and Rococo art was the visual representation of the optimism people felt in response to that. The Rococo style (fig 2.3) is characterized by pastel colors, gracefully delicate curving forms, fanciful figures, and a lighthearted mood (visually and physically). The essence of Rococo art is light; which reflects the essence of French architectural decoration at the end of Louis XIV’s reign where the Rococo first started and then spread across Europe.

There have been a number of attempts to develop architectural correspondences of mural painting after the Rococo period, Fiebusch contends that:

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² Ibid
Fig 2.1
Mural paintings in Valley of the Queens, queen Nefertari, Horus with crown and Horus as Re-Harakhty in the Tomb of Nefertari, Luxor, Egypt 1290-1224 B.C.

Fig 2.2
Upper east wing; St. Laurence Mausoleum of Galla Placidia, Ravenna, Italy
Made between 425 and 433 pc
‘Several heroic attempts to create a new style, such as Puvis de Chavannes, Hans Von Merees or the pre-Raphaelites, could not succeed, because there was no congenial architecture to support them and because they looked too much towards the past for inspiration’.³ (Fig 2.4 & 2.5)

This research would argue with Fiebsch’s previous statement from the perspective that significant changes made in the realm of architecture since Rococo simply took place in the 20th century, decades after the aforementioned attempt took place. Furthermore, looking towards the past for inspiration does not oppose the serendipity of innovation. Part of this research depends on retrieving a number of compositional and structural aesthetics that have been used in the Renaissance to be used in contemporary practice.

Fig 2.4
Pier Puvis de Chavennes, The Sacred Wood allegorical mural in the Grand Amphitheatre
1887-89, Paris, France

Fig 2.5
Hans Von Merees: ‘Fishermen Setting Off’ 1873. One of five frescos made by Merees at
Stazione Zoologica in Naples,
‘Over time, however, mural painting ceded the important place it had occupied in Art History’s founding narrative, and little by little found itself on the margins of historiographical discourse. The reasons for the increasing marginal situation of wall painting are essentially related to the fact that this type of painting is tied up with architecture and cannot leave its original spot, making it difficult for connoisseurs to see it close up and, in particular, with the fact that it cannot be made into a saleable object that can be part of a private art or “universal museum” collection’.4

Artists and architects in the 20th century such as Antonio Gaudi in Spain and the Austrian Hundertwasser have made significant contributions to modern architecture, specifically ‘Organic Architecture’ with buildings such as Guell Park, in Barcelona, Spain (fig 2.6) and The KunstHaus in Vienna, Austria (fig 2.7). But it is not realistic to describe their works as murals. More appropriately, these kinds of works might seen to include surface treatments, where they are generally dealing with architectural surfaces using different kinds of media, such as mosaic tiles, ceramic tiles and sometimes decorative bricks to decorate certain internal and external facades surfaces of the building.

Such decorative architecture is not the same as the approach that this study is trying to address. To deal with architectural facades in a decorative approach is significantly different from designing a mural for a particular wall giving consideration to the architectural settings and to the conceptual aspect of the mural itself. Decorative solutions usually tend to be repetitions of patterns or motifs on certain architectural surfaces, or particular architectural features, whilst a mural design is conceived as a pictorial whole impinging directly or indirectly on a certain architectural space.

In Mexico in the 1920s, a growing, collective social consciousness gave rise to a revolutionary furore focused on liberating the country’s workers from harsh conditions and poverty and a major associated artistic outcome was mural painting. Rochfort argues that:

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Fig 2.6
Antonio Gaudi, roof section from the Porter’s Lodge, Guell Park, 1900-1914, Barcelona, Spain

Fig 2.7
Hundert Wasser, The KunstHaus, 1990, Vienna
‘In 1921, Mexican artists Diego Rivera, Jose Clemente Orozco, and David Alfaro Siqueiros were all commissioned by the government to create educational paintings on the walls of public buildings. After that initial experience, they devoted themselves almost exclusively to painting these large-scale murals-forming the foundation of a movement that would last 50 years’\(^5\) (fig 2.8, 2.9).

Rochfort also claims that these paintings reflect diverse artistic influences including surrealism and cubism, which are generally considered revolutionary artistic movements based on the Renaissance principles particularly in terms of the pictorial composition\(^6\). This proposition by Rochfort would oppose what Hans Fiebusch stated about looking towards the past for inspiration. It also indicates that a number of contemporary artistic movements have had their epistemological roots in the Renaissance.

Aksoy (1996) suggests that the modern mural movement, especially in terms of ‘community’ has had strong socio-cultural and political bonds, particularly since the end of the 1960s\(^7\). Aksoy also commented that from 1960s onward, mural art has become a common and sometimes a significant feature of urban-public places, this is reflected within a broader debate on ‘public’ and ‘community arts’ by the number of books and articles published, conferences held, attention within art institutions, agencies for funding, and public reactions\(^8\).

However, this research would suggest that the development of contemporary murals as site-specific art forms needs further studies, debates and conferences in order to produce contemporary murals that can reflect the massive developments in contemporary architecture and urban design since the beginning of the 20\(^{th}\) century until now.


\(^6\) Ibid


\(^8\) Ibid
Fig 2.8
Diego Rivera, fresco mural at North Wall, 1932–33. Detroit Industry, USA

Fig 2.9
David Alfaro Siqueiros, Mural on the National Autonomous University of Mexico's (UNAM) Rectory in Mexico City
From the same historical perspective Hayes claimed that *The Wall of Respect* painted by William Walker was one of the first of a stream of murals to appear in the big cities.⁹(Fig 2.10)

A number of conferences about contemporary murals have taken place recently such as Philadelphia's National Conference on Mural Art in 2004 and the International Mural Painting Encounter, Mexico City 2006¹⁰. Also a number of muralists groups and associations have been established across the Western World such as the *Mural Arts Program in City of Philadelphia, The Chicago Public Art Group* in the USA, *Bogside Artists Group* in Northern Ireland and *The Art and Architecture Group* in Britain. Most of these events and public groups are mainly concerned about the cultural, urban and political roles of contemporary murals, whereas this study aims to focus on the aesthetic as well as the structural role of contemporary mural design as integral features of modern architectural styles.

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2.1.3 Previous Studies

- **Books**

The most relevant books to the current study are Feibusch’s book ‘*Mural Painting*’\(^{11}\) and Weber’s book ‘*Mural Composition*’\(^{12}\). These books discuss the relationship between mural painting and architecture but through different approaches.

Feibusch (1947) identified which kind of murals would be suitable for contemporary architectural styles in a narrative classical approach, but did not discuss this in relation to their composition or to their site-specificity.

Weber did discuss some compositional issues that relate to contemporary murals, particularly the exterior ones. He suggested a number of solutions which would comprehensively deal with exterior architectural features claiming that:

> ‘As the shape of the wall determines the shape of the painting, so the irregularities of the wall - fire escapes, windows, mouldings, ins and outs, as well as the shadows they cast - need to be dealt with in a creative way. Often these ‘obstacles’ can be transformed into creative elements of the design and become assets’\(^{13}\).

He also explained how to integrate doors and doorframes, stairways, windows and niches, pipes and electrical outlets, buttresses, columns and posts, and especially corners, as challenging obstacles for every muralist and to every group doing a collective mural. Weber asserts that to consciously design with all the site-specific elements of architecture, including the incidental utility fixtures is a touchstone of mural aesthetics\(^{14}\).


\(^{13}\) Ibid

\(^{14}\) Ibid.
• **Academic Studies**

Many of the previous studies investigated through the literature review were very specific to a certain region such as A. P. Willsdon’s (2000) study of Mural Painting in Britain, 1840-1940. Other authors investigating the social or cultural impact of murals also emphasise regional considerations, for example ‘Art for a People: An Iconographic and Cultural Study of Mural Painting in Minnesota’s New Deal Art Programs’\(^{15}\). The third type of study was about murals in specific periods such as ‘Out of the Stream: Studies in Medieval and Renaissance Mural Painting’ edited by Luís Urbano Afonso and Vítor Serrão. Other articles and academic papers in the field investigated the conservation and restoration of mural paintings or techniques such as ‘The Conservation of Wall Paintings’ edited by Sharon Cather or a study of the ‘Materials in the Mural Painting at the Corral del Carbon in Granada, Spain’ by L.F Capitan- Vallvey, E Manzano and V.J. Florez.

The most relevant studies can be summarized as follow:

- Aksoy: a PhD titled ‘*The Concepts and Practices of Urban Mural Painting since 1970: Artists’ Perspectives*’. In this study Aksoy investigates cultural, architectural and collaborative characteristics of murals and explains them within an urban context. Therefore the research is historical, analytical, experimental and theoretical as defined by the author himself\(^{16}\).

Through his literature review, analyses of his questionnaire, and the experiences of personal practical work, Aksoy suggests that the dominant aim of the modern urban mural is to democratise art, and humanise urban spaces.

The most important issues Aksoy raised as a conclusion of his dissertation were that the current variability in the quality of art in public spaces might benefit from specific courses which introduce the idea of collaborative working, alternative collective aesthetic values, and a new role for an integrated artist. It also suggests that local characteristics


and community identity are paramount in arts integration within the urban context, and that connection with (urban) sociology and (local) cultural studies might help to develop a more critical language and understanding of art in urban places\textsuperscript{17}.

Although Aksoy’s study is about murals, and seemingly one of the most relevant studies found in the field, it does not, however, investigate in depth the critical compositional and structural issues that are the focus of this study.

- Fratzeskou: a PhD titled ‘Visualising Boolean Set Operations: Real and Virtual Boundaries in Contemporary Site-Specific Art’. In this study Fratzeskou develops a methodological model for expanding the development of site-specific art, through advancing the investigation of the relationship between built architectural spaces and their architectural digital modelling. Fratzeskou suggests that a site-specific virtual environment is created for visualising how the contrast between the functional form of that built space and its model occurs while analytically delineating that space\textsuperscript{18}.

The study also advances a wider discourse in site-specific and digital art through enabling the in-depth investigation of the relationship between physical and virtual spaces. Moreover, Fratzeskou argued that the findings of this study are relevant when artists investigate the transitions between virtual and physical spaces in site-specific art\textsuperscript{19}.

Although Fratzeskou’s study is about using digital technology in enhancing the production of site-specific art in general, and like this research employs digital technology on its practical element, however, this research focuses in depth on contemporary murals as site-specific art forms.

- Pinheiro: a PhD titled ‘Art from Place: The Expression of Cultural Memory in the Urban Environment and in Place-Specific Art Interventions’. The research question of this study was about how cultural memory is expressed in the urban environment and

\textsuperscript{17} Aksoy, M.A., 1996, The Concepts and Practices of Urban Mural Painting since 1970: Artists’ Perspectives, PhD, UK: Birmingham City University, Birmingham Institute of Art and Design.

\textsuperscript{18} Fratzeskou, E., 2006, Visualising Boolean set operations: real and virtual boundaries in contemporary site-specific art, PhD, UK: University of Surrey.

\textsuperscript{19} Ibid
how artists can/do utilise this expression to produce work.\textsuperscript{20} The study particularly investigates the trajectory of cultural memory in the processes through which the cultural body is formed in connection with the sensorial experience, and encompassed by an analysis of the spatiality of experience.

Pinheiro’s study is not specifically about murals, It gives ideas about how the urban environment would affect what s/he called ‘place–specific art’, which is more conceptual rather than compositional or structural. Although this research addresses some conceptual aspects, the main concern is the compositional and the structural elements discussed in this chapter.

In Egypt, a number of contemporary studies in mural painting have been undertaken, the most relevant ones are:

- Hanafy: a PhD titled \textit{‘Colour and Movement in Mural Painting’} \textsuperscript{21}. In this study Hanafy focuses on two elements of the pictorial composition of mural painting. He argues that the colour schemes of a mural should be decided according to the environmental conditions for which this mural is made i.e. desert environment, coastal environment and/or suburbs. Hanafy also addresses the important role that the movement element plays in the pictorial composition of a mural and how this affects the movement in the physical space where this mural is located.

Hanafy’s study is working towards the formal acknowledgement that murals are a site-specific art form that should incorporate aspects of the environment in its design. His ideas on movement are the most interesting. According to his study, Hanafy sees that architecture necessarily builds the element of movement into its design and therefore an acknowledgment of this factor in the design of the mural would usually involve the incorporation of broader architectural elements. However he does not discuss the ways in which the composition as a kind of two-dimensional structure can interact with the structure of the architectural space. This research is taking Hanafy’s argument to another

\textsuperscript{20} Pinheiro, G. V., 2002, \textit{Art from place: The Expression of Cultural Memory in the Urban Environment and in Place-Specific Art Interventions}, PhD, UK: Open University.

area of investigation. It is focused not only on one or two of the compositional elements of a contemporary mural, but on the entire set of structural elements that would integrate the mural with its architectural context (this will be discusses in detail in the following sections).

Other academics in Egypt investigated new techniques that could be used in contemporary murals, for example Kamel’s study ‘Modern Techniques in Developing Decorative Patterns for Architectural Environment’. This study is concerned with developing decorative patterns to be used as surface treatment for a certain architectural environment in Sinai, Egypt. The approach used in developing these decorative patterns was based on the notion of producing decorative shapes that are inspired from natural elements in the local environment such as palm trees; these shapes can then be implemented in mural designs for the same environment.

However, the idea of decorative patterns is completely different than the process of developing pictorial composition and/or structural elements. Moreover, the notion of a pattern in paintings in general tends to be a repetitive approach, unlike the constructive or the deconstructive method this research aims to address.

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2.2 Murals as Site-specific Art Forms

In order to address the first question of this study which concerns the aim to arrive at a set of principles that can incorporate the specific architectural context within the compositional structure of the mural it is important to investigate the extent to which murals can indeed be regarded as site-specific.

Site-specific art, also site-responsive art\textsuperscript{23}, is artwork created to exist in a certain place. The artist takes the location into account while planning and creating the artwork. Kaye sees that site-specific work might articulate and define itself through properties, qualities or meanings produced in specific relationship between an ‘object’ or ‘event’ and a position it occupies\textsuperscript{24} (fig 2.11 & 2.12).

Kwon articulates the aspects of site-specific art where she says:

‘Whether inside the white cube or out in the Nevada desert, whether architectural or landscape-orientated, site-specific art initially took the site as an actual location, a tangible reality, its identity composed of a unique combination of physical elements: length, depth, height, texture, and shape of walls and rooms; scale and proportion of plazas, buildings or parks; existing conditions of lighting, ventilation, traffic patterns; distinctive topographical features, and so forth’\textsuperscript{25}.

Kwon’s statement demonstrates how site-specific works should be fully integrated with their contexts, and this is the main aspect that distinguishes this type of art from other types.

More broadly, the term is sometimes used for any work that is (more or less) permanently attached to a particular location. In this sense, a building with interesting architecture could be considered a piece of site-specific art.


\textsuperscript{24} Kaye, N., 2000, Site-Specific Art: Performance, Place and Documentation, London and New York: Routledge. P.1

\textsuperscript{25} Kwon, M., 2002, One Place After Another: Site-Specific Art and Locational Identity, USA: Massachusetts Institute of Technology, P.11
In a project that "will astonish the commuters of Liverpool," sculptor Richard Wilson has turned part of a building's facade inside out. As if learning from Gordon Matta-Clark, Wilson sliced an "egg-shaped section" out of the building's facade – "fixing the eight meter diameter piece on a pivot" so it can spin.
It is very clear that the term site-specific does not refer to a particular technique or a standard form that would be attached to art forms produced in this approach, but it is a general concept that would identify any art forms that deal with a certain space. This definition, therefore, may include murals as site-specific art forms.

As Fiebusch constantly discusses the mural within its architectural context, other books and studies took the same approach. Cass for example, sees the mural as a decorative work for a specific area to expand the space we live in. He also claims that the mural at its finest, should be a continuation of architecture. The fact that murals are always described and seen as integral part of the architectural context justifies why murals should be categorized as site-specific art forms.

Figures 2.13 and 2.14 explore the idea of site-specificity in murals. These figures represent two of about eight artworks produced by art-world stalwarts like Richard Serra and Sol LeWitt, to decorate certain walls at Pearson International Airport in Toronto. Blum described all these works as site-specific works. However, in terms of the compositional integration, I would argue one of the present examples to be a site-specific mural. In a glance, in fig 2.13 Gross developed this abstract painting to occupy the whole wall. Although the space has a significant characteristic, it is hard to identify any visual integration between the composition of the mural and that particular character of the architectural space. In other words, this abstract composition does not relate the mural to the space. It seems to consciously ignore the structure of the space treating it instead as a blank surface on which to paint thereby creating a formal tension between the painting and the architecture. On the other hand, in fig 2.14 we can see that Sol LeWitt has formally based the structure of his wall drawing around the architectural forms in the space. However at the same time he seems to have used this to create a tension between the ‘drawing’ and the space. Further critique to explore the notion of site-specificity of contemporary mural will be discussed in detail in the next chapter.

Fig 2.13
Katharina Gross, 2004, 75 foot mural looms above Air Canada Gate at Pearson International Airport, Toronto, Canada

Fig 2.14
Sol LeWitt, 2004, Wall Drawing No. 1100, “Concentric Bands” at Pearson International Airport, Toronto, Canada
This study raises the question of what makes a mural a site-specific? Throughout the literature review the elements that would fulfil the site-specificity of a mural can be summarised as follow:

1. The architectural context: as defined in Chapter One, the term architectural context refers to the structural characteristics of the architectural space. This includes any significant architectural features that distinguish this particular space, and it includes the functional aspect of this space (fig 2.15).

In her journal article titled ‘Ceramics and Installation’, Shaw contested the concept of site-specificity where she said “Issues of space and site are central, where the work inhabits a particular physical space.” Moreover, in his book ‘Modern Art’ Poli referred to how the Italian art critic Germano Celant described environmental art in general saying:

‘The contextual location awakens a sense of reciprocity based on a real mutual relationship in which the art creates an environmental space to the same measure that environment creates to the art’.  

The aforementioned statements are examples that explain the crucial role the architectural context as “an environmental space” plays in the development of any site-specific artwork in general and murals in particular as the critical element in its conception.

2. Urban environment: particularly for outdoor murals, the consideration of environmental aspects such as weather conditions, the architectural environment and the functional character of the place, would affect and determine the physical elements of a mural, for example the weather conditions should determine what kind of materials to be used and the colours used of the mural is subjected to the colour schemes of the urban space (fig 2.16).

28 Shaw, E., 2008, Ceramics Installation, Ceramic Review no 229, P.34-9
Fig 2.15
The Vatican Museum, Rome
This photograph shows how all the murals depicted are integrated with the architectural elements that distinguishes this particular space

Fig 2.16
Chiesa di San Marco, Venice
This photograph shows 9 external murals that reflect the architectural style
3. Conceptual influences: this includes the cultural, political and social elements that may be reflected in the conceptual aspect of a mural. In the Italian Renaissance, for example these conceptual issues were highly represented in their secular context. Kwon says:

‘To be “specific” to such a site, in turns, is to decode and or/recode the institutional conventions so as to expose their hidden operations to reveal the ways in which institutions mold art’s meaning to modulate its cultural and economic value; to undercut the fallacy of art’s and its institutions’ autonomy by making apparent their relationship to the broader socioeconomic and political processes of the day’\(^{30}\).

Discussing those conceptual elements to be involved and considered in site-specific works articulates that this type of artwork is based not only on the physical features that distinguish a certain space but also the cultural, political, financial and social influences that may emphasize the site-specificity of the artwork. Moreover, Kwon suggests that:

‘In most cases, community-based site-specific also seeks to bring about another kind of integration between the community and the work of art’\(^{31}\).

Fig 2.17 gives a live example of conceptual influences in site-specific works, particularly murals. It is a mural made to commemorate the battle of Cable Street when anti fascists stopped Oswald Mosley’s British Union of fascists from marching through a Jewish area. A number of local artists were commissioned to paint this mural, and in order to do so they carried out historical research into the events that took place at the battle of Cable Street in 1936\(^{32}\). The execution of such a mural at the same location where the actual events took place works as a visual documentation for the social, cultural and political history of the localities.

The conceptual influences of a site-specific mural will be explored in more detail through a critical study in the next chapter.

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30 Kwon, M., 2002, One Place After Another: Site-Specific Art and Locational Identity, USA: Massachusetts Institute of Technology. P14
31 Ibid, P.95
The pictorial composition of a mural is the most visual feature that would be affected and determined by the previously mentioned elements. This research however, is particularly concerned with this feature as the main device in the design process of a mural. The following section will discuss what pictorial composition is in detail.
2.3 Composition and Site-Specificity

2.3.1 Overview

As seen in the previous section, murals can be regarded as a site-specific art form and in fact, it can be argued that this was the case in the Renaissance before the rise of easel painting and notions of aesthetic autonomy or site-specific art. This study in its aim to identify compositional, structural principles that are capable of integrating their architectural contexts needs to investigate what is meant by composition in relation to painting and its relationship to context. This section will demonstrate ideas of composition that have prevailed and have tended to regard paintings as aesthetically autonomous. This has been applied, in my view inappropriately to early Renaissance murals that have derived a significant part of their aesthetic value from being designed specifically in and for their physical contexts.

Starting with the term ‘Composition’, it is important to articulate an appropriate definition. When applied to paintings, the word “composition” is used today in several ways. Francois Quiveiger identifies that:

‘It can refer to the arrangement of the main elements or areas of colour on the picture plane, as with a work by Mondrian, or alternatively to the disposition of forms, such as figures and architecture, within a fictive three-dimensional space, a kind of proscenium stage behind the picture plane, although here to there seems to be a tacit assumption that these forms will be related not just to one another, but also to the frame’. 33

Quiveiger gives the view of composition as an aesthetically autonomous task in which elements within the work are arranged in relation to one another. However he acknowledges that there is an apparently “tacit” use of the frame in the compositional structure. If we are to use the term “frame” in mural painting to also include the wall and architectural context then this is also a tacit acknowledgement

of the importance of the architectural context in the design of early Renaissance painting and murals in general. This thesis aims to make this explicit.

The traditional constants of any painting as have been identified and demonstrated in most studies of pictorial composition, also known as ‘Pictorial Principles’ are: balance, contrast, harmony, focal point (emphasis), movement, proportion, stability, variety, unity, rhythm and repetition. Other elements such as lines, shapes, colours, forms, tones, textures and perspective are regarded as the ‘Structural Elements’ of the pictorial space.

There are two basic types of pictorial composition that have been practiced in the design process since the Renaissance period, the ‘Linear Based Composition’ and the ‘Tonal Based Composition’. These two main compositional approaches generally embody the above-mentioned principles and structural elements (partly or wholly) according to the specificity of each composition.

The ‘Linear Based Composition’ generally depends on line axes that construct a well-formed net, which contains the components of the image. An underlying structure composed of geometric (straight, or rectilinear) and/or curvilinear (curved) line, usually construct the aforementioned net whether the image is abstract or realistic. These lines may be visible and/or implicit, the visible lines are easily observed, while the implicit lines usually emerge from the relationships between the elements within the picture, such as the implied sight-line of a figure in the painting or a pointing gesture (fig 2.18, 2.19).

I observed during the field research conducted in Italy for this study it was found that most of the murals that were produced in the early Italian Renaissance were based on linear composition. Artists such as Giotto, Botticelli and Fra Angelica used this approach in designing their murals to decorate churches walls. The introduction of linear perspective in the early 15th century started a revolutionary movement in painting. Most painters at that time implemented this device in their paintings as a substantial element to involve the extension of the architectural space into the pictorial space of the mural.
Fig 2.18

Fig 2.19
A suggestion for the underlying structural net (vertical, horizontal and diagonal lines) that was used in Botticelli’s work based on ‘Linear Composition’, made by the author
What is missing in the linear composition, as a variable aspect is the tonal value or the distinctive relationship between light and shadow. This missing value has been regarded as a distinctive type of pictorial composition in itself, and may be called the ‘Tonal Based Composition’ or generally known as Chiaroscuro.

As identified by the Saywells\textsuperscript{34} the Tonal Based Composition (Chiaroscuro) is a term that originated as a name for a type of Renaissance drawing on coloured paper where the artist worked from this base tone towards light, with white gouache, and dark with ink. Chiaroscuro depends on the relationship between light and shadow; the focal point of the picture is usually in the lit area and some times it is literally the highlight of the whole composition. The viewer’s eye then should travel from this point to explore the rest of the picture along fluid paths, carefully designed for this purpose.

Ralph Larmann identified that:

‘Chiaroscuro is a method for applying value to a two-dimensional piece of artwork to create the illusion of a three-dimensional solid form’.\textsuperscript{35}

However, the term (Chiarosuro) is mostly used to describe compositions where at least some principal elements of the main composition show the transition between light and dark, as in the works of Caravaggio, Rembrandt and Tintoretto (fig 2.20, 2.21).

The main composition in chiaroscuro is based on the relationship between light and shadow, thereby; both pictorial principles and structural elements are employed in such a way as to emphasize the value of the tonal composition. The underlying structure in this composition can also be obtained by analyzing the forms that light areas are shaping in the image, where they are usually formed in geometrical and /or semi geometrical forms, the same way as the linear composition (fig 2.22, 2.23).


Fig 2.20
Caravaggio, ‘Supper at Emmaus’ 1600-01. Oil on canvas, National Gallery, London

Fig 2.21
Tintoretto, ‘Finding of the body of St Mark in Alexandria’, 1548, Oil on Canvas, Commissioned for the Scuola di S. Marco (Venice), (now in the Church of the Angeli, Murano).
Fig 2.22
Rembrandt, ‘The Anatomy Lesson Of Dr. Nicolaes Tulp’
Tonal Based Composition (Chiaroscuro)

Fig 2.23
Analysis of the underlying structure in Rembrandt’s painting as an example of the Tonal Based Composition. Made by the author
In Chiaroscuro, it is clear that one of the most significant structural elements missing is the use of colour. Colour in the tonal based composition plays a marginal role. Basic or explicit colours are rarely to be used. However, a gradation of the same colour and/or the same colour family is commonly implemented in a wide range of tones to form the pictorial space, which may be described as “The reduction of colours to tonal values”\(^3\). The visual confusion that might have occurred by using explicit colours in the tonal composition made most of the artists who employed this technique to avoid falling into this dilemma.

2.3.2 The Development of Pictorial Composition

Throughout his book, Stella (1986) discussed the development of pictorial space from the Renaissance to the 20th century. A third of this book describes how pictorial space evolved and has its epistemological roots in the Renaissance. Stella says that:

‘We believe that great painting—painting that is illustratively, full, substantial and real—was born with the Renaissance and grew with its flowering.’

Stella also went further and argued that the most significant and successful pictorial space achieved through history was that of Caravaggio’s pictorial genius. And that is why focusing on the pictorial composition in its traditional manner during the Renaissance and Baroque emerged as the founding principle of this study (research question 2).

David Sweet (1999) stated that the story of pictorial composition lasted until around the 1870’s. As painting moved towards the 20th century the practice of formal composing became less central partly because there was a major change in what pictorial forms were like, brought about by the innovations of the impressionists. Sweet claimed that:

‘Less attention was given to the task of arranging pictorial objects because of the activity of drawing or gesturing, which was the process responsible for generating those objects, achieved a dominant role within many twentieth century stylistic innovations’.

Sweet also argued that the anti-or non-compositional tendency of developments from Impressionism, through the drawing method of Cezanne, into Abstract art and into the Minimalist grid does seem to be a dominant feature of the Twentieth Century art history. Sweet added:

‘But against this direction can be put a formidable list of artists who continued to emphasise the importance of arranging pictorial elements and throughout the same period made contributions to the history of composition.

37 Stella, F., 1986, Working Space, USA: by Frank Stella. P.1
38 Ibid. P.2
in the form of fresh and novel variations on the old Florentine Theme. Artists like: Matisse, Bonnard and Leger\(^4\) (Fig 2.24, 2.25)

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\(^{40}\) Ibid
In Painting, however, it is common to find instances in which a combination of both Linear and Tonal Composition or Flat and 3D illusionist Images techniques has been used in the same work (fig 2.26, 2.27).

In murals, whether a Linear Based Composition or a Tonal Based one, whether it is a Flat Image or a 3Dimensional Illusionist one in terms of Pictorial Composition, it is my contention that the different compositional structures of these different types of compositions may have been directly or indirectly influenced by the architectural space for which they were designed. Murals are not easel paintings, and this analysis relating compositional structure to architectural space may be of value to contemporary mural designers.

The reason for contesting the term pictorial composition is that it is the basic element that would articulate the notion of compositional structures this study addressing in detail in section 2.4 of this chapter. The current study suggests that determining the pictorial type is affected by the architectural settings and given features of the space. Linear composition is usually used to create flatness presence in painting, whether traditional or modern (fig 2.28), where as chiaroscuro composition is usually employed to create three-dimensional illusionist space (fig 2.29). It is particularly important to decide which compositional type would fulfil the site-specificity of the space.
Fig 2.26

Fig 2.27
Jackson Pollok, ‘Night Mist’, 1945. Oil on canvas, Norton Museum of Art, USA
Example of a combination of flat and 3D illusionist Image
Fig 2.28
Knox Martine, ‘Venus Mural’, 1970, New York, USA
Linear composition

Fig 2.29
Jose Maria Sert, ‘The Last Supper’, 1927, mural at Vich Cathedral, Spain
Chiaroscuro Composition
2.3.3 Compositional Schemes

The most relevant studies contributing to the criteria of judging pictorial schemes are Popham’s ‘Pictorial Composition’ and H.R Poor’s ‘Pictorial Composition and the Critical Judgment of Pictures.’ In his book, Popham sees that the composing for a picture begins with the act of taking control of the subject. He also believes that the first requirement of composition which every picture should satisfy is the quality of unity or one-ness. He summarized the compositional principles:

‘It is enough to require that a design shall be a coherent system, a well-knit structure fulfilling the principles of unity, equilibrium, and centre of interest, and if it can be made to display some definite character such as gracefulness or strength or tranquillity or viveliness, so much the better.’

Popham also identified the two main compositional systems: the linear composition and the tonal composition. He mainly applied his theories about composition to landscape painting. Poor (1903) emphasized the importance of balance in the composition and defines different types of balance i.e. vertical and horizontal balance, the natural axis, balance by opposition of lines, balance by opposition of spots, and balance by gradation. Poor also discussed the classical approach of getting into the picture and getting out of the picture, and the aesthetics of composition. The conclusion of Poor’s book was summarised by Jurate Macnoriute (Lithuanian artist and theorist) who concluded that Poor has identified seven pictorial schemes (Table 1), which are commonly used in painting.

Macnoriute’s ‘Introduction to Pictorial Composition Schemes’, published on the web: 2005 is one of the most relevant and recent studies made in pictorial composition. In this study Macnoriute raises questions about H.R. Poor’s ideas and has developed his schemes for compositional theories further. Thus he set himself a task to establish the validity of Poor's schemes in relation to such questions:

1. Do Poor's schemes fit for any masterpiece?

2. Can we find more compositional schemes, simplest geometric figures; with properties and aesthetic principles different from those Poor's seven?

3. Can we specify some Poor's in determinations and form a comprehensive table of compositional schemes?43

Macnoriute extended Poor's table of seven schemes to form a table of over 25 compositional schemes based on simple geometric figures, characters, and entities (Table 2). He claimed that these schemes could be widely found in the history of painting.

Table 1
Poor's table of compositional schemes as identified by Jurate Macnoriute's study of Pictorial Composition Schemes, 2005.

43 Ibid
### Table 2
The 25 compositional Schemes identified by Jurate Macnoriute

Table 2, demonstrates Macnoriute’s 25 schemes as:

<table>
<thead>
<tr>
<th>1. Triangle</th>
<th>14. Waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Scales</td>
<td>15. Snail</td>
</tr>
<tr>
<td>3. Circle</td>
<td>16. Rows</td>
</tr>
<tr>
<td>4. Cross</td>
<td>17. Diagonal</td>
</tr>
<tr>
<td>5. Rays</td>
<td>18. A Part of Concentric Circles</td>
</tr>
<tr>
<td>7. Rectangle Moved to the corner of picture</td>
<td>20. V under V</td>
</tr>
<tr>
<td>9. Zigzag</td>
<td>22. Entities</td>
</tr>
<tr>
<td>10. Stairway</td>
<td>23. Two Points of Strain</td>
</tr>
<tr>
<td>11. Figure of Eight</td>
<td>24. Angles Oncoming/Laying</td>
</tr>
<tr>
<td>12. Noose</td>
<td>25. Complex</td>
</tr>
<tr>
<td>13. Trident</td>
<td></td>
</tr>
</tbody>
</table>
2.4 Site-Specificity and Compositional structures in Mural Painting (Field Research in Italy)

2.4.1 Introduction

It became clear through the literature review that there is no significant body of writing that addresses the relationship between murals and architecture. Therefore, it is necessary to determine this relationship in a tangible way. As discussed earlier, the most significant compositional designs of murals that still influence present artists are those of the Renaissance in Italy. The only way to fully understand the relationship between mural and architectural space was to undertake site visits to Italy to examine a range of important murals produced in this period.

The site visits were made to a number of significant cathedrals, churches and palaces in Rome, Florence and Venice. Visual notes, written notes and digital recordings were made to document all my observations. The aim was to identify the pictorial compositions that had been used and also to investigate and determine how much these murals were integrated with the architectural context.

In this field research, I have identified nine types of pictorial format which operate no matter what the style is. Most of the walls in the construction of architectural space are usually variations of rectangles, squares, circles, arches, and triangles. The surfaces used for murals are often flat walls but these shapes also apply to three-dimensional forms i.e. columns (rectangles) or domes/arches (circles). Apart from the triangular shape that was usually used in ceilings (particularly around domes), nine types of formats have been identified with various architectural styles and different conditions (fig 2.30).

It should be mentioned that a number of the murals investigated were not frescos, or mosaic based, they were oil paintings either painted directly on the wall or on stretched canvases that usually took the same shape as the designated wall. However, it has been already mentioned that murals and easel paintings generally share the same principles of pictorial composition.
Fig 2.30
The 9 forms of Pictorial Format identified during the field research in Italy 2006
All the analytical studies undertaken have used the following approach:

- Initially, classifying the pictorial format of each mural/easel.
- Digitally enhancing the original photographs taken to make the required corrections particularly for the perspective errors that usually occur in photography. It was important that all the samples taken should have no perspective errors in order to identify the pictorial composition of each one with its correct angle.
- The initial analysis was made using tracing paper and pencil.
- After the field research in Italy all selected murals were digitally analysed. It was important not to ignore any detail that might be seen as a basic element in the composition.
- I have then simplified /abstracted the outcomes (retaining the basic lines or tones) to identify the actual composition of each sample.
- Each pictorial composition identified was given a specific number according to the 9 pictorial formats laid out in fig 2.30 with a brief description for each one.

It was not practical to display all the analysed samples in this section as I have recorded more than 800 images for various types of pictorial formats; therefore, I have excluded the repeated results and selected the most explicit and clear ones for discussion in the main body of the thesis. In order to make all the results available, the thesis includes a DVD that contains most of the photographs taken in my field research in Italy as well as including a number of video records of the murals investigated.

Appendix No.2 includes a fully illustrated layout of the new approaches to the pictorial schemes identified through the analytical study made after the field research of Italian Renaissance murals. The letters P.C used in the Appendix No. 2 tables refer to the term Pictorial Composition.
2.4.2 Findings of The Field Research Conducted in Italy

After analysing the selected murals from the Italian Renaissance it was found that a number of these murals could be considered as site-specific artworks not only by using the appropriate pictorial composition but also through their fulfilling other visual and conceptual conditions. The integration with the architecture for which these murals were made could be identified from the following points:

- The architectural style and the architectural details were usually echoed and through illusion extended within the pictorial space of the mural using linear or aerial perspective.
- Perspective was an important device used to place the mural appropriately onto the wall according to the viewer’s eye level (above the eye level, on the eye level or fisheye perspective).
- Some murals included architectural details within the pictorial composition (fig.2.31 & 2.32), which emphasised the site-specificity of the mural.
- The narrative approach usually implemented in the Renaissance depicting religious stories inspired from religious text, such as the Bible or the Torah emphasised the conceptual aspect of the mural in relation to the architectural contexts.

An interesting finding in this field research was the fact that many of the original paintings made for particular spaces were moved to museums and were replaced with copies of the original ones. Furthermore, some of the original architectural spaces themselves have been transformed (i.e. adding or subtracting new features) and these changes affected the site-specificity of the murals located in such places. An example of this kind of changes were found at San Pietro Vincoli in Rome (fig 2.33)
Fig. 2.31
Titian: *Presentation of the Virgin*, 1534-8. Oil on canvas, 346X 795 cm. Academia, Venice, Italy

Fig. 2.32
Raphael: (title and date unknown), Vatican Museum, Rome, Italy
Fig 2.26, 2.27 show the integration between the mural and the architectural space, and the use of architectural features in the pictorial composition
The altar, San Pietro Vincoli in Rome, Italy

The basilica has undergone several restorations and rebuilding. In the real space, the altar obstructs the spectators' view of the murals in the background. It is very hard to view these murals from their appropriate vantage point.
The pictorial schemes investigated and identified during the field research in Italy took different approaches to those already known through previous studies. The most recent study being that of Jurate Macnoriute which includes the recapitulation of previous studies. The main points that distinguish the proposed new schemes of this study from the previous studies may be posed as follows:

- Most of the previous studies of pictorial composition were concerned with the pictorial composition itself regardless of the picture format, and how the pictorial space would interact with or relate to the picture format/the frame. Whereas this study is based on identifying the pictorial compositions that are commonly used with each one of the 9 pictorial formats defined in fig 2.30 of this chapter.

- Relating the pictorial composition to the picture format is a fundamental aspect in this study as these picture formats represent the most common architectural surfaces. This then focuses on the possible integration between the pictorial composition of the mural painting and the architectural space. This particular aspect in studying pictorial composition seems to have been ignored in previous studies.

- In this study the pictorial composition is related to the pictorial format and identifies the common schemes that are usually used with each format. Whereas previous studies identified those schemes whether in one picture format (the rectangle in Poor’s Table 1), or with no picture format as characters (in Table 2).

- I have identified 5 new Pictorial schemes through this study. These schemes are: the bow, the horseshoe, the teardrop shape, figure X and the two conjoined noose.

- Previous studies did not involve any architectural aspects in identifying the pictorial schemes, whereas in this study the key relationship is that of the compositional schemes in relation with the architectural context, which has been identified as ‘Compositional Structures’.
2.4.3 Compositional structures in Mural Design

As identified in chapter one, compositional structures in this study refer to the relationship between the pictorial composition used in the mural and the architectural context for which it was made (research question No.1). The term not only refers to the site-specificity of the mural in relation to the architectural space but it also focuses on the mural’s compositional aspect as the most important visual device that incorporates the mural visually into the space. The following example will demonstrate the term ‘structural systems’ in a tangible way.

In figures 2.34 A& B it is obvious that Tiepolo carefully considered the picture format which takes the shape of a rhomb. The diagram made in fig 2.34B shows that the diagonals used to compose the whole scene resulted in the formation of a rhomb in the centre which emphasizes the pictorial format. This integration determined by the picture format would subsequently integrate the whole mural visually into the architectural space. This visual integration is what this study would describe as site-specific composition, which involves a systematic approach to the structure of the pictorial space in relation to the architectural context and it is this that I call a structural system.

The same notion would be applied on the previous figures 2.31 and 2.32. Moreover, these examples show further integration with the space by incorporating existing architectural features into the main composition of the mural. This emphasizes the site-specificity of these murals but the underlying composition of the painting is, in effect, already site-specific. Therefore, the compositional structure used encompasses the broader structure of the architectural space as well as the specific elements and features of the space.

The previous two examples demonstrate two types of compositional structures this study aiming to address. The study would suggest identifying these two types as:

1. The framed compositional structure: which determines the pictorial composition used in the mural according to an existing frame.
2. The architectural featured compositional structure: which is based on using existing architectural features to be used within the pictorial composition.
Fig 2.34A
Tiepolo, *The Prophet Isaiah* 1726 – 1729, Fresco (200 x 250 cm)
Palazzo Patriarcale, Udine, Italy

Fig 2.34 B
Diagram shows the pictorial composition used in Tiepolo’s ‘*The prophet Isaiah*’
This study, however, suggests other types of compositional structures that would employ those traditional compositional structures used during the Renaissance periods but in deconstructive contemporary approaches. These newly suggested compositional structures could be summarized as:

3. Layering compositional structure: which is based on the assumption that the designated wall forms the main layer of several layers that construct the mural. This would subsequently constitute the mural as an integral part of the architectural physical space. This notion will be explored with examples in detail in Chapter Four.

4. Digital compositional structure: which is also based on traditional pictorial composition but with the use of digital means such as projection art technique to fit in certain architectural types. The advantage of using this compositional structure as a contemporary approach is the flexibility it embraces which would enable the mural designer to create murals that may not be obtained using traditional approaches (fig 2.35). Bearing in mind the site-specificity of the architectural settings (which seems to be not fully taken into account in the present example in fig 2.35), the digital compositional structure would be a significant approach in the development of contemporary murals. Further exploration of this system will be discussed in Chapter Four.

5. Frameless compositional structure: this system considers the whole architectural space as the frame of the pictorial composition. During the literature review I found visual evident that support this notion. Fig 2.36 demonstrates how Christine Rusche transformed the whole space using this deconstructive approach which, in spite of being extremely abstracted lines and shapes, still generates this explicit illusionist space. This research, however, suggests that the notion of frameless compositional structure could be represented in other techniques using traditional pictorial compositions as will be shown and discussed in Chapter Four.

6. This research also suggests that a combination of the previously mentioned systems could be developed according to the site-specificity and the architectural settings of a designated place.
Fig 2.35
Ian de Gruchy, Maitland Town Hall (Art Projection), April 2005, Australia

Fig 2.36
Christine Rusche, Le Plateau, 2005- Île-de-France, Paris (FR)
2.5 Towards a Deconstructive Mural Methodology

As identified in 20th Century Architecture the word deconstruction was used about a type of postmodern architecture that began in the late 1980s. It is characterized by ideas of fragmentation, an interest in manipulating ideas of a structure's surface or skin, non-rectilinear shapes which serve to distort and dislocate some of the elements of architecture.

The main idea in deconstruction is based on breaking the traditional rules in a particular discipline. In painting the idea of deconstruction was discussed in a number of articles and studies such as that of Tyler and Ione in The Concept of Space in Twentieth Century Art. The authors claimed that since art moved out from the walls of churches to the private homes of the Renaissance princes, it was delimited with few exceptions by the convention of a frame in the form of a rectangle (vertical to horizontal aspect ratios) and the occasional circular format, have been incremental until the twentieth century.

The issue of pictorial space has been a major concern for many artists since the Renaissance until the 20th century. Tyler and Ione clamed that ‘Leonardo da Vinci, was the first who defined the terms ‘natural’ and ‘artificial’ perspective in painting’. Contemporary artists such as Kandinsky and Stella also made significant contribution to the literacy of pictorial space.

In his book ‘Working Space’, Stella claims that:

‘ Before 1500 the artist had to battle hard surfaces - unyielding panels and walls – trying to create space on surfaces that would have been content to stay flat. After 1500 the artist became critical of his relationship to the surfaces of architecture and sought to modify by separation, making more use of individual portable panels and canvases, or by accommodation, creating a

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46 Ibid
The painted space interacted in some meaningful, though often competitive, way with structure.\footnote{Stella, F., 1986, Working Space, USA: by Frank Stella. P.5&6}

The challenge therefore, for the 20\textsuperscript{th} century artist was how to redefine the pictorial space. The pictorial space was known for a long time as the illusionist space depicted in paintings by using linear or aerial perspective to give depth or to extend architectural features particularly in murals. The modern styles developed in the 20\textsuperscript{th} century have manipulated the notion of pictorial space in different ways starting with Cubism and ending with different approaches of abstraction to reach the ultimate flatness of the picture plane. Stella argues that:

\begin{quote}
The last really vibrant and exciting pictorial space was the Cubist space that Picasso had left behind by 1920. What abstract painting has to do is to take what Picasso left behind -Cubism- and develop it to include what Picasso went on with -a dynamic rendition of volume\footnote{Ibid, P.74}.
\end{quote}

Karmel described how Picasso and Braque created a system that transformed the traditional pictorial space in their Cubist paintings, saying:

\begin{quote}
‘Picasso and Braque replace the converging diagonals in traditional perspective with an arrangement of overlapping planes, supported by the scaffolding of the Cubist grids’\footnote{Karmel, P., 2002, Picasso and the Invention of Cubism, USA: Pope Karmel. P.14}.
\end{quote}

Fig 2.37, 2.38 demonstrate how Cubism significantly find its way in representing three-dimensional forms used to be practiced since the high Renaissance. These figures also show a new format of the traditional picture plane. This transformation in classical method of composition led step by step into the idea of an abstraction.\footnote{Ibid, P.16}
Fig 2.37
Pablo Picasso, Portrait of Ambrose Vollard, 1910

Fig 2.38
George Braque, Mozart Kubelick, 1912, Oil on canvas.
After Cubism, artists continued to create modern approaches to develop further transformation in pictorial representation. Tyler and Ione claimed that Frank Stella is one of these artists who developed new approaches in depicting modern pictorial space. Stella literally abandoned the traditional painting frame using sculptural, iconic structures that define their own limits by leaping off the wall onto the gallery floor. The presence of the space in Stella’s works is fulfilled with no illusionary tricks, but with actual forms deconstructed on the picture plane\(^\text{52}\) (fig 2.39, 2.40).

The previous examples show how the notion of deconstruction was applied in painting since artists started to manipulate the rules of traditional pictorial composition, particularly after paintings moved from the walls of the churches and palaces to individual stretched canvases. These contentious attempts resulted in the development of the pictorial space to reach its ultimate flatness of the picture plane in modern and contemporary abstraction.

Moreover, the concept of the frameless mural demonstrates the idea of both deconstructing the mural itself as well as its ability to transform the architectural space. The murals of Christine Rusche represent a live example of frameless murals (fig 2.41, 2.43). In her works, Rusche significantly succeeded in transforming the whole space with these simple black lines and shapes. She has extended the space using an abstract approach which she named *Fictional Landscape and Framed Spaces*. Deconstructing the lines and shapes used in these works, Rusche managed to create that presence of illusionist space that has extended the actual space, considering the whole architectural space as the main frame of the work.

This recent example actually demonstrates the notion of a deconstructive mural this study aims to develop. This research suggests that it is possible to produce other types of deconstructive murals that would cope with modern architectural styles in different approaches using the methodology of compositional structures developed in this Chapter.

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Fig 2.39
Frank Stella, *The Pequod meets the Bachelor*, 1988, Mixed media on etched magnesium and aluminium, USA

Fig 2.40
Frank Stella, *Il Drago e la cavallina fatata*, 1986, oil, urethane enamel, fluorescent alkyd, acrylic and printing ink on canvas, etched magnesium, aluminium and fibreglass
Fig 2.41
Christine Rusche, *in Entourage de*? 2005, Villa Merkel, Esslingen, Germany

Fig 2.42
2.6 Summary of Chapter Two

This chapter focused on the study of mural painting through a literature review. It discussed murals from different approaches emphasizing the site-specific aspect of murals as central to distinguish this particular art form from other types of art forms. Through an analytical study of previous studies made in the field, the current study found that the considerations of murals as site-specific art forms have been overlooked. However, some of these studies implicitly referred to this notion such as that of Hanafi’s study (see p29).

This chapter also discussed the three main elements that would attest the site-specificity of a mural. A fourth element was added as the basic visual aspect that would emphasize the integration between the mural and its architectural physical space. This aspect was identified as the ‘structural systems’ in mural design. This term and the other elements were investigated and identified during the field research made in Italy. A full description of the term supported with visual evidence was given in detail in this chapter. Applying the analytical methodology in this section resulted in achieving the previously mentioned findings which theoretically produces an answer for the first research question.

The four elements discussed throughout this chapter as the key elements to fulfil the site-specificity of murals are not time-specific; in fact, these elements are central for contemporary mural practice. The main reason for undertaking this kind of study within this research is to highlight the basic design principles in murals that might have been ignored or overlooked; with the result contemporary murals have no significant relation with the architectural space for which they were made. This aspect will be discussed in detail in the next chapter.

This chapter also raised some contemporary conceptual and visual issues that are particularly relevant to this study such as the notion of a frameless mural and the idea of deconstruction. The exploration of the aforementioned issues develops new insights that could have a direct impact on the design process for contemporary murals. These insights seem to be not taken into account in previous studies. A further exploration of these concepts will be shown and discussed through the practical study of this research in the
following chapters. Raising these issues in this chapter would also give an answer for the second research question. However, to fulfil the main aim of this practice-based research it is important to test and critically analyse these findings through practice and the reflection on this practice.

The fact that there is no law that controls any art form as a human activity does not obstruct the notion of undertaking this kind of practical research which attempts to identify a potential format. Popham said:

‘In the practice of so personal an art as painting there can be no law, but respect may justly be paid to a fund of knowledge which has been accumulating through many centuries. The legacy has grown to its present size because its tenets are the agreed results of countless experiments, but it would be imprudent to suggest that they are yet complete’.

He also added that in major works of art certain satisfying elements have been observed and carefully examined: pupils have noticed that certain ideas and devices in their masters’ works have invariably produced happy results.

This research emphasizes the importance of finding and developing those principles and experiences that have been practiced through centuries; the challenge, however, is how to activate the empirical knowledge that has proved its success for ages and how it is to be invested in contemporary approaches. Fulfilling an investigation of mural painting in Italy from the Renaissance, Baroque and Rococo periods, the research proposed in this investigation engages with the production of abstract based composition. This raises questions about the integration or site-specificity with contemporary architectural space. The practical study developed in this research in Chapters Four and Five proposes answers for these questions.

The findings of this chapter will be deployed in the next chapter as an evaluation device to critique contemporary murals that have been produced in the west as well as in Egypt.

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54 Ibid
Chapter Three: Critical Study of Murals Between Conventionality and Modernity

3.1 Issues of Space

3.1.1 Introduction

The term ‘Space’ has a range of definitions as it is used in many different disciplines but what is relevant to this study is that the word ‘space’ constructs one of the common bases between visual arts and architecture. As Tyler and Ione state, space might be defined as the infinite extension of the three-dimensional field in which all matter exists. Contemporary visual artist Frank Stella sees the creation of space as the principal goal of art when he said:

‘But, after all, the aim of art is to create space - space that is not compromised by decoration or illustration, space within which the subjects of painting can live.’

Stella’s statement may also be applied to architecture where the ultimate goal for an architect is to achieve a well-structured design that embodies both form and function to the highest possible standards, creating a space within which human activities may take place.

‘Space is an essential knowledge in the understanding of design. Human beings live in space but a picture comprises only of a ‘flat surface’ with no actual space. This is no different from the space that architects and designers work with. Space is the first creative act of any drawing or painting scrawled on a piece of paper. Like an architect, a painter needs to determine before hand the manner in which the space can be depicted.’

Murals could be considered to be one of the oldest and most appropriate art forms to explore the relationship between virtual space (depicted) and the actual space of the

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2 Stella, F., 1986, Working Space, USA: by Frank Stella, P.5
architectural environment.

‘The murals of Pompeii attest to the fascination of the Romans for enhancing the space of their windowless rooms, while much of the power of Renaissance art grew out of its ability to use perspectival techniques to create the illusion of three-dimensional space on the walls in their villas’.

Tyler and Ione are making an important point here by drawing attention to the importance of perspective in Renaissance painting in relation to architectural space. The distinctions between architecture, painting and sculpture during the Renaissance were not so clear-cut and practitioners could move easily between the disciplines. The technique of perspective in drawing was developed as much by and for architects as painters. Therefore the theories of pictorial space, that were to dominate painting up until the 20th Century, had their roots, at least partly, in architectural theory. This became more easily overlooked as painting moved towards the easel and became a more autonomous discipline.

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3.1.2 Murals and Easels in Relation to the Architectural Space

Murals were produced a long time before easel paintings. Primitive cave paintings are argued by many art historians to be murals. Cass, for example, claimed that mural had its roots in prehistory and continued to develop through the splendour of the Renaissance and Baroque periods, to the challenging and the vital 1930s. Less controversially, in the medieval period, frescos were the main method of producing images or painted scenes and were used to decorate churches and palaces of the nobles (fig 3.1).

Weber said, “The shape of the wall determines the shape of the painting.” This means that the pictorial composition used is determined by the shape of the wall. The frame is the fundamental element with which the pictorial composition can be integrated; in mural painting the frame is the wall itself. This aspect adds a substantial issue to be considered in the mural design process, which is the architectural space that not only determines the proportions and shape of the wall but also is itself partly formed by the wall. Feibusch urges mural painters to recognise the architecture as something that does not only impose literal restrictions but as the work of an architect whose aesthetic intentions constitute another limit that should not be crossed:

“The painter of easel pictures is used to developing all his problems within the picture frame and to settle them there. He creates his own space without any reference to an outer one, whereas the mural painter creates out of the space of the room surrounding him. He must give up the idea of using the room as background on which to display his art with complete freedom; he must learn not to contravene the tendencies of the architect.”

Feibusch’s advice is explicitly for painters trained in the tradition of easel painting but there is also an implicit acknowledgement of the historical relationship between painting

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and architecture in his assumption that the painter should be able to understand the ‘tendencies of the architect’.

The effect on the development of painting of the move from the wall to the easel was enormous and has also affected the way murals are regarded by art historians. It is often overlooked that most early ‘paintings’ were in fact murals and as such were designed for and made in a specific space and were not intended to ever be seen outside that space.

‘From the middle ages to the eighteenth century, influential patrons—such as the church, the state, or eminent individuals—would, almost certainly, have expected artists to reflect their beliefs and privileges. As artists became more self-sufficient, the loosening of ties with powerful patrons was mirrored by the growing value placed on individual freedom of expression’.  

With the rise of easel paintings there was a shift in the status of painting as an art and along with the growing value of individualism and free expression there were burgeoning new markets for paintings as movable commodities. This may be why murals became increasingly marginal in the history of art compared to easel paintings until the 19th century when murals started to gradually retrieve a distinctive role in modern societies. This gap in mural history resulted in a significant development in easel painting whilst there was less development in murals.

The mural designer had to identify the style, the function and the rhythmic order of the architectural space for which the mural was being designed. These would necessarily effect the composition from the outset and would be incorporated in the conception of the work. However, the compositional starting point for an easel painting is the frame and dimensions of the support over which the artist has much more control and the conception of the work need not be influenced by the place in which it will hang (fig 3.2).

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Chapter 3

A. Abdelrahman

Fig 3.1
Mattia Pretty, Series of murals at the apse of Basilica di Saint’ Andrea Della Valle depicting The Crucifixion, Martyrdom and Burial of Saint’ Andrea, Rome (1650-1651)

Fig 3.2
The examples shown in figs 3.3, 3.4 demonstrate that the murals depicted were designed specially for their particular spaces. In fig 3.3 the doors on both sides were included in the pictorial composition as supporting elements or as a basis for the figures depicted to sit on. Thus they have a functional role in the pictorial composition of the mural in addition to their architectural role. The doors have also been echoed within the mural as a framing device for the central figure and the painting draws attention to the real doors as frames through which the users of the room will appear to walk through the pictorial composition. In fig 3.4 the whole composition of the fresco is based on the form of the marble unit that is centred on the wall. Using the tromp l’oeil technique, the painter has integrated his painting with the architectural features that surrounded his mural in a frameless format. These examples clearly illustrate how effective mural painting is integrated with its architectural context and the site – specificity of the space where it is made – and distinguishes the murals from easel painting where the painter does not need to take all these conditions into consideration. As can be seen in fig. 3.3 the painter is able to incorporate architectural features to create frames-within-frames.

One of the issues this research aims to address is the relationship between the frame and the mural. If the wall is considered to be the mural’s frame, as previously indicated by Weber, the current study would suggest that the whole architectural physical space could be regarded as the real frame of the mural. This sounds like a modern idea but as we have seen the historical relationship between painting and architecture particularly during the Baroque indicates that murals once were fully integrated within their architectural frames and the separation began with the rise of the easel painting.
Fig 3.3
Frescoes at one of the halls at Castillo Sant’ Angelo, Rome (artist and date are unknown).

Fig 3.4
Fresco Painting at the Complesso Monumental di Santa Croce, Florence. (artist and date are unknown). Both examples demonstrate the site-specificity of the murals depicted.
3.2 Murals and Contemporary Architecture

3.2.1 Introduction

It is important to highlight some specific issues in contemporary architecture which would directly or indirectly enhance and affect the quality of contemporary murals. These issues include the significant potential that contemporary architecture embraces in terms of the materials used, the deconstructive nature of new spaces and new approaches that apply modern architectural theories.

As a definition ‘contemporary architecture’ is a term that refers to the architecture being made at the present time. The time span includes the last few decades, from the 1980s to the present. Modern Architecture or Modernism was a product of the mid-20th century.

‘By 1920 there was an increasingly wide understanding that building forms must be determined by their functions and materials if they were to achieve intrinsic significance or beauty in contemporary terms, without resorting to traditional ornament. Instead of viewing a building as a heavy mass made of ponderous materials, the leading innovators of modern architecture considered it as a volume of space enclosed by light, thin curtain walls and resting on slender piers. The visual aesthetic of modern architecture was largely inspired by the machine and by abstract painting and sculpture’.\(^9\)

In their book *The 20th Century Architecture* Peel and others claimed that:

‘The term Post-Modernism was coined in the 1970s, possibly first by the architectural critic Charles Jencks in his 1977 book *The Language of Post-Modernism* as a ‘Populist-Pluralist art of immediate communicability’\(^10\)

Figs 3.5, 3.6, 3.7, 3.8 show some examples of post-modern architectural styles evolved since the 1970s.

These new conventions in contemporary architecture have inspired other disciplines to evolve in similar ways such as in painting and sculpture. The terms Modern, Conceptual and Deconstructive are commonly to found in all of these disciplines (fig 3.9, 3.10). In the realm of visual art, new forms of expression have also evolved to cope with the language of the modern age: Conceptual Art, Installation Art, New Media Art, and Projection Art. All these art forms have significantly dominated many of the art galleries as well as public spaces (as site-specific works) around the world (fig 3.11).

Contemporary architecture has a number of changes concerning some of its infrastructural elements, particularly the walls; for example, most contemporary public buildings (commercial, social or educational buildings) are generally built out of a steel structure, and therefore walls are not functioning as structural elements anymore. Consequently, most of these walls could describe as temporary walls made of plaster, wooden boards or panels and even glass sheets. They may be changed or reconstructed at any time in accordance with the functional requirements of the space, hence, extending or enlarging an existing space or even dividing a large space into small areas is easier than ever. This significant change is one of the most important features in the structure of contemporary architecture would inevitably impact on the way murals are thought of in relation to the space, their longevity and their function within contemporary buildings. However my main focus is on how these changes may affect the design process of murals.
Fig. 3.5
Frank Gehry, The Ray and Maria Stata Center, March 2004. Massachusetts Institute of Technology, USA

Fig. 3.6
Coop Himmelblau, 1998. Ufa Cinema Centre, Dresden, Germany
Fig 3.7
Design proposal for the New School of Design tower for Hong Kong Polytechnic University, by Zaha Hadid. Expected to be completed in 2011

Fig 3.8
Fig 3.9
Theo Constanti, ‘Abstracto’ (date unknown). One of the artists associated with Constructivism

Fig 3.10
Anish Kapoor, *The Bean*, Urban Art (Site-Specific art) 20-metre-long sculpture installed in the Millennium Park, Chicago, USA.

Its real name is actually "Cloud Gate", but Chicagoans call it "the bean" because of its shape. This site-specific piece is covered with polished stainless steel plates that reflect the city's skyline and the sky.
3.2.2 Permanency Aspect of Mural Painting

Fiebusch argued that as the walls are no longer the carriers of the building but only a clothing skin giving seclusion and protection, they can be treated with greater freedom, pushed backward and forwards as required by the purpose of the building, open or closed, made opaque or transparent. A result of this flexibility is that the outer and inner spaces are no longer strictly separated. Fiebusch continued: ‘In fact the whole building has become an homogenous arrangement in space’\(^\text{11}\).

Murals made in the early Renaissance were frescoes and were therefore painted onto the newly applied, wet plaster. It might be thought therefore, that murals in its conventional definition would be described as permanent art forms. But it was found during the field research in Italy that many murals made during the late Renaissance were oil paintings and had been painted on stretched canvas to fit a particular wall (fig 3.12). These were not permanently integrated works and were sometimes exchanged with other paintings or moved to other locations. For example, during my field research in Italy I found that most of the original oil paintings made especially for San Pietro Cathedral had been moved to museums and replaced with reproductions of the same paintings made of tiny mosaic tiles (fig 3.13).

Steve Lobb and Carla Kenna mentioned the term ‘Movable Murals’ in their book ‘Mural Manual’, where they commented that:

‘Movable murals are usually painted on plywood panels, light metal or plastic and used in a variety of situations: in connection with campaigns which move from place to place; where wall is available only temporarily or where its surface is unstable or heavily pitted, or where scaffolding cannot be erected; and where preparation and painting for a mural are better done off-site’\(^\text{12}\).

The Stroom Public Art Group, which is based in the Netherlands, have established a set of principles for their public art projects; two of these principles relate to this discussion:

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Fig 3.12
Chiesa di San Zaccaria, Venice
All of the paintings shown in this photograph are oil paintings on canvas made to fit their designated place.

Fig 3.13
San Pieter Cathedral, Vatican, Rome
This Photo shows one of a series of copied works made with mosaic to replace the original ones (which were oil paintings moved to museums)
1. ‘Artistic quality, an intrinsic relationship, and flexibility remain a priority; site-specific works should be checked periodically to make sure that they are still suitable for the location they were designed for.

2. Projects of public art can, aside from being tangible site-specific objects, also be of a temporary nature, or manifest themselves as a passing activity or event; they can take the form of research, without requiring actual realization of the work.\(^{13}\)

The criteria of this research would strongly agree with these principles in terms of an understanding about what contemporary public art (which would include murals and site-specific art works) should represent in relation to contemporary architectural spaces. The notion of a non-permanent or a temporary mural would add more insights for new and innovative approaches to be applied in contemporary murals practice as will be demonstrated in Chapter Four. Furthermore, this research argues that if murals, in their traditional definition are permanent art forms, new/contemporary architecture theories would suggest that new conceptual approaches for mural painting, as site-specific works, could be considered in order to develop contemporary murals that would cope with those architectural styles.

As previously stated, it was very difficult throughout the development of this research to identify a significant literature that argues the relationship between murals and architecture, with the exception of John Pitman Weber’s vital study ‘Mural Composition’, as much of it is on the fringes of the contributing disciplines. The need to expand this topographical knowledge about murals and their architectural context is particularly important. Therefore, it was necessary to determine this relation using experience and previous practitioner knowledge in the field by two methods:

- The first method, which has been already discussed in details in Chapter Two was to identify a possible relationship between traditional murals that have been produced during the Renaissance age and the architectural context in which they were made as the key period for this research.

• The second method, to study and analyze a number of contemporary murals around the world in general, and contemporary murals that have been produced in Egypt in particular especially in the last 10-15 years in order to determine whether this kind of relationship does exist as a common feature in contemporary murals or is accidentally achieved because of the artist’s priorities and beliefs. The following section will discuss these murals in details.
3.3 Critical Study of Contemporary Murals

Throughout the literature review, visual notes and site-visits were made to a number of contemporary murals in Egypt, UK and in Italy. I have developed a record of a number of contemporary murals that merit investigation and articulate the extent to which these murals integrate with modern architectural styles. The chosen samples do not cover all contemporary murals, but, as far as possible, this research endeavours to cover a wide range of contemporary murals in relation to different architectural conditions (interior and exterior) where the potential of the architectural context is clearly tangible.

In order to analyze the selected murals within an appropriate academic methodology, I have devised a critical template that will be applied to all of these murals. This template applies the elements described in Chapter Two in order to determine what makes a mural successful as a site-specific art form.

The critical template is based on the following elements:

- The architectural context particularly for interior murals: this element will judge the correlation and the integration between the pictorial composition of the mural and the architectural space to construct what has been identified as the compositional structures of mural design.

- The urban environment, particularly with exterior murals: this element will measure the integration of the mural with the urban environment in terms of colour schemes, the materials used and also with any architectural elements that exist.

- Conceptual influences, this element will test the site-specificity of the mural in terms of its cultural, political and social aspects discussed in chapter 2.
3.3.1 Critical Study of Selected Western Murals

1. The City Hall, Oslo mural is an interior mural where the Noble Prize Ceremony takes place (fig 3.14A&B). This mural was made by Henrik Sørensen in 1950. As shown in the picture, the mural is a symmetric composition; the presence of the mural is almost flat, but with a slight use of perspective (in the bottom left) that depicts a staircase. It is difficult to identify a clear underlying structure in the mural, only 3 horizontal sections in 3 levels across the whole wall, even without any significant bonds between the 3 levels. The focal point at the upper centre dominates the whole scene, which gives no chance for the spectator to explore the rest of the mural. The three horizontal levels are almost separated from each other; the style used in depicting the figures in each level is dependent and visually isolated from the other levels; furthermore, the approach used in the figuration is also varied. The colour scheme used does not impose the mural onto the space, contradictorily; it restrains the mural from being part of the physical space.

Applying the critical template on this mural the outcome is as follows:

- With regard to the architectural context, it is clear that the interior architecture has its own characteristic style which has not been emphasized or even reflected in any of the mural’s components. Hence, it is very difficult to identify a significant coherence between the mural and its surroundings, in spite of the horizontality used in the mural that may be seen as an extension of the horizontal lines in the ceiling, but it is not sufficient to integrate the mural to the space. This would subsequently disqualify the compositional structure used in this piece from being a site-specific mural according to the criteria deployed in this critical template.

- With regard to conceptual influences, the mural appears to fulfil the cultural purpose it was made for as it depicts the Noble Prize ceremony scene. However, the pictorial composition employed is not appropriate to fully portray the sequence of the ceremony. As previously mentioned the central focal point grabs the viewer's attention all the time and does not allow him to explore the rest of the mural. These shortcomings would also disqualify this mural from attesting the site-specificity for which it was made.
Fig 3.14A

Fig 3.14B

Fig 3.9A&B: Henrik Sørensens ‘Administration and Festivity’, painted in 1938-50. Noble Prize Ceremony, South Wall, City Hall, Oslo, Norway
2. The second example is a mural in Hamburg made by an unknown group of people (fig 3.15A). The technique used in this exterior mural is simple but succinct. The presence of the smoked glass depicting shadows of workers and builders bring this side of the building into life. The implementation of shadow in depicting figures makes the presence of the mural as a flat image very natural and justified. It is very easy in this mural to identify an underlying structure which is composed of a good arrangement of figures and the use of vertical, horizontal and diagonal lines which is very subjective both visually and the conceptually. Visually, it completes the well-designed path that emerges from the spontaneous arrangement of the lines in all directions (vertical, horizontal and diagonal) which operate as an indicator or a guideline to the viewer to travel through the whole design to meet the figures depicted in each horizontal level of the scene. Conceptually, these lines are very relevant to the subjective aspect of the mural as they represent the metal pipes and wooden timbers that are usually used in buildings. Furthermore the pictorial composition used in this design represent one of the classical compositions that was used in murals, which we may call the spiral composition or the letter S composition (fig 3.15B). This particular composition was usually used with this kind of architectural space (the vertical rectangle) which has already been discussed in detail in Chapter Two.

Applying the critical template on this mural we will find that:

- The pictorial composition used in this contemporary approach and technique has significantly integrated the mural with the architectural context as one of the modern buildings in an industrial environment.
- The whole mural does not clash with the urban environment; it appears as if someone has revealed this side of the building to showcase a cross-section of what is behind, or to indicate that some refurbishment works are under way.
- The mural reflects the nature of the whole series of buildings as part of an industrial area, and that would attest the cultural and the social aspects. It shows the notion of workers homes are made by workers. Applying the critical template, this mural seems to fulfil its site-specificity.
Fig 3.15A
The Horizontal Group Mural, painted by unknown painters, Hamburg. (Date unknown)

Fig 3.15B
A Diagram that demonstrates the pictorial composition of the mural. Made by the author.
3. There is no doubt that exterior wall paintings provide an art form, which can be seen, discussed and enjoyed by a wider audience than any other branch of contemporary art. The main object of many of these paintings is to enhance an environment, but they often convey information as well. However as Hans Feibusch says:

‘We have found that the three dimensional murals can only be used in special circumstances; not next to doors or windows, or in the open, because artificial and real space clash badly. Also it requires the most careful adjustment of its perspective to the features of the room and the position of the spectator.’

According to this statement the use of figurative elements in such spaces (outdoors) is considered to be a risk in certain conditions. However, the mural in fig 3.16 is an example of one successful attempt experienced throughout this study. The perfect use of perspective, the pictorial composition (the spiral) and the high skill used to connect every single detail in the mural to the surroundings including the real sky that appears to be part of the depicted objects made this side of the building appear to hold a real action rather than just being depicted. Using parts of the attached façade (on the right), and also extending it inside the mural by depicting a virtual side view of it has integrated the mural to both facades. In addition, repeating the red bricks in some areas at the mural itself also emphasised the presence of a natural scene not an illusionist one

Applying the critical template, it seems that this mural has fulfilled most of the visual and conceptual aspects that would qualify it as a site-specific piece of work. The integration with the architectural context, and the involvement of the surroundings have emphasised the use of a good compositional structure. However, and referring back to Fiebusch’s statement, this mural needs a vantage point from which it is to be viewed and enjoyed in the way it appears at the picture, otherwise many fascinating aspects that have been deliberately adjusted and pre-considered would be intangible. This would be considered as a shortcoming in this type of exterior wall paintings.

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This study suggests that it maybe more appropriate to describe and categorise these types of paintings; as exterior wall paintings, which would also include Graffiti art.

In terms of its conceptual aspects, this mural succeeds in depicting part of the social and cultural activities being practised amongst the local community. Fulfilling this aspect may facilitate the interrelation between the local audience and the mural.

![Fig 3.16](image)

4. The ninety-foot high mural by Mary Blair, remains a focal point of the Disney Contemporary Resort hotel at Walt Disney World, which was completed for the resort's opening in 1971 (fig3.17A).

As seen in the picture, Blair used one of the common pictorial compositions that are usually used in this type of wall space (the vertical rectangle). She organised the structural elements in almost a vertical spiral/Figures S shape which emerges from the relation between the light areas on the left and the dark areas on the right that would help the spectator to move across the whole mural from the very bottom to the top of it. She has also emphasised the fisheye perspective by narrowing the composition as the eye goes towards the top. This effect makes the composition appear to be a pyramidal shape, which would also emphasise the spatial nature of the interior space as may be observed in the picture, the building’s levels are getting narrower towards the top.

Blair also made horizontal divisions across the whole composition which is a very common designing solution for walls that are extremely vertical. This horizontal division would partly help to integrate the mural with its surroundings especially if it could be seen from different eye levels as seen in fig 3.20C. The colour scheme used matches with the colour scheme used in the interior space, especially in the night scene although it has a contrast effect, which, in a certain position and certain lighting conditions would eliminate the carrying wall, as this block wall that seems to be the elevator duct, has the same colour as the background (fig 3.17B).

This visual analysis of the current mural would strongly suggest that it has fulfilled the criteria of the critical template in terms of its integration with the architectural space and the urban environment. Furthermore, the cultural identity and the locality have been also depicted in the mural featuring stylized birds, animals, flowers, and American Indian children, which reflect part of the local community.
Fig 3.20 A, B&C are different views of the mural by Mary Blair, 1971 at the Disney Contemporary Resort hotel at Walt Disney World, USA.
5. The following example (fig 3.18) is a recent mural made in the year 2005. *Wall Drawing* by Sol LeWitt who pioneered the use of wall works- art applied directly on the wall- in a contemporary art context. At a glance, the mural does not seem to have any significant features that would correlate it to its architectural context. In spite of what Sol LeWitt may have contributed to the field, this particular mural, even with its robust colours and radical approach, does not embrace the integrality of the space. The reference for this point is that if this wall painting has been moved or painted on any other wall that has the same dimensions or even the approximate dimensions it would make no difference. In addition, this particular wall has some significant and explicit features that should have been considered in the mural even though it is an abstract one (which normally should make it much easier). The features are the architectural apertures (set of windows in two levels and a wide doorway) that have no significant relation to the depicted circular motifs other than that the centres of the circles may be seen at the same level as the lower set of windows, which is inadequate in integrating the mural to the space. Furthermore, it would be visually recognized if the colours used were to have a dimensional role, which may add some virtual depth to the mural. Unfortunately the use of basic colours in the same amount and the same distribution across the wall makes it clash with the viewer’s eye in the first instance. It is very common for a mural to dominate the space that it was designed for but it is much more important for it to be an integral part of that space.

Applying the critical template on this mural, we will find that:

- The architectural context has not been represented or pre-considered in the mural at any level, which would disqualify this mural from attesting the site-specificity of the space. However, the abstract composition used may refer to the modernity of the architectural style.

- In terms of the conceptual influences (cultural, social, political, etc.) using an abstract approach makes it difficult to determine any of these elements particularly when knowing that this place is The Swiss Copyright Society for Literature and Art. This means that this place has a significant cultural nature.
This leads to one of the issues this research is aiming to address, which is that not every drawing/ painting or even installation piece of work that is related to a wall should subsequently be classified as a mural. This assertion relies on the criteria this research is undertaking in determining the relationship between the art form that is made on a wall and the architectural context within which this wall belongs. In terms of the compositional integration, if such a relation does not exist at any level that would disqualify this art form from being a typical mural that matches the criteria of this study.

The following examples showcase the kind of artworks that may be described as contemporary decorative solutions to some wall spaces. Showing these examples will clarify this notion and will also highlight the unique techniques used in these works and the potentials they may provide in producing ultra modern types of murals.
6. Fig 3.19 shows one of the recent pieces of artwork made by John M Armleder in Geneva in 2005. The work has a variable format; on the right hand side there is a wall painting (orange circles) and on the opposite wall a set of 21 neon rings (in green) have been placed. The circle shape used in both walls generates a firm relationship between the two walls; it appears that the green neon circles on the left wall have been constructed as a result of or as an instant reflection of the orange ones on the right wall. The fact that the right wall is a huge arc, has also integrated the work on both sides with the space.

It is hard to identify an underlying structure in these two examples. This does not mean that any kind of composition that is not relevant to this study will be excluded as a disordered approach, and that is why I have presented these types of compositions to acknowledge the potentials they may have for coping with the criteria of this research. For instance, this present work may considered to be a very radical mural in terms of its congeniality and coherence within the space, in spite of not having any of the compositional approaches adopted in this study.

In applying the critical template on this work, the artist seems to consider the whole space in his design applying the circle as the main theme of such circular space and also emphasizing the notion of a frameless compositional structure identified in this study. Moreover, this new approach employed has attested the site-specificity of this work and also have suggested different insights that merit investigation. These insights could be invested in juxtaposition with the compositional structures identified in this study to produce contemporary deconstructive murals.

The abstract approach employed in this work may suggest different kinds of interpretation that are not particularly narratives. Therefore, conceptual aspects such as cultural, and social influences could be easily articulated in such radical approaches. For example, in the current piece of work, the circles might be seen as reflections of dishes or plates that are commonly used in this place. This would suggest a further coherency between the mural and the space it was made for.
Fig 3.19
7. Fig 3.20 A&B represent another approach within the new age inventions. It is made by Erika Hanson and although she calls them *Objects for Walls* sculptural installations they seem to be more like organic deconstructions of the traditional flat, vertical wall. “Objects for Walls” as described by Jill Fehrenbacher in her article,\(^{15}\) offers a contemporary alternative to the plain walls typical of modern interior environments. Blurring traditional categories of sculpture, architecture and furniture, these objects change the way we perceive the boundaries of a room.

Fehrenbacher also added that the designer has created full-size walls out of eco-friendly fibreboard Maplex, and then carved slices into them warping the fabric into different shapes. Hanson treats the Maplex like pliant skin, pushing and pulling bits into pockets and fissures. The gaps are then backlit, creating sculptural lighting; or left open, creating organically shaped ventilation holes. Although the forms appear soft, once set in place, they are as hard and enduring as the surrounding wall. Fehrenbacher also added that along with fellow designer Emiliano Godoy, Erika Hanson was commissioned by Weidmann Creative to come up with some interesting new ways to use their eco-friendly Maplex material. One of the unique qualities of the fibreboard is that it can be moulded into almost any shape imaginable. This flexibility of material was one of the inspirations behind this inventive rethinking of the traditional wall\(^{16}\).

*Objects for Walls* appears to have no clear underlying structure (or at least one that may be relevant to this study), but it still has this unique creative approach that would define them as installation art from the way in which it interacts with a designated space. The nature of this work, in its current state does not suggest it should be classified as a mural that was designed for a specific architectural/urban space. The idea of projecting parts of the wall to interact with the physical space seems to suggest new approaches and techniques that would increase the boundaries of characterizing site-specificity of a mural, particularly if combined with an appropriate compositional structure.

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\(^{16}\) Ibid
Fig 3.20 A
Erika Hanson, ‘*Objects for Walls*’, 2005

Fig 3.20 B
Second version of Objects for Walls
8. The last example in this section is about the contribution of new media technologies in the field of visual art. There is no doubt that new media technologies have provided a great deal of technological as well as visual potential that many contemporary artists have employed in their works, especially those artists who have an IT background in parallel with their artistic background. Pascal Dombis is one such contemporary artist who has a computer since background, which enabled him to produce ‘Hyper-Structures’ so as to advance a complex pictorial space. Frank Popper described the approach Dombis uses in developing his hyper-structures saying:

‘Using the computer’s calculating power, Dombis can generate structures made up of tens of thousands to several million single elements, which would be impractical to be generated by hand’. 17

The images shown in (fig 3.21 A&B) represent part of a series of video installation art work Dombis produced in 2004 called “Stong_Geminga”, and it is based on the idea of opening and closing geometric space. On his web site, Dombis explains that the increased numbers of curves at different scales generate shapes that can be geometrically simple like rectangles or squares. Integrated into architectural space, they work as virtual doors or windows. Then, by making the growth process more and more random, these simple forms close and develop into out-of-control networks of arabesques. 18

The question to be raised here is: what will be the result of using Dombis’ hyper-structure technology in combination with the compositional principals this study has identified? The suggested answer will be a remarkable mural style that would integrate with a number of contemporary architectural styles. Bearing in mind that the execution of this kind of art form is not a problematic issue in terms of the advanced technology developed in the last few decades.

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17 Popper, F., 2007, From Technological to Virtual Art, Massachusetts Institute of Technology, P.93.
Fig 3.21A
Pascal Dombis, Stong_Gemina, Fort Napoléon, La Seyne-sur-Mer Video installation 2004

Fig 3.21B
Pascal Dombis, Stong_Gemina / Thura_Stong, Fort Napoléon, La Seyne-sur-Mer 3 minutes Video installation, 2004 (opposite angle)
3.3.2 Critical Study of Contemporary Murals in Egypt

This section will critically analyse a number of contemporary murals in Egypt that have been produced in the last 15 years. The aim of this study is to highlight the compositional/structural problems these murals may have in terms of the pictorial format as well as the architectural context for which they were made.

An aspect of this study is also based on applying the critical template designed for this purpose. All samples studied in this section were recorded in Cairo and Alexandria as these are the two major cities of Egypt and have a number of murals especially in public areas. That does not mean that other cities such as Luxor, Sharm Elshaikh and other districts in Upper Egypt do not have contemporary murals. However these are not on the same scale as those in the two major cities. Right from the beginning of this research it made methodological sense to limit the study and focus on those two large cities with the assumption that the output of this study as a whole would be applicable to a wide range of contemporary murals.

- Contemporary Murals in Cairo

1. Fig 3.22 series represent the massive 9 separate murals that were made to decorate the outer perimeter wall of The Military College Stadium in Cairo. It is a highly visible construction on the route to Cairo international airport. This project was designed by Mustafa Elshikh, Sami Abdullah (Faculty of Fine Arts, Cairo) and Diaauldeen Mohamed (Faculty of Applied Arts). The Ministry of Defence commissioned the project and the construction work was undertaken by the contractors, Ivac. It would not be difficult to imagine how much this project cost if we consider that the material used throughout is coloured marble and that the smallest mural is approximately 5 metres high and 20 metres wide.

Most of these murals are based on enlarged images from photographs representing some of the significant places and monuments in Egypt such as The Opera Building, The Great Library of Alexandria (fig 3.22E), and the Sphinx (fig 3.22D).
The first 8 Murals at The Military College Stadium’s perimeter in Cairo, Egypt 2004
The last 2 Murals at The Military College Stadium’s perimeter in Cairo, Egypt 2004
The photomontage technique used in designing these murals makes it difficult to identify a clear pictorial composition in any given section. As can be seen in the photographs there is no sign of coherence between each individual section either with the main perimeter wall or to each other. However, in some sections, the supporting wall was basically built in a special form to accommodate the mural structure. So instead of designing for the wall the wall was built to fit the mural which is completely contradictory to the notion of what a mural is. The perimeter wall itself does not have a particular architectural style, which sometimes may be useful for the mural designer, because, as in this case, he does not need to worry about the artistic style that he should implement to compose his design in relation to a specific architectural style. The major problem in this particular design, that can be argued, is how to identify any underlying structure that would unify the whole composition since the photomontage technique militates against such a unity.

Some sections occasionally have a hint of an underlying structure (fig 3.22 B&C), in spite of the photomontage technique but they still retain the pictorial compositions that would distinguish them. The pyramidal composition used in the mural depicted in fig 3.22B is not actually the appropriate one to be used in this pictorial format. The horizontal spiral used in the mural (fig 3.22C) is one of the most common compositions to be used with this particular pictorial format as explained in Chapter Two. The absence of an underlying structure appears again in fig 3.22G&H where the attempts to create feasible links between the major elements could be argued as inappropriate particularly with the constant overwhelming photographic presence.

The most significant section made in this set of murals, is the front wall of the same perimeter on the side that embraces the main gate to the stadium (fig 3.22I). The approach used in this large composition (5 meters high x approximately 40 meters length) is physically different from the previous ones. A relief technique was used to project the main objects out of the wall (fig 3.22J), but still the main structure for the whole mural is not bonded together and the painted part in the middle (that depicts the Nile and the Pyramids) emphasises the disconnection between both sides of the composition.
Applying the critical template on this series of murals, it would be found that:

- It is very hard to identify the relationship between this set of murals and the perimeter wall as an architectural construction in terms of their compositional structures. As already mentioned some parts of the perimeter were deliberately reconstructed to accommodate the mural. Thus, the architectural context appears not to have been fully considered within the murals.

- In terms of the urban environmental aspect, the use of base relief might be considered inappropriate because of the amount of dust that would accumulate on the relief parts. However, the use of a durable material such as marble is considered to be an appropriate choice to resist the weather conditions, in spite of being so expensive. Also, the use of ground colours would integrate the murals with the nature of the urban environment.

- The conceptual influences are partly represented in the mural by depicting a number of cultural, historical and monumental features that distinguish Egypt. These conceptual issues would justify the need of producing such series of murals in this unique route that leads from Cairo International Airport to the town centre.

The outcome of applying the critical template on the Military Collage Stadium set of murals would disqualify them from attesting the site-specificity aspect in terms of the architectural context.
Fig 3.22I
The front wall of The Military College Stadium’s perimeter in Cairo, Egypt 2004

Fig 3.22J Detail
2. Figures 3.23 A&B are two images of a huge mural (approximately 15m in width and 5m height), which is located at the Social Club of the National Bank of Egypt in Cairo. The designer and consultant for this project was the Arina Agency for Interior Design and Decoration. It demonstrates similar problems to those discussed in the previous example mainly in terms of the non-structured composition. The compositional problems of this mural can be summarized as follows:

- The scale and proportions of this wall tend to look like a billboard which should have been considered in the design. There could have been a number of solutions to this including altering the shape of the wall with panels or integrating architectural features.
- The image of the five-pound note (the light rectangle above the centre) acts as the main focal point and keeps the viewer’s eye busy with its huge scale and the details inside it, rather than travelling across the whole mural. There would appear to be no reason for the odd relation between this rectangle and the main rectangle of the mural itself, it has emphasised its disqualified relation to the rest of the pictorial composition as well as to the frame.
- Most of the structural elements have no connection with each other. Some of these elements look as though they have been added to the image without any compositional reasoning such as the Citadel and the circle that contains the portrait of Rhamses the Second.
- Through an investigation made on the nature of this wall, it was found that it is the rear wall of a small hotel attached to the social club (fig 3.23 C&D). This wall covers the staircase of that hotel. If this fact had been considered before designing the mural, and a closer collaboration between the artist and the architect took place, it would have given a chance to reveal some parts of the wall as apertures, which would lighten up the massive appearance of the wall and also would integrate it to the architectural environment.

A part from the subjective aspect attested by depicting some banking features in the mural, applying the critical template would disqualify this mural from fulfilling its site-specificity, particularly after identifying the visual shortcomings in the previous points.
Fig 3.23A
The Social Club of the National Bank of Egypt
Mosaic mural made by Arena Consultant Agency (date unknown)

Fig 3.23B
A closer view that explore details of the National Bank Mural
Fig 3.23C

Fig 3.23D
Different views of the National Bank Mural
3. The figures 3.24 series show the 6th of October 1973 Victory Memorial in Cairo and the mural attached to it (artist unknown). The mural was commissioned by the Ministry of Defence. The approximate dimensions are 3 meters x 6 meters, an ideal rectangle according to the golden mean. The wall was built specially to embrace the mural and the written text on the left.

With regard to the pictorial composition, a pyramidal (rectangle) structure was used to emphasize the soldier that holds the flag. This is the most explicit compositional feature in the mural, and all other elements act as a background to emphasise the presence of a war scene. What is really confusing in this mural is the extension of the flag shape to cross the frame of the mural, which results in having the viewer’s attention being taken by the soldier and the flag, taking the viewer’s eye outside the composition. Moreover, the white frame between the two black frames has no visual justification either to the mural or to the supporting wall. On the contrary, this frame emphasizes an odd relation between the mural itself and the supporting wall.

Applying the critical template on this mural, it was found that:

- The architectural context could be applied only on the holding wall as the main architectural elements that have no significant feature except of being the main frame of the mural. This was not correctly invested in the mural and the evidence of that is the odd relation between the mural frame and the wall.
- Concerning the urban environmental aspect, this mural is widely seen by the passing cars on a main road (approx 120m away from the mural) therefore the contrast approach, the colours and the use of mosaic technique used seems to be appropriate. The triangle composition employed has also echoed the pyramidal structure of the Memorial and that would integrate the mural with the overall visual environment.
- The conceptual influences were clearly considered by depicting part of contemporary Egyptian history (the 6th October war scene) which establishes a direct relation to the memorial.

A part from the compositional problem discussed previously, this mural seems to partly fulfil the site-specificity for which it was made.
Fig 3.24A
The 6th October 1970 Memorial Mural in Cairo

Fig 3.24B
Detail
Fig 3.24C
Showing the mural in relation to part of the Memorial

Fig 3.24D
Showing the mural in relation to the Memorial
4. The mural in (fig 3.25A&B) represents one of several murals that were made to decorate public urban highways. These murals are sometimes commissioned by the local authorities and other times they are commissioned by private companies for local communities with the return that they are able to exploit advertising opportunities. Most of these murals unfortunately fall short of the standards of public artworks that this research is aiming to establish. This mural for example highlights the problematic of the relationship between the mural and the architectural context. In spite of being just a tunnel in one of the main routes in the city, it still has its site-specificity that should be considered before designing a mural for such a space. For instance, using detailed ornaments is inappropriate since the speed of passing cars militates against them being properly seen. On contrary, a clear pictorial composition that embraces contrasting areas and shapes might be more appropriate for the same reason.

Unfortunately, in this mural there is no sign that the aforementioned features had been considered in the design process. There is no evidence that any compositional structure was employed, and a massive number of detailed objects were depicted. Generally speaking, the final view of the mural is absolutely the opposite of what the site-specificity of this particular site requires.

Applying the critical template on this work and after discussing the previous issues the outcome would suggest that:

- This work has failed in attesting the integration with the architectural context with no evidence of any underlying structure being used.
- Apart from using the mosaic technique as an appropriate outdoor material, this work seems to have no integration with the urban environment in terms of the colours used or the features depicted, particularly as this is a route that leads to one of the most significant landmarks in the world, the Giza Pyramids.
- No conceptual influences can be identified in this work which subsequently disqualifies it from being classified as a site-specific mural.
Fig 3.25A
Mural at the tunnel of Nile Valley Street, Giza district

Fig 3.25B
A closer view of the mural
- **Contemporary murals in Alexandria**

5. Figure 3.26 series show one of the largest murals in Egypt. It is a perimeter wall of the Mustafa Kamel hospital in Alexandria facing the Mediterranean. Abdelsalam Eid, who is a senior scholar and artist at the Faculty of Fine Arts, Alexandria University, designed this mural and it was commissioned by the governor of Alexandria, General A. Elmahgoob. This mural is more than 300 meters long and 5 meters high. A huge amount of materials were used in the construction of this mural and it was completed between 2002 and 2003, with assistance from fine arts students.

Despite the considerable skills involved in the execution of this mural and the thought that has gone into the design of the various sections, it contains many problems with regard to the overall pictorial composition in its relation to the scale and proportions of the supporting wall. It is very difficult to determine an underlying structure that would have connected the various elements, thereby keeping the unity of the whole project. We should bear in mind that as a continuous wall, with no bends or corners, it is possible for it to be seen as one continuous piece of work. This does not appear to have been considered in the design.

Although some sections are radical or abstract in their design, however, they remain only as individual parts of the whole. Moreover, although the use of various materials can be appreciated in this mural, their use in fact emphasizes the disunity in the composition. Popham, in his book *Pictorial Composition*, classifies the value of unity in the pictorial composition, asserting that:

“The first requirement of composition which every picture should satisfy is the quality of unity or one-ness”\(^{19}\).

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Fig 2.29 A&B show the Mustafa Kamel Mural in Alexandria pictured from the east and the west
It is likely that the designer realised that the composition was not bonded together in the way it should have been. That is possibly why he used that form of a white wave across the whole mural to act as the physical bonding element for the composition. However, it can be argued that it was not adequate for attaining the required unity. John Weber found that long horizontal formats that are parallel to the street (or path) would be mostly viewed at very oblique angles. Invariably these compositions call for the use of sets of low, long zigzags or crossing diagonals to move the eye from one end to the other and to avoid having the composition collapse into illegibility\(^20\). This concept has not been fulfilled in this mural at any level.

The photographs are shown in the same sequence as experienced by the viewer as he walks past the mural from the left side (fig 3.26C) to the far end on the right side (fig 3.26N). The mural was also recorded in video format which explores the actual view of the mural and its relation to the surroundings including the architectural environment on both sides. The elliptical ring (fig 3.26I), has divided the whole composition into two halves. This would not be obvious in the photos, and that was one of the reasons to make the video recording. Rather than giving a focal point to the mural, this huge ring has the effect of splitting it into two halves. It is a device that is not entirely successful; it undermines the unity of the mural and its relationship to the perimeter and the hospital building behind.
Applying the critical template on this mural, it was found that given the shortcomings previously discussed in terms of pictorial compositional issues, this mural seems to be disqualified from attesting the site-specificity within the architectural context. However, regarding the urban environmental aspect and the conceptual influences, the mural seems to attain some attraction using a wide range of colourful materials that constitute themselves as the dominant feature of the mural. This partly compensates for the compositional problems. The mural also has diverse cultural and historical influences characterized by depicting many symbols inspired from Egyptian heritage.
In spite of fulfilling these aspects, this mural, however, does not fulfil the site-specificity of this particular parameter. The most important feature that would visually integrate the mural to the parameter (which is the use of an appropriate pictorial composition) is clearly absent. This absence would strongly disqualify the mural from attesting its site-specificity. The reference for this point is that if we move the mural from this location and place it somewhere else that has the same dimensions it would not make any difference. This would confirm that fulfilling the integration between a mural and the architectural context for which it is made in terms of the compositional structure, is the basic element to attest the site-specificity.

6. The next mural is located in front of one of the most significant tourist places in Alexandria: The Quaietbay Castle. It is a huge mural also commissioned by the former Governor of Alexandria, General El Mahgoob in the beginning of this century. As seen in (fig3.27 A&B), the supporting wall has no specific architectural style. It is just a plain wall that takes a rectangular shape, and even what appear to be small windows on the top of the wall, are just part of the mural structure and not related to the actual wall. In spite of the motifs used, which are influenced by a mix of the Egyptian heritage (ancient Egyptian, Greco-Roman and Islamic patterns which appear to be overwhelming) the composition used has not capitalised on the visual values that could had been obtained if the structure of the mural had been carefully planned. The use of the circles in their particular order have resulted in visual confusion for the viewer, as it is very hard to determine where to start to look at the mural and where to end. All the circles have the same visual interest because the contrast between each one of them and the background is almost the same. The difference in their sizes and the order they were formed in was not designed to draw a proper path for the viewer’s eye to follow and to explore the whole mural. The fact that the middle circle is the biggest makes the eye stop there and there is no other visual emphasis to draw the eye elsewhere, especially with the pyramidal shape this big circle contains (fig 3.27B). This mural could have represented a unique contemporary or post-modern Chiaroscuro, especially with the number of abstract motifs used.
Fig 3.27 A

Fig 3.27 B
Quaietbay Castle Mural in Alexandria (Artist and date are unknown)
This could have been a breakthrough in this traditional technique given the huge scale of the mural, but the compositional problems mentioned, have militated against achieving this breakthrough.

The compositional problems in such big commissions require attention. This research focuses on this issue through its exposure of weak design and the assertion that this can be overcome through the teaching of better methods in the academies.

Applying the critical template on this mural results in disqualifying this mural of attesting the site-specificity in terms of:

- The architectural context (as a plain wall that has no significant features) but its still has specific dimensions that were not considered in the design using uncongenial pictorial composition.
- As an open area that looks over the seaside, the chiaroscuro technique used might suggest an appropriate approach for the mural to be seen from a distance. However, the seaside (the Mediterranean) and the existence of a monumental feature (the Castile) as significant features in the urban environment, these elements were not represented in the mural at any level, resulting in a failure in integrating the mural with its urban and natural environment.
- Conceptual influences have been achieved as already mentioned by depicting features of Egyptian historical heritage. The outcome would suggest that this mural does not fulfil the site-specificity for its designated place.
The last mural in this section is one made at the old harbour, reflecting the same structural problems; no underlying composition can be identified, as can be seen in fig 3.28A. Two main objects are depicted; one on the far left (the fish) and the other one on the far right (the small fishing boat) with no obvious design structure. This compositional fault was previously discussed in one of the Cairo murals (fig 3.24). The objects locations are taking the viewer’s eye out of the composition. The pictorial scheme used in this one is the ‘Two Points of Strain, but unfortunately with no obvious strains.

Applying the critical template on this mural, we will find that:

- The site-specificity in terms of the architectural context (represented by the carrying wall) was not fulfilled due to employing uncongenial pictorial composition.
- The urban environmental aspect was partly characterized in the mural by depicting some features of the harbour and the use of mosaic tiles. However, the failure in organizing these features in an appropriate pictorial composition and and the mixed approaches employed seem to militate against bonding the mural visually to its environment.
- There is no evidence of any cultural, political or social influences to be discussed. Therefore, this mural generally does not seem to attest the site-specificity for which it was made.

It should be mentioned that there are a number of contemporary murals in both Cairo and Alexandria and many other districts in Egypt that may be classified as good examples of contemporary murals, most of them unfortunately are interior murals and need legal permission to be recorded or pictured. But they are not that numerous, compared with the number of murals I have recorded during this field research.

At the end of this section, it is particularly important to articulate the outcomes of this critical study. It was clear that a number of the examples critiqued fall short of achieving the proper site-specificity with which they were designed. Applying the critical template showed that the main reason that causes this fall short is the lack of understanding of the important role pictorial composition plays in integrating the mural with its architectural and/or environmental context.
Fig 3.28 A

The old harbour mural in Alexandria (Artist and date unknown)

Fig 3.28 B
3.4 Summary of Chapter Three

Finally, to conclude the main points discussed in this chapter; it was important to identify all relevant issues of space particularly architectural space and pictorial space, to articulate how murals, as an art form that deals with such kinds of space, should fulfill the visual and conceptual aspects that would integrate both spaces. The mural examples investigated in this chapter, whether the Western or the Egyptian ones, demonstrated different types of contemporary murals. The Western murals in particular explored new approaches and techniques that would be applicable in the development of contemporary murals, whilst the Egyptian ones raised many questions regarding their site-specificity and their integration with the architectural context.

The critical template applied on critiquing contemporary murals showed that the most important device to attest the site-specificity of a mural is the implementation of an appropriate compositional structure that would integrate the mural with its architectural and/or environmental contexts. It also explained the importance of other conceptual elements like the cultural, political and social influences. One of the most important outcomes of this critical study was the distinction between murals as an independent site-specific art form and other similar forms such as wall painting which includes external and internal wall paintings and graffiti art.

This chapter also raised the permanency aspect of murals. The investigation made in this chapter raised the notion of a temporary mural. This notion was proposed according to the changes made in the infrastructure of contemporary architectural styles particularly the walls. The investigation conducted in this chapter proved that walls in a number of modern and contemporary architectural styles especially public buildings are not permanent walls. This important fact would subsequently affect the production and development of contemporary mural practice.
Chapter Four: Practice-Based Research Methodology

4.1 Reflective Practice

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

‘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’¹.

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 lead to protocols and regulations applied widely in practice-led research. ² Paul Clark found his PhD project ‘approached performance from both the position of the theorist and that of the practitioner’³ and debated the issue through the forum of PARIP. 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’.⁴

¹ 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
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’.\(^5\)

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’.\(^6\) And the notion of practice-based research in art education leads Michael Biggs to focus ‘not on outcomes that 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.’\(^7\)

There are well-established positions about reflection in practice from practitioners such as the architect Donald Schôn (1983) and the academic Carol Gray (2004). In his book *The Reflective Practitioner* Schôn 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\(^8\).

Carol Gray noted that Schôn proposes that much of the activities made by professionals practitioners are personal knowledge, not usually articulated, sometimes indescribable and that they rely on the improvisation learned in practice\(^9\). As Gray noted recently:

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\(^{5}\) Ibid, P.162  
\(^{7}\) 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](http://www.bristol.ac.uk/parip/biggs.htm). Accessed: 2009  
‘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.’

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. 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. Moreover, Gavin Stewart observed that:

‘Practice-based research is a relatively new undertaking within UK higher education institutions. This means that, compared with the established epistemologies of the humanities, the social sciences and the natural sciences there is less familiarity with the discourse surrounding the epistemologies of this approach’.

This research agrees with the previous positions of professional practitioners. However, my 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 form the literature review in Chapters Two and Three of this thesis.

• Analytical knowledge that has been gained through the field research conducted in Italy (addressed in Chapter Two) and also through the analytical study made of a number of contemporary murals in Chapter Three.

• Reflection on my practice is the main device this study adopts to generate personal knowledge. The reciprocation between theory and practice and the

10 Ibid
11 Ibid
documentation of the process would articulate this personal knowledge. This chapter seeks to make this personal knowledge overt and transferable, by describing and analysing the hypothetical and actual mural designs produced through the practical element of this study.

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’.  

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, or that of James’s Reflection Revisited: Perceptions of Reflective Practice in Fashion Learning and Teaching. 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 chapter discusses the initial thoughts, the ongoing process and the final results of all of the hypothetical designs made in a virtual approach. This virtual approach enables me to possess an analytical reflection on the outcomes of these designs in order to articulate the argument of this thesis about Compositional structures.

### 4.2 Initial Designs

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In parallel with the literature reviews and site visits, I used practice-based research method to analyse the internal pictorial format using the three most common wall-shapes in mural design. I have developed a number of preparatory sketches of hypothetical designs for murals based on linear and tonal approaches. These initial designs were not deliberately made for specific architectural spaces; they were an attempt to develop the ideas of line and chiaroscuro compositional structure (discussed in chapter 2) within the internal pictorial format. The intention was to explore and test these ideas and reflect upon their effectiveness as well as raising further points of inquiry that might then be ‘applied’ to certain architectural locations that suited the composition.

Thinking about site-specificity of mural, as well as other art forms, should start with identifying the designated architectural space in order to consider all visual, spatial, and conceptual issues that are related to the site. In these initial designs the notion of site-specificity was not yet developed to the extent for which this research went for. However, these initial designs are worth mentioning because they demonstrate the development of the making process; they also show the development in the ideas and thoughts in their early stages that led to deeper consideration of the site-specificity in the later hypothetical designs.

The initial designs made, were developed through the following stages:

- 3 different pictorial formats were chosen for exploration of the theoretical research into compositional structure. These pictorial formats were the square, the vertical rectangle and extended horizontal rectangle, as these are three of the most common architectural wall-shapes that are usually presented to mural designers. This point has been confirmed and documented through site visits in Italy. However, there are two other common pictorial formats presented in murals: the regular rectangle and the vertical rectangular arch. In progressing this practical study, some hypothetical designs for the regular rectangle were developed as well, but no attempts were made to deal with the vertical rectangular arch because it is rarely to be found in modern and contemporary architectural styles.
Some structural analyses that were made during the literature review have been used to make initial drawings for the primary hypothetical designs in black and white, using pencil and black ink, as shown in figs 4.1A, 4.1B, 4.1C.

These initial drawings were all designed using a tonal-based structure (Chiaroscuro). There was an attempt to demonstrate the movement of the viewer’s eyes, showing where the eye starts and where it is led. This is one of the most important elements to be considered in the organisation of pictorial space.

Using circles and arches it was determined from the beginning to emphasize the value of rhythm and the ways it can contribute to unifying the components of the image. There is a focus on fig 4.1B to show how this has been developed.

The knowledge gained from previous studies, and from practical experience in mural design and paintings, enabled me to develop these initial designs regardless of the conceptual aspects because designing a mural (for a particular wall) has to be thought about after defining the wall/space itself not vice-versa. The main concern, as already mentioned, was about testing the visual aspects (the pictorial composition) for each selected pictorial format.
Fig 4.1 A
The square

Fig 4.1B
The extended horizontal rectangle

Fig 4.1C
The normal rectangle
In figures 4.2A, 4.2B and 4.2C, which are actually variations on an idea for a design, the S-based composition has been used. The spiral (or letter S composition) is one of the most common compositional devices used in (usually narrow) vertical pictorial format. A series of drawings taken from structural analyses of this form were combined into a single black and white pencil and ink sketch (fig 4.2A). This was scanned and developed in a series of digital colour treatments in PhotoShop based on a combination of linear and tonal composition (fig 4.2B&C).

The following examples (figs 4.3A, 4.3B and 4.3C) demonstrate a similar approach used for a horizontal pictorial format. In these sketches the process have been taken a stage further, a more simplified ‘hard edge’ design. The intention was to clarify the extent to which a design can differ in style and content but remain almost identical in terms of compositional structure. The four versions of the same design are described as:
Fig. 4.3A

*The Initial version:* Pencil and ink sketch incorporating various elements from works that have been analysed. I have used a horizontal spiral or waveform as the main structural 'spine' of the composition. The wave is clearly visible.

Fig. 4.3B

*The second version:* After scanning and digital manipulation in Photoshop. This demonstrates the more complex balancing involved in the use of colour. The waveform is still very evident.
The third version: A further stage for the design, adding the presence of light, plain colours and a slight presence of depth to represent a bas-relief effect.

The fourth version: The composition has been further abstracted and the colours unified into a range of blues and grey-blues. This is more successful compositionally partly because the more harmonious use of colours and tones makes the wave/spiral linear form operate implicitly. It also allows other forms to be more apparent such as the triangles and circles.
The next stage of this process was identifying a possible site in order to incorporate the pictorial composition into an actual architectural space. Therefore, I started to collect some pictures of a number of interior walls inside the university buildings, which offered the opportunity to picture the identified sites from different angles. It was important to visually analyze and study the appropriateness of each wall in architectural surroundings.

Two sites out of about ten were selected to accommodate the initial designs that have been developed. The main objectives for choosing these two sites were:

- The geometrical shape (pictorial format) of each of them.
- The locations of the two walls were challenging, as they both are quite busy with different kinds of human activities and movement.
- As indoor sites, both walls represent an optimum space for a permanent mural piece of artwork not temporary easels, as they enjoy significant accessibility attained from the unique location.

The following images demonstrate the stages of the developmental process made to apply the previously mentioned designs into the first nominated wall.

Fig. 4.4A

In this stage I transformed the design into a monochromic bas-relief, using cardboard in layers. My intention was to test the design in a physical approach and on a large scale
Then it was painted with white paint and pictures were taken from different angles.
This is a photograph for the first location. This wall confronts the doorway that leads to the Learning Resources Centre at the University of Bedfordshire on which are hung 3 large-scale paintings made by Bashir Makhoul (date unknown).

Using digital imaging methods, I have placed the design onto the nominated wall. This gives the apparent presence of a real mural on a one to one scale.
It was decided from the beginning to work on the designs made using digital imaging techniques, creating a virtual reality images for the hypothetical designs. This gives reality to the designs and makes them much easier to be tested and analysed in relation to the actual surroundings.

The technical procedures used in developing most of the hypothetical designs made through this practical study are as follows:

- Taking a series of pictures for a designated wall (whether interior or exterior) 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 theory that has been developed through the parallel analytical study.
- 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.

These procedures have been applied on almost all the designs made through this practical study as will be shown later in this chapter.

The next mural design was made for one of the walls at the Learning Resources Centre at the University of Bedfordshire. It is a connecting ‘hall’ or ‘landing’ between two major areas in the library. It separates the silent area of the library reading and studying space from the computers and service desks. The areas are separated by two sets of doors so that ambient noise does not accompany people entering the study/reading area. These areas are also on slightly different levels so this space also has a few steps, a chair lift and also provides a fire escape. It is generally regarded as somewhat of a non-space in that it exists for purely practical purposes but, from an artist’s point of view, it is an interesting transitional space offering a creative challenge. The space was chosen because the University was considering commissioning a mural for this wall.

I have adapted the previous designs and emphasised particular components of the design in response to the architectural features and the function of the space (fig 4.6A&B). The most obvious architectural element is the pillar, which has been echoed in the design with the bold vertical form. I also picked out the minor vertical and horizontal rhythms implied by the handrails. The semi-circular form reflects the way people move through this space forming an implied curve between the two sets of doors. The intention here was to pay more attention to the architectural enhancements that would incorporate the internal pictorial composition not only with wall itself but also the whole space in its three dimensional perception.
Fig 4.6A
Initial design made for one of the walls at the LRC - University of Bedfordshire, Luton Campus

Fig 4.6B
The same design from a different angle
4.3 The Development of The Design Process

The outcome of the initial designs was not entirely satisfactory. The compositional structures theory was explicit but the practical outcomes were not as innovative as might have been expected. I then endeavoured to find out how to be more creative in developing future designs. The initial designs, on reflection, appeared somewhat dated and prompted a reconsideration of approach in order to develop designs that would be more contemporary.

In considering how to improve the design methods and reflecting on how a contemporary mural might look based on the compositional structures theory, I noticed that some discarded materials left in the studio (after cutting the cardboards used in the previous design) in their random organization suggested a couple of unique compositions that I had not thought about. These compositions merited recording. Using a digital camera, I recorded these random compositions and then rearranged them 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. 4.7 series.

There was no intention or specific thoughts about what role these compositions might perform in the design process, but I was quite sure that they would be more than useful in the future designs. Reflecting on my practice, I 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 my Studio Journal and proved to be a significant development in the research and has become an important tool in most of my practical experiments.
The previous images 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 my 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 my 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. This significant outcome of this process is identified as the layering compositional structure addressed in Chapter Two.

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 I started to design a mural for this particular wall based on the compositions mentioned. Using digital means the initial design was developed (fig 4.8), then transformed into a physical state using found materials and scraps taken from my own and other peoples’ studios (fig 4.9). I took a picture of the physical composition and went back to make further digital enhancements that developed the final design.

The pre-made panels that had been produced in my 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 I constructed a wall with and around ‘negative’ spaces. As a mural painter/designer my work depends upon the size, shape and surface of walls and in this work I was attempting to effectively make the wall vanish. My 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 I used ‘negatives’ from which to construct the work. Rather than covering the surface of the wall I 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 4.10 A&B).
Fig 4.8
The initial design

Fig 4.9
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 4.10A

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

Fig 4.10 B
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 4.11).

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. I found this technique an expressive medium for extending my long-standing practice of mural design/painting. It made me start to be much more speculative about the site-specificity of the mural that I was design.

This mural was the first attempt to physically test the notion of frameless mural discussed in Chapter Three. 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 I 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 4.11. I was very keen to ask each viewer where s/he might start to explore the composition and where to end. The fact that general audience have perceived the compositional aspect of this abstract mural the same way it was designed underpins and responds positively to the argument of this study about compositional structure.
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.

4.4 Hypothetical Designs between Practice and Theory

The following pages show the hypothetical designs developed through this practical study. There is an elaborated description for each design that articulate how it was developed, inspired or from where it was derived and how it is related to compositional structures theory.
4.3.1 Mind’s eye

Dimensions: 3.80 m x 2.40 m and the maximum projection is 30 cm.

Location: the staircase between level 1 and level 2 at the LRC, University of Bedfordshire.

Suggested materials to be used: mosaic tiles, timbers, brass sheets for the calligraphy and resins.

This design was inspired by one of the analyzed paintings that were made during the analytical study. The original work is called ‘Renaldo and Armida’ by Jean Honore Fragonard (fig 4.12). The layering compositional structure was the main device in developing this design. I used one of the pictorial compositions achieved through the analytical study. This pictorial composition was used, because it contains both diagonal lines, vertical lines and a main circle as well, these elements in such combination to produced a design that would fit this particular wall for the following reasons:

Visually:

1. I have used horizontal strips to emphasise the uniformed rhythm that emerged from the hand drill and to repeat it in the design. All the lines of the surroundings were echoed in the design. The upper stair line in the far left is represented in the diagonal line, the metal pillar also has an echo in the design represented by the vertical rectangle in red.

2. The aim of using the convex circle was to interrupt the aforementioned rhythm, to create a focal point and also to represent the conceptual point of the work, which is the mind’s eye.

3. The notion of deconstruction was applied by transforming the basic elements of the composition into flat-abstracted objects (fig 4.12) that then formed the pictorial composition of the mural in its final three-dimensional state (fig 4.13A&B).

Conceptually:

- I called this piece of work: Mind’s Eye with the intention of making the circle looks like an eye that is always thirsty for knowledge. I placed it on the right hand
side of the stairs to act as a metaphor for the aspirations of the knowledge seeker. bearing in mind that this particular staircase leads from level 1 to level 2 at the Learning Resources Centre.

- The Arabic word inscribed inside the hemi-sphere (meaning earth) was used to emphasise a global aspect indicating that the seeking of knowledge is not bounded.

- The chromatic schemes used in this design would also emphasize the poetics of this particular space. The white colour and the horizontal lines are dominating both the architectural space and the mural, which produces this kind of coherence, making it consequently very difficult to take this design and fit it elsewhere, which emphasises the site-specificity of the design.

Fig 4.12
Analysed composition made after ‘Renaldo and Armida’ by Jean Honore Fragonard 1763
Fig 4.13 A
Mind’s Eye, designed for the LRC at University of Bedfordshire

Fig 4.13B
The design from the lower angle
4.3.2 Brain Factory

*Dimensions:* The exact dimensions are Unknown.

*Location:* exterior wall, University of Bedfordshire.

*Suggested materials to be used:* sheet metal, mosaic tiles, timbers, and glass.

This design was based on design intuition and evolved through reflective practice. Drawing on both theoretical and practical study, this design was based on one of the classical pictorial compositions that was commonly used for this particular space (the vertical rectangle). The visual documentation that was made during my trip to Italy shows that this composition was employed for this particular pictorial format in many places such as *Chiesa de Santa Maria ai Monti in Rome* (fig 2.19, page 47). Titian also used the same composition in (*The Assumption of the Virgin*) in *Chiesa di Santa Maria Gloriosa dei Frari in Venice* (fig 4.14, 4.15).

In this design I decided to choose one of the exterior walls of the university buildings for the following reasons:

- To test and evaluate whether the theory of compositional structures would also work on exterior murals as well as interior ones considering issues such as the huge scale of the building, the surroundings and the architectural style.
- To create a mural design that would fit into a huge space, and test how much it would integrate with the architectural context.
- To challenge the scale of this kind of architecture that has no specific style, as was found during site visits made to different places whether in the UK and in Egypt. It might be said that these buildings do not have an architectural identity.

For a muralist these kinds of buildings offer a big challenge. This may contradict what the Stroom Public Art Group have established in the group principles, where they have determined that visual arts should not be used as a cover-up for visual sparsity, poor architecture or problematic urban development.\(^\text{16}\)

But from the examples studied it would appear that high quality architecture generally does not need to be decorated or to be beautified, it is usually self-contained and attain its consistency out of the well-structured design made by a skilled architect.

On the other hand, poor architecture has many visual problems that need to be treated in a professional way; murals or site-specific works would provide perfect solutions for the enhancement of this kind of architecture.

Fig 4.14
Titian, ‘The Assumption of The Virgin’, Oil on canvas, Chiesa di Santa Maria Gloriosa dei Frari, Venice, Italy

Fig 4.15
The main approach of this design (called *The Brain Factory*) was the adoption of the above-mentioned composition and its transformation to construct a big hole (following negative and positive space theory) in this huge block. This makes it look lighter and simultaneously breaks the static rhythm that emerged from the red brick sequences and the gap between the upper and lower windows (fig 4.16).

Obviously it would not be that easy to make a real hole in the building. As a hypothetical design, in the first instance, every possible innovative idea is worthy of being tested. It was found that the best way of making this big hole without interrupting the main building was to construct it in two layers using the layering compositional structure.

Fig 4.16 A&B represent the selected wall at the west wing of the university of Bedfordshire main campus
Fig 4.16C

Fig 4.16C is the extension of the same side towards the southern end of the building

The foreground layer, which was made in a cylindrical metal form, repeats the cylindrical shape that already exists on the far right of the panoramic view of this side of the university (fig 4.16C).

The second layer draws on more than one idea:

- The initial design represented a part of the main motherboard that is usually found inside the central processing unit in a computer. The idea was to indicate that this place (the university) is a brain factory (fig 4.17A,B).

- The second idea has been developed after discussing the design with my Director of Studies. We discussed other ideas that would represent the idea of the brain factory in simple terms. The simplest circular shape I had in mind refers to the notion of a CD ROM with a laser reader installed inside the large circle and the previous components of the motherboard have been taken away. The result eventually achieved the same goal to represent the University as a Brain Factory (fig 4.17C).
Alternatively, making a real hole in this block might be useful if there was a chance to convert the two floors behind the circle into an art gallery or a library. In which case the walls would be removed and replaced with glass windows. In daylight, the windows would reflect the surroundings within the structure, and at night the inner activities could be seen from the outside the building offering an intimacy with the interiors (fig 4.17D).
The empty gaps at the far left of the design were deliberately made to retain parts of the original facade (the red bricks) of the wall. The reason for doing this was to emphasize the interaction between the constructed layers and the building underlying the same composition for all the three designs.
Fig 4.17C
The second Idea of the Brain Factory design
I adjusted the lower vertical and horizontal rectangles at the bottom of the final composition to match with the lower windows behind them in order to be seen as one element and to involve the windows as part of the whole composition.
4.3.3 The LRC Main Entrance’s Series of Murals

A number of hypothetical designs were developed for the particular wall space shown below (fig 4.18A&B). Its panoramic nature (extended horizontal rectangle) and its unique location in the foyer of the University campus made it a perfect and challenging site on which to try out a series of mural/ site specific designs.

The fact that the same wall has been changed in its dimensions through building alterations during my period study at the University (4 years) brings me back to the issues that have been raised in Chapter Three, that is questioning the permanency aspect of mural/ site specific works (P.79). The spatial changes that affected the dimensions of this wall, gave an opportunity to establish a series of hypothetical designs for the same wall before and after these changes took place. Two designs were developed for the wall with its full length before the changes and two different designs were made after the wall length was subdivided due to the changes made to the space. The four designs will be presented in the following pages from the older to the most recent.

Fig 4.18A

The LRC wall before the spatial Changes took place. Dimensions: 785 cm X 292 cm
The first set of designs made for the full length of the Foyer wall

1. The First design

This design offered the first opportunity to think about conceptual aspects prior to pictorial composition (the visual aspect). This raises the question of what comes first in the design process; the concept or the form? From the examples studied, and through my long-standing practice of mural design it would appear that the integration between form (as a visual aspect) and content (as a conceptual one) is a conventional principal in the design process. Each aspect would normally affect the other no matter which came first.

For example, in this design my mind was constantly busy with what should be exposed in this challenging space? In the first instance it should be something relevant to the actual activities that take place in this space. I was interested in revealing the structure, content and character of this space by defining a physical structure through the elements I use creating a poetical space whose mural presence consists of materials coming from the activities of the human environment.

Therefore, the initial idea was to create a visual concept that depicts the sequence of the
educational process inside the university in metaphoric forms. This was interpreted as a series of sketches, because they were not sufficient to demonstrate the whole idea. This was to construct different volumes and shapes of containers, each one of which would depict one of the educational processes that are usually practiced in this place as institutional activities. A three dimensional model (maquette) was mandatory to explore the whole idea in its physical state (fig 4.19 A, B). The challenge was how to join all these metaphoric containers and construct them into a well-formed structure.

The next step was to photograph the model from different angles, and then scan them to be ready for digital treatment. Considering the compositional structure that had been identified during the field research in Italy, I have developed the initial design using the maquette photos in accordance to the initial idea, which may be described and applied to the final outcome (fig 4.20) as follows:

- The general notion was to address the university as a multi-cultural learning place. Students from all over the world come to Britain to get their higher education. All overseas students usually bring their cultural background and their previous knowledge along with them. The three narrow vertical panels on the right side denote three of the main cultures across the globe: the Arabic, the Latin (English, French, and Germany, etc) and the Chinese cultures, visually represented by depicting the letters of each language / culture in those three containers as individual objects. (This refers to the time prior to the induction process, where students are regarded as individuals.)

- Students are then introduced to the University passing through a doorway (which is represented in the second container from the right) that leads them into the institutional realm. This subsequently enhances the integration between their cultural backgrounds. This concept of integration is then visually represented by digital means using a TV/Computer screen that plays a graphic presentation depicting the overlapping between the various calligraphic symbols/letters.
Fig 4.19A

Fig 4.19B

Fig 4.19 A&B: Photographs of the initial maquette made to visualize the idea of the university as multicultural place
• The next stage would be the learning process itself. This is where the interaction between students as individuals and the University as an institutional realm take place and this concept is visually represented by the cylindrical container in the middle that gives the sense of being contained. My intention in using this cylindrical form was to involve the presence of a mechanical object such a blender that mixes all the aforementioned cultural backgrounds with the serendipitous acquisition of knowledge.

• The final stage would represent the outcome of the previous stages. The section on the left side depicts a square shape, diagonally divided into two halves, the first half contains a water wheel in a rigged state on a rough background, and the other half that completes the circle contains a scientific chart on a smooth and reflective background. This combination laterally refers to the higher education process as a polishing process. It is not only the process of creating something that does not exist, but the most significant part of it is arguably to polish and refine what is already there.
After finishing the design, it seemed that the concept of this work might be a good one in terms of its interpretation of the educational process in a visual manner. On reflection, I found that the structural elements of the whole design were not bonded enough to maintain the unity that I intuitively envisaged or that was consistent with my design experience. I was quite sure that the explicit verticality of the objects used is a common pictorial solution conventionally used to divide this kind of extended horizontal formats (panoramic scenes). Eventually these divisions need to be joined and bonded together to achieve the unity to the design. Hence, I went back to the pictorial schemes that had been identified through the analytical study to find out how to resolve this structural problem.

After reviewing a number of murals that had the same architectural conditions, one of the best solutions was to establish the presence of a wide arc that would contain the whole design and bond the vertical features together and also to emphasize the horizontal lines.

As seen in (Fig 4.21 & 4.22) the vertical elements that have been used to divide such pictorial spaces, in Italian frescoes that I have viewed, were joined together by constructing the elements in an arc shape, actually two opposite arcs (upright and upside down in fig 4.21) or indeed multiple arcs as in fig 4.22 which were used to attain the ultimate unity for the whole scene.

Fig 4.21
Photo for a fresco mural in the Vatican Museum, which was taken during field research in Italy. A simple diagram demonstrates the pictorial composition employed.
After viewing the Italian examples, I went back to the design to refine it and make the changes needed. A number of attempts had been made to meet the required criteria without making fundamental changes to the composition, which would affect the conceptual aspect of the mural. However, the final results were not completely satisfying in terms of achieving the ultimate visual demands (fig 4.23A, B&C). Nevertheless, presenting these unfinished ideas demonstrates how the developmental process progressed, and also articulates the reciprocation between theory and practice.

The amendments made to the design (fig 4.23A) were:

- Adding an arc on the left side to visually join the three vertical columns.
- The colour of this arc was echoed on the far left side of the composition in order to emphasise the unity of the design as a whole.
- A diagonal line was added in another layer to join the three columns on the left and to oppose the diagonal line on the right, which would support the functionality of the arc in bonding the elements of the design.
- Horizontal effects were established on one of the diagonal halves on the right side to emphasize the horizontal aspects, which would contribute to the consistency of the composition.
I noticed that the cylindrical object was dividing the whole scene into two halves, creating a symmetrical composition. Furthermore, this cylindrical object was obstructing the fluency of the panoramic order. Therefore, it was necessary to develop an appropriate visual solution to avoid this problem. The intention then was to create an organic object that would dominate the whole composition and simultaneously break the obstruction caused by the cylindrical shape (fig 4.23B). In addition, this organic object would also break the systematic order that had emerged from the sharpness of the vertical objects used. The circle on the right side was also replaced with a plain surface of a natural papyrus to maintain the same concept (the contrast between roughness and smoothness) and also to reduce the number of ornaments.

The right triangle evolved from the arc on the left and the spontaneous shape on the right has reset the composition and defined the path to be traced by the spectators.
Fig 4.23B
Second amendment to the University design

Fig 4.23C
Third amendment to the University design
A third set of amendments was developed (fig 4.23C) to include the cylindrical shape again into the composition after being mostly covered by the random object in the previous design. Instead of overlaying the cylinder, I made the organic object intersect with it in a position that would not affect or disturb the composition attained, but it would integrate the elements of the whole mural.

In terms of the integration between the mural installation and the architectural context, my intention with all the ideas was to dominate the space by establishing a visual dialogue/connection between the contradiction of the elements used in the mural composition and the passing audience. This particular area of the University campus has a traffic stream most of the day caused by people going in and out of the Learning Resources Centre. Therefore, stopping this fluency would interrupt the ‘Political’ aspect of the space. Thus I endeavoured to make the passing audience interact with the mural by providing significant shapes that would attract the attention of passers-by. At the same time the fragmentised details would draw those coming out from the LRC to examine the mural details.

As a non-featured space, (the space that does not embrace significant physical/architectural elements) this mural installation idea had no significant response to the surroundings. The only and most explicit feature that would distinguish this architectural context is the movement circulation. That is why some projected objects like the cylinder were employed to encourage the audience to physically interact with the installation.

As a practitioner in the field, I would argue that a non-featured space is one of the most difficult spaces that a mural designer has to deal with. S/he then would need to concentrate on the other intangible aspects that distinguish that particular space, which may be considered as cultural, social and/or political concepts of the space.

From the real examples studied in this research (particularly in Egypt) it would appear that not too many muralists pay much attention to those immaterial aspects as fundamental features of any designated space, especially the contemporary ones.
2. The Second design

Reflecting on the previous design and the use of organic shapes, the idea of the second design is was to develop a new composition employing organic shapes. This design was inspired by the painting of Bonifacio De Pitati (fig 4.24). This was one of the analysed paintings made upon my return from the field research conducted in Italy.

The original painting was an easel painting but the composition was deliberately made to fit into an extended rectangular space. As previously asserted this pictorial format is considered to be one of the most difficult formats that a muralist can deal with. The field research in Italy revealed that many artists had adopted this specific type of pictorial format as one of the most common architectural surfaces to be decorated with a mural.

The overlaid structures in fig 4.25 demonstrate another way of designing for the same pictorial format. The previous ones used symmetrical means and different kinds of arcs to bond the designing elements, whereas in the Pitati painting the main dialogue between two dominant areas (the large ellipse on the right and the equilateral triangle on the left) intersects the elements of the whole composition bonding them with the support of the right triangle on the right. In both pictorial compositions, verticals and horizontals are strongly presented as fundamental elements that would normally emphasize both the stability and unity of the composition and also work as substantial features that would integrate the internal pictorial composition with the architectural surroundings. Referring back to the second composition, the aforementioned dialogue between shaped areas was ideal to be represented in a radical approach, and that was the main notion in developing this second design.
Fig 4.24
Bonifacio De Pitati, (title and date unknown) Oil on canvas, Chiesa di Santa Maria Gloriosa dei Frari, Venice, Italy

Fig 4.25
A simple diagram demonstrates the pictorial composition of the Pitati painting
In the first version (fig 4.26A), the metaphoric dialogue inspired by the painting was interpreted through organic shapes. This intention was to emphasize the dialogue between shapes. The outcome achieved may be described in the following points:

1. The same or almost the same visual dialogue can be represented in a mural installation using these organic shapes with the ability of re-forming them according to the criteria which the panoramic nature of the pictorial space would demand (in terms of visually perceiving such massive shapes in a larger scale).

2. Implementing these organic shapes enforces the robust nature of the pictorial space to become more aesthetically appealing in the way organic shapes always do. It was a deliberate action not to cover the whole wall with these shapes, instead, I have left parts of the background as a plain wall and made some apertures in the foreground to create a sense of depth to the pictorial space. This causes the foreground and the background to interact with each other in reciprocation.

3. Basic colours were employed (Red, Blue, Green and Yellow) to emphasise the simplicity of the approach. Furthermore, as this wall is a large expanse within the space, and the space is usually busy (especially in day light), using these colours will ensure that the mural would be dominant and influential.

4. Using Islamic patterns fragmentizes the large massive shapes and asserts some focal points, which provide a further rhythmic order. They encourage the viewers to interact more effectively with the mural, stepping forward towards it to explore the details.

5. Islamic patterns also give an indication about my cultural background as a Middle Eastern artist.

After the first version of the design was finished, I had some concerns about how it was going to be executed. It would be difficult to project these organic shapes off the wall because of their scale and intrusion into the architectural space. Thus, I tried to reduce the projection by returning some parts of the projected objects and attaching them to the wall (fig 4.26B).
Compositional Structures in Mural Design

Chapter 4

A. Abdelrahman

Fig 4.26A
The first version of the second hypothetical design

Fig 4.26B
The second version of the second design for the same space
The intention in making these amendments was initially to solve the projection problem, and also to try some design strategies to test whether the design could be improved. The projection problem was resolved by sinking the blue area back to look as it had been formed behind the actual wall, giving more depth to the composition, the new black area (looks dark grey in the photo) has emphasised that feeling of depth, stabilized the composition and made it look more intense. The spontaneous movement that was added by randomly taking away small areas especially from the red shape, made the composition much lighter without any fundamental changes that might otherwise corrupt the actual structure. It also created a sense of movement that added further bonding to the structure’s elements.
The second set of designs made for the Foyer wall (after the changes made)
Because of the actual changes made to the space through building works, I had the opportunity to test a set of hypothetical designs developed through my practical research. These spatial changes have confirmed the reality of the non-permanent walls in contemporary architecture (specially the public ones), which would normally have an impact on contemporary murals in terms of the designing techniques and the materials to be used. Simultaneously, these changes also offered a new challenging space to be occupied with a new set of virtual mural designs.

The first idea
The inspiration of this design was derived from a set of installation art works viewed while gathering visual information about this significant approach as discussed in Chapter 3. A set of interesting installation compositions made by the artist John Dahlsen attracted my attention to the robust visual impact that rough certain materials such as drift wood (which was the name of this set of installations) could achieve in spite of the simplicity of the technique used to assemble the pieces (fig 4.27).

The intention was to use a similar technique in the next set of designs. Using one of the compositional structures that I had identified after analysing the visual samples collected during my Italian field research (Shape No5, detailed in Chapter 2), I transformed the same composition into a small installation using small pieces of wooden sticks (fig 4.28, 4.29).

The composition itself is very much similar to the one used in the second idea of the previous design which was inspired by the geometric figures (a dialogue between two dominating areas) but transforming it into another medium has changed the way it could be perceived (fig 4.30A).

The small installation was scanned and a number of digital enhancements had been made, then it was placed on the wall as can be seen in (fig 4.30A).
Chapter 4

A. Abdelrahman

Fig 4.27
Selection of Driftwood Art by John Dahlsen 2004, John Gordon Gallery Coffs Harbour, Australia
Fig 4.28
Giuseppe Fumiani’s ‘Christ Chasing the Moneylenders from the Temple’ (date unknown) Mural Painting at Chiesa di San Rocco, Venice, Italy

Fig 4.29
Initial small installation made using the same composition in fig 4.28.
Water colour and Wooden sticks on cardboard.
31 X 15 cm. made by the author
The next stage was to suggest visual amendments that would integrate the mural much more effectively with the space rather than being a plain object that had been attached to the wall. It was decided to convert the circle on the right side of the composition into a non-material object by making it look as if it is a hole in the wall. This would reveal part of the actual wall for the viewers so they could see what is behind. This action would normally give coherence to the mural in the space and also would interfere with the politics of space by revealing the unseen, (fig 4.30 B&C).
It becomes clear that two different approaches might be applied:

- The first one was to create a real hole and block it with semi-transparent smoked glass) after having the appropriate authorization and then construct the rest of the mural upon it.
- The second idea was to create virtual reality by depicting the actual activity behind the wall using video art and projection installation to be projected onto this particular area after the mural is completely installed. This idea could be executed by recording a short film of the activities that take place on the other side of the wall, (an IT laboratory), and then by using digital means; this film could be projected within the designated circle (hole) so it would appear to the audience as though life behind the wall has been revealed.

This idea would demonstrate the functional aspect as well as the educational activities being practiced inside the University. The rough timbers that could be used in the execution of this design would also indicate the ‘Under Construction’ concept, which
would be metaphorically relevant to the educational process, suggesting the concept that the students whether undergraduates or post-graduates are ‘Undergoing Constructions’.

The next developmental stage in this design was to incorporate more space into the mural installation rather than occupying just the designated wall. Considering the door and the window on the right wall as apertures, I have extended the drift wood treatment to be installed on that wall as well, which would emphasise further integration of the space (fig 4.30C). The notion behind this action was to justify the existence of a circle hole as an integrated part of the main space, and also to emphasize the ‘Under Construction’ concept.
The second Idea

The intention in this design was to test the same pictorial composition as used in fig 4.30 but in a further abstracted approach. Thinking about changing the façade of the mural to another physical state without changing the structural elements, I have digitally applied a plaster effect to the mural and kept the draft wood effect behind the plaster layer to appear occasionally in certain points through the mural. This effect would emphasize the ‘Under Construction’ concept. Visually, keeping the natural white colour of the plaster layer would integrate the mural much further to the space, where white walls and grey floor are the main colour scheme that dominate the whole space (fig 4.31A).

Fig 4.31A
I have also extended the plaster effect to part of the sidewall to include it in the composition in order to achieve the same visual and conceptual as in the previous design (fig 4.31B). The suggested materials to be used in executing both designs are: drift wood, mosaic tiles, a combination of Video art and projection art installation, glass and plaster.
4.5 Murals and New Media

Reflecting on the last design where, a new technique was experimented with, I started to explore other potential of the digital compositional structure that would be applied in producing contemporary murals. New issues evolved during the development of this research, new questions raised and new insights had to be addressed. For example, what kind of murals should be produced to fit one of the most significant contemporary architectural styles (Deconstructive Architecture), especially those buildings that are built of steel structure and glass? The appropriate answer for this question may be found in the recent art forms such as technological art, digital art, video art projection installation, laser art, which have been fast growing as a result of scientific and technical inventions (fig 4.32 & 4.33).

Frank Popper suggested that ‘Technological Art’ has three principle roots. First, technological art can be traced back to artistic sources such as visual art, photography, cinema, music and more generally sound as well as architecture and other environmental experience. A second origin can simply be found among technical sources such as engineering inventions and similar undertakings. And a third important source can be detected in the different areas of the natural and human sciences, in particular, physics, biology and linguistics17.

Addressing the potential of these new art approaches in developing and producing new kinds of contemporary murals, has evolved as one of the main concerns of this research. This identification is necessary having raised questions about certain types of contemporary and post-modern architecture and what type of murals would cope with these architectural styles.

17 Popper, F., 2007. From Technological to Virtual Art, Massachusetts Institute of Technology, P2
Fig 4.32
Pascal Dombis, Mertz, France 1999, large format digital print for a thirty-meter window in an art school, after being digitally processed by the Computer.

Fig 4.33
Yaacov Agam who was a pioneer of the Kinetic Art trend in the early 1950s\textsuperscript{18} sees the psychological reality of a person in the great number of possibilities that lie dormant on every human being. According to him the only true task for an artist is therefore to make the human conscious of the physical forces that surround him. This consciousness can only be achieved by liberating these forces through an artistic experience. This experience must be an active one, involving a combination of the human senses.

This particular insight was practically experienced through my MA research titled “Fulfilling the Audio Visual Coherence in Arabic Music performances”. In this research I have identified that the process of perceiving any physical objects outside our bodies with more than one sense (see, hear, touch) could be more influential on both spiritual and intellectual aspects than with only one sense. This concept would be most applicable in perceiving art works. As a practice based research, I produced a number of hypothetical stage set-designs to be projected during Arabic music performances at Cairo Opera House, using back projection technique (fig 4.34 A&B). These designs were based on Islamic Art and as I have proved in this study that there is a relationship between Islamic Art and Arabic music in terms of their inspirational resources\textsuperscript{19}.

Following these insights, it was important within the progression of this current research to develop design ideas that would demonstrate the potentials of using digital technology in creating contemporary murals.

\textsuperscript{18} Popper,F., 2007. From Technological to Virtual Art. Massachusetts Institute of Technology. P.32.
\textsuperscript{19} Abdelrahmana, Akmal, 2000. Fulfilling the Audio Visual Coherence in Arabic Music performances, MA thesis, Helwan University, Cairo.
Fig 4.34A

Fig 4.34B

Akmal Abdelrahman 2000, examples from my MA research demonstrating two virtual stage set-designs made for the Arabic Music performances in Cairo Opera House, using digital art and back projection
4.5.1 The National Theatre in London

Fig 4.35 A&B show a hypothetical design made for the National Theatre building in London, UK using Islamic patterns. As a virtual design made on a normal photograph using digital means, it might look very normal and has no innovative approach in its physical state as a photograph. But the real intention in this design was to decorate the designated surfaces of the building with Islamic patterns as moving and animated objects using projected video art.

The main idea was to use the video art techniques in developing a design that was based on depicting Islamic patterns in a moving state demonstrating how these patterns are geometrically structured and then assembled to form the Islamic star. The outcome of this process would be projected onto particular parts of this purely concrete building (the main staircase and the top of the building) in order to achieve additional rhythm (a moving one) to the one that already emerges from the physical nature of the concrete structure. Form my previous experience in such decorative art the use of Islamic patterns has unlimited visual potentials. These potentials are demonstrated in the hyperstructures and the sophisticated elements that comprise this art style. These potentials would also simplify the process of using computer art as a digital method to produce several visual solutions to the pictorial space. The fact that Islamic patterns are digitally flexible, extendable, variable and visually enjoyable, makes it easier to achieve such impact.

I have chosen the National Theatre building in London for the following reasons:
1. As a well-formed structure, the use of this particular concrete façade to apply such a design would emphasize the massive nature of the building through the visual contrast that would emerge from the moving objects and the serenity of the concrete presence.
2. The pure concrete structure ultimately provides such a wonderful opportunity to implement the idea of using projection art without physically adding or subtracting from the concrete structure itself.
3. This type of concrete buildings is commonly seen in different urban societies around the world. Some of them may not attributed to a particular architectural style, which make them theoretically ideal places to adopt this kind of artwork (projection art).

4. Using projection art to decorate this kind of buildings has the potential of being changeable, so one can see the same building with different façade especially when it is a public building that houses variable occasions.

5. The mural designer, who would deal with such a building, would have the flexibility to select the most appropriate surface to accommodate his/her digital designs. This flexibility aspect is one of the most important qualities every contemporary artist/designer is seeking.

6. Applying Islamic patterns on one of the British national buildings would convey a cultural and social message and would also emphasise the multicultural nature of the city of London as a cosmopolitan city.

As already mentioned, the main theme of this design was to explore the complexity of how the Islamic star would be structured and then repeated to perform a complete Islamic pattern. Achieving the first part (structuring the Islamic Star and repetition) would be obtained by using digital means and sophisticated computer software such as Photoshop, Final Cut-pro and Illustrator programs. Then the final output would be projected onto the selected walls using multiple projectors (fig 4.35 A&B).

One of the most important issues that needs to be considered is the actual dimension of the selected walls. These dimensions need to be thoroughly calculated, so that the final output of the digital process would perfectly fit these walls when projected. The aim is to reduce the manipulation with the original proportions of the Islamic patterns as one of the substantial features that should be considered when dealing with Islamic art in its original state. Finally, using virtual art on the National Theatre seams to be a good opportunity to perform other digital works that may be used as direct or indirect advertising method that would indicate or refer to the current activities taking place with an artistic quality.
Fig 4.35A
A hypothetical design made by the author for the National Theatre building in London, UK
A combination of Computer Art and Projection art

Fig 4.35B
Detailed picture for the same design, from a different angle
4.5.2 The LRC entrance at the University of Bedfordshire (Luton Campus)

The inspiration for this design was derived from a set of site-specific works viewed through the literature review. One of the most interesting works I have seen was the one by Gordon Matta Clark, namely Matta Book (fig 4.36). The idea of this piece of work was really inspiring, Matta made the whole book out of coloured wallpaper in a sliced pages format, so it can be seen in different views according to the upper and lower page position.

The notion of transforming the Matta Book idea into a mural installation was challenging. The main concern was to find out how to execute such idea on a wall with the possibility of turning the pages. The initial thinking was to use a combination of installation art, computer art and Projection art, employing the digital compositional structure.

The second step was to find an appropriate space for this mural design to be installed. A number of photos for a number of sites inside the university campus were taken, and then it was found that the best place to implement the idea was the wide upper wall in the LRC entrance (fig 4.37).

This particular wall was selected for the following reasons:

• It is a massive upper wall that would not stand to accommodate a traditional type of a mural installation because then it will look much heavier than it already is. However, it may be decorated with a traditional mural painting using oil or acrylic paintings. This approach can be digitally produced giving the same effect of a traditional painting.

• The present decoration of this massive wall is obvious, has not been carried out in a professional way (fig 4.37). Hanging some framed pictures or paintings on the lower part of the wall has emphasised the upper empty space of the wall rather than dominating the whole space.

• This wall is a perfect space to accommodate a projection installation piece of work. Its unique location as an upper wall means that any display projected on it would be unhindered by passing people or moving objects.
Fig 4.36

Fig 4.37
The Upper wall at the LRC entrance
The main concept I had then was to adapt digital art techniques to expose the different stages practiced in my research. From analysing one of the Renaissance murals, through identifying its pictorial composition and ending with the stage where the same composition or almost the same structure would be transformed to create a post-modern or a contemporary mural.

As already mentioned, a combination of installation art and projection art would be employed and a structure of an opened book would be installed on the wall, using a wooden frame and stretched canvas. This latter step is optional, as the plain wall could be used as a screen for the projected images. The pages would be achieved using computer art techniques to perform the effects of turning the book pages and other moving images embodied in every page, then by using projection art the whole work will be displayed on the installed book or directly on the wall (fig 4.38).

I have chosen one of the Renaissance murals recorded and studied during my research trip to Italy, the ‘Adoration of The Magi’ by Bambini in Chiesa di San Zaccaria in Venice (fig 4.39). This was chosen because the mural almost has the same pictorial format (normal rectangle) and almost the same proportions as that of the nominated wall.

The idea of this mural installation was a good opportunity to demonstrate the stages of my practical research. Organizing the pages and designing them in coloured layers using some moving images as part of the page and then displaying changeable texts was the sequence strategy that would describe the context of each piece of the work. As a perfect instrument for exhibiting PhD practice-based research, this design would also work as an announcement board or to display the ongoing events inside the university in an artistic manner.

The following figures demonstrate some slides from the display show made specially as part of this mural installation (fig 4.40 series). A full presentation of this design is available in the attached DVD.
Fig 4.38
Showing the wall after installing an opened book structure, the main reason of doing this step was to attain reality prescience for the whole installation.
Meanwhile, using the plain wall is an option.

Fig 4.39
Nicolo Bambini, *The Adoration of the Magi*, Oil on canvas, (Date unknown), Chiesa di San Zaccaria in Venice, Italy
These figures are representing part of the projection show that could be displayed on the upper wall in the LRC, University of Bedfordshire, Luton
Fig 4.41

Fig 4.42

Fig 4.41 and 4.42 represent the final stages of the projection display
As can be seen in the images displayed, the projection show will start by displaying one of the Renaissance paintings as analysed in this research. The next series of slides would show how the pictorial composition is defined, described and whether it is related to the architectural context or not. This set of slides would be combined with a written text. The next set is a developmental process showing how the same pictorial composition could be used in a deconstructive approach to develop a mural installation to fit in a wall that has almost the same spatial conditions. This space is ideal for accommodating projection art installation because of the lack of lightning exposed on this particular wall during the day, which makes it perfect to be used as a screen.

A few months later, after finishing the previous hypothetical designs using projection technique, I was attracted by works of the Australian artist Ian de Gruchy. His works are based on projection in a unique approach. Figs 4.43, 4.44 and 4.45 show how he uses projection to visually transform the architectural façade into a large piece of artwork. In fact most of his works produced with this approach could be seen as murals.

When I had that idea of projecting Islamic art patterns on the National Theatre in London, the intention was to test and evaluate the projection approach as a possible technique that might be used in producing contemporary murals. But I would not describe the outcome, the illustrated Islamic star in a moving state, as a mural (the idea of decorative patterns was discussed in Chapter Two). It is likely to be described as to include surface treatment the way Antonio Gaudi and Hundertwasser decorate architectural facades (as discussed in chapter 2). However, after seeing de Gruchy’s work, the idea of using projection art technique to create mural designs that could be applied on certain architectural facades was really appealing.

A closer look at de Grouchy’s work, the site-specificity of each project in its current state is not obvious. This means that if the same projection were displayed on another façade, the visual effect would be the same. Hence, I had several ideas that were inspired by the works of Ian de Gruchy but in a more sophisticated manner, to create designs for particular architectural facades. These designs should take into account the significant features in each designated façade to fulfil the site-specificity.
The idea would be to combine projection with conventional mural techniques and to exploit the visibility of each under different light conditions. Projected images can be seen explicitly in night time, but in daylight traditional murals would be more visible. A combination of the two techniques could produce multiple presences for the same architectural façade.

The main problem was the lack of time I had to produce such hypothetical designs. Therefore, I decided to include this concept in a post-doctoral research that would be based on Islamic art and Projection art technique. This point will be emphasised in the conclusion at chapter 6.
Fig 4.43
Ian de Gruchy, Maitland Regional Art Gallery (Art Projection), April 2005, Australia

Fig 4.44
Ian de Gruchy, Maitland Post Office (Art Projection), April 2005, Australia
Chapter Five: Exploration of Integrative Approaches

Throughout the development of this practice-based research, I pursued possible mural commissions as a way of applying the methods I developed. I was commissioned to develop three site-specific mural installation: the first one was commissioned by the Head of the Art and Design Department, University of Bedfordshire, Luton to be installed on one of the department walls. This was executed and installed on time. The second one was commissioned by Luton Borough Council. It was a mural installation to be installed at the Halyard Youth Centre located at Lewsey Farm (an area between Luton and Dunstable). Three designs were developed, and one of them was selected and approved by the youth centre panel to be executed at the social area in the centre, but unfortunately it was not executed due to a lack of funding. The third one was commissioned by Mr. Tim Stone (Director of Learning Resource Centre) at the University of Bedfordshire, Luton Campus, to be executed and installed on one of the walls at level one of the library. The commission was funded by a number of departments at the University.

This chapter will discuss these three commissions as an essential part of the practice element of the research. This will cover the development of the designs, starting with the initial ideas, the final design, and execution stages and ending with the final stage (the murals) after being installed in their designated place.

One of the most important parts of this chapter is the feedback received from the viewers/spectators and the comments I had regarding how they perceived the murals visually and conceptually. I have used different evaluating methods such as Focus Group, Observation and Interviews to collect various forms of feedback. It was important to discuss and analyze the feedback I had. This will be explored in detail at the end of each section.

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1. An application to the Arts Council of East England was not successful.
2. Vice Chancellor Professor Les Ebdon, Professor James Crabbe (Dean of the Faculty of Creative Arts, Technologies and Science), Professor Alexis Weedon (Director of the Research Institute of Media, Art and Design) and finally Mr. Tim Stone.
5.1 The Art and Design Department Commission University of Bedfordshire - Luton Campus

**Work title:** Sketch

**Location:** Art and Design Department, University of Bedfordshire – Luton Campus

**Dimensions:** 250x360 cm.

**Materials used:** found materials; smooth planed timber, vinyl, cardboard and hardboard and Acrylic based paints.

**Artistic description:** installation art.

**Date:** April 2007

The idea of this design was derived from one of the visual observations that commonly occur in the artist/designer’s daily life. A discarded slip of paper was found in the trash bin while I was using the copying machine in the Art and Design Department; it looked like a photocopy of a paper collage that someone was experimenting with (fig 5.1). The composition was really inspiring and has visual potential that would make it a perfect starting point for a new series of designs. Furthermore, it would be extremely radical to utilize this montage as inspiration for the design of a mural; the serendipity of retrieving visual information from something discarded was particularly appealing to me. Therefore, the idea was taken forward into a further development process. The slip was scanned and digital enhancements were made to fulfil the idea of using this sketch as a mural design.

The initial design was ready, preserving the original composition in its original context. The next stage was to find out which wall would be appropriate for such a design. It was determined from the beginning that the most appropriate space for this design should not be located outside the Art and Design Department, where the original slip belongs, and where the word “Sketch” is commonly used in a wide range. The most appropriate wall found to execute this design was the wall that faces the students’ staircase and leads to the studios (fig 5.2). I selected this particular wall to accommodate this design because it had the same proportions as the original composition.
Compositional Structures in Mural Design

Chapter 5

A. Abdelrahman

Fig 5.1
The original discarded slip

Fig 5.2
The selected wall at the Art and Design department
The major compositional concerns in this design may be described as follows:

**Visually**

- Although the design looks spontaneous, it still embraces an explicit classical pictorial composition (the pyramidal/triangle composition), used in a deconstructive approach. A framed compositional structure was suggested to be employed in such space that has no significant architectural features.
- The idea of using a limited colour scheme (mainly black and white) means that the viewer’s eye would be busy with the composition itself. It also accommodates the installation technique used to apply the design onto the wall. Furthermore, the colour scheme all around the space is in greyscale as well, which keeps the mural integrated with its surroundings (fig 5.3).
- Red was used in some areas to emphasise the pyramidal composition and also to emphasise the start point and the paths where the viewer eyes launch and move across the rest of the design. Also the same colour scheme had been used in an installation piece of work already on the staircase that leads to the mural (fig 5.4).
- The fact that this wall is facing the main door that leads to the department, fundamentally encourages the use of colour contrasts in the mural to enable those whom are coming up the stairs to identify and capture the mural from behind the glass door, in addition, the door itself is constructing an outer frame for the mural, which means that the mural is perceived in two ways (from inside and from outside the door).

**Conceptually**

- The composition indicates directly that this place has something related to art and design, as it has the typical presence of a sketch and a very radical one as well.
- The red colour may indicate the challenges that are usually combined with the word sketch; it also gives some life to the design.
- The different and branching directions in the design indicate the different aspirations and orientations that the students of this department have for their work. This could emphasize the cultural and social aspects of the space.
Fig 5.3

Fig 5.4
The installation piece at the staircase that leads to the Mural
The fact that these various directions are facing the doorway of the main staircase that leads to the department, may also give an indication of the studio activities.

Thinking about the most appropriate materials that would preserve the same effect obtained through the development process, I found that there were two different kinds of material schemes would be the most appropriate in executing this mural:

- The first one: the use of mosaic tiles as a classical approach with in which the tromp l'oeil technique would be employed to produce the same effect as in the hypothetical design. This is also the classical technique that used to be employed with this type of the framed compositional structure. However, using this technique would increase the budget allocated for the execution and therefore need extra funds, which would not be appropriate for a temporary mural.

- The second one: the use of rough and found materials such as timbers hardboard and cardboard rolls, etc, to achieve the same goals but with less expense and a short time scale. This technique would also be more appropriate in the execution of a temporary mural installation.

Comparing the two schemes, the second one was preferred and it was approved to transform the design into a mural installation. The reason for using found and cheap materials arose out of the argument made in this research about contemporary architecture, which has been previously mentioned in Chapter Two. The argument articulates the permanency aspect of contemporary mural. Hence, the use of expensive materials and sophisticated approaches would be an extravagance, unless particularly represented by the customer. Furthermore, the installation technique using cheap and found materials would emphasise the notion of the deconstructive mural particularly with this radical composition. It is a transformation of 2D flat image (the original sketch) into a real 3 dimensional state.
Fig 5.5

Fig 5.6

Figures 5.5, 5.6 Different views of the mural after being installed on the wall
Fig 5.7
View of the mural when the door is closed

Fig 5.8
A detail showing the materials used. The nails were deliberately left obvious to emphasize the ‘Sketch’ concept
Fig 5.9
Side view. This picture also includes the trash bin where the initial slip of paper was found.
5.1.1 Reflection on the execution process

1. After the whole installation was finished, I had to repaint the plain background, as some drops and marks of the coloured paint I had been using had marked the surface. However, I found that leaving some of these coloured marks would increase the coherence of the design and supported the idea of making it look like a real sketch. Consequently, I decided to leave some of these marks and include them in the mural. I have recorded this incident in my studio journal, as a visual note, in order to reflect upon in my future designs.

2. It was found that using cheap and found materials was the right decision, as the 2-dimensional primary sketch was completely transformed into a 3-dimensional installation piece of work that had the same visual impact asserting the notion of a deconstructive mural. This would not have been achieved if the classical approaches had been implemented.

3. By achieving the three dimensional sketch effects, it was also important that the projection of the pieces used out of the wall should not exceed a certain limit for safety purposes.

4. The only aspect that was not thought through, which I realised after the work was finished, was to setup a proper lighting effect that would enhance the composition. Consideration needed to be given to the shadows that would emerge as a result of using any source of decorative lighting. The installation was setup in accordance with the natural lighting in the space.

5. As a self-evaluation of this project, I have applied the critical template I used in Chapter Three on this mural. In doing so, I would suggest that this mural seemed to fulfil the site-specificity of the space, as it responds to and reflects the cultural and physical elements of this particular space. The compositional structure used attests the site-specificity in both ways visually and conceptually as been discussed in the aforementioned points.
5.1.2 Critical Comments

This mural was the first commission that gave me the opportunity to test and evaluate the compositional structure theory adopted in this study. Evaluation methods were not sufficiently developed to evaluate this mural. The self-evaluation was the main device that generated experiential knowledge. However, audience comments were encouraging, the majority of spectators were members of the Art and Design Department (either students or staff members).

They were mostly attracted to the spontaneous structure of the mural installation and they admired the sketching approach. I also attached a written text and hung it close to the mural for anyone who wanted to know more about the design process or the conceptual issues.

One of the most important elements of feedback I had, was a remarkable note from a staff member\(^3\), where he mentioned that this mural installation, which had a multiple framing has explicitly affected politics and poetics of space. These terms were actually new for me at this stage, and I realised that I need to know more about these terms to consider them in my future designs.

\(^3\) Dr. Gavin Stewart, Post Doctoral research fellow at the RIMAD, University of Bedfordshire.
5.2 The Halyard Youth Centre Commission, Luton Borough Council

Work title: New Graffiti

Location: Halyard Youth Centre, Lewsey Farm, Dunstable, UK.

Dimensions: 2.800 x 290cm.

Suggested Materials to be used: smooth planed, hardboard, Acrylic based paint, Mosaic tiles and modelling materials (wire, mesh and mod-roc rolls).

Artistic description: installation. Date: May 2007

One of the most interesting series of designs made in the practical part of this research was the set of designs made for the Halyard Youth Centre. I was commissioned by Luton Borough Council to develop a mural design for this place, after a channel of communication was opened between the University and the Borough Council with regard to the role of the university in community developmental projects. It was a real opportunity for me to test my ideas about contemporary murals in the public arena.

The first step was to study the nature of the nominated space. I made visual notes, and took some digital photos of the wall from different angles (fig 5.10, 5.11). The intention was to identify the physical, cultural, and social elements of this space to be considered in the design. As seen from the pictures, it is a wide wall inside the social room at the youth centre. It is a very busy area that hosts young people for social activities, includes a coffee shop and audiovisual kits.

The mess recorded in the photos was digitally cleared to identify the nature of the wall and to determine whether it had significant visual potential that could be used in the design or not (fig 5.12). I was informed that the air-conditioning unit hanging on the ceiling and the DJ unit that appears on the left hand side would not be removed, and that the mural would have to contain them. In addition, I have summarised the initial given features as follows:

- An extended rectangular wall located in a busy area, which might affect the use of detailed ornaments and also the use of colour.
- The ceiling was not even, having two levels, which could be easily observed in fig 5.11, and which therefore impact on the pictorial composition that would be used.
Fig 5.10

Fig 5.11
The original wall at the social room, Halyard Youth Centre
Consideration had to be given to the type of compositional structure would be suitable for such space in accordance to the aforementioned visual observations. What kind of mural would attract young people and be enjoyed by them? Going back to the literature studies made, I found that one of the most common public art in Western culture, that has a wide popularity, especially amongst young people, is that of ‘Graffiti Art’ (fig 5.13 & 5.14). Hence the idea of developing a new graffiti mural that is based on the compositional structure theory of this research was appealing to me, and was challenging.

The next consideration was to find out an appropriate pictorial composition that would fulfil the aforementioned conditions, and also meet the site-specificity of the space. According to the site conditions, the suggested compositional structure to be used was the framed compositional structure or the architectural featured compositional structure or a combination of both.
Fig 5.13

Graffiti art at Queen Elizabeth Hall, South Bank, London. Photographs taken by the author, May 2007
Fig 5.15  
Some of the initial schemes (sketches) made for the extended horizontal rectangle  
(Shape 5 in chapter 2).

Drawing on the new compositional schemes (as discussed in Chapter 2) I tested out a series of relevant ones to determine which would be appropriate in developing the design (fig 5.15). Four pictorial compositions were selected from a number of analyzed sketches depicting the most common compositions used in designing this particular shape. I found that the second one from the top marked by arrow (the Noose scheme) was the most
relevant composition for use in developing the youth centre mural for the following reasons:

1. It had a robust spontaneous presence that would perfectly accommodate the notion of using graffiti art as an essential part of the composition.
2. The dynamic presence this composition had would integrate with the dynamic nature of graffiti style and the nature of the wall itself.
3. As indicated in fig 5.15 the other compositions are based on a symmetrical system, which would not fulfil the criteria to develop the design according to the spontaneous, robust and dynamic concepts.
4. Finally the simplicity of this composition would make it more flexible to create a series of designs based on the same composition, and then select the most appropriate one.

With no previous experience in graffiti art and how it should be composed, I initiated one of the designs following my intuition and the theoretical knowledge obtained during the literature reviews about graffiti art. I also drew on the visual notes made during the graffiti site visits.

In the initial design (fig 5.16, 5.17) I tried to combine two types of calligraphy to write the name of the youth centre in graffiti (known as tagging style) using the large arc pictorial composition which is commonly used in this kind of wall space. The final result attained was not in an acknowledged graffiti style. The letters characteristics generated in this design do not fulfil the common visual characteristics of graffiti art.

In this design the air conditioning unit was used as a launching point to visually involve its shape in the design. The main lines in the design appeared to be generated by the air conditioning unit to form the main body of the composition. On the other hand, the DJ unit remains detached from the wall. However, the same approach used with the air conditioning unit was applied to the DJ unit and, in the finished version, the same colour scheme was also applied to the unit.
Fig 5.16
The initial design made using pencil on a photocopy

Fig 5.17
The final stage of the initial design after being developed and enhanced using digital means
It was necessary at this stage to find out how to get the text written in a common tagging format. Using the Internet, I found an online program that would generate any text in a graffiti style called The Graffiti Creator. The text was written using the Graffiti Creator ‘Halyard Youth Centre’ and I had to get the letters separately in order to reorganize them according to the nominated pictorial composition (fig 5.18 & 5.19). Then, the composition was scanned, digitally placed onto the wall and the required enhancements were also digitally set (fig 5.20).

The intention of using monochrome (white) was determined from the beginning for the following reasons:

- To decrease the uproarious presence emerging from the characteristic organic shapes of the graffiti text, and as previously mentioned the space is already busy with other visual activities, which had to be considered.
- It was thought that this mural could perform the function of a background for the young people to encourage their artistic skills by allowing them to paint it with their favourite colours using temporary paints, so it can be changed and have multiple facades over time. This idea was appreciated by the youth centre panel, but they preferred to leave it the way it is.

In the final version of the second design (fig 5.21) I included both the air conditioning unit in the design by projecting the letters A & L out of their normal level to hold the unit, and the DJ unit was painted in white and the rest of the letter H, that was cut due to the position of the DJ unit, was added onto the unit’s side to complete the elevation. The ceiling shape was also echoed in the design using the same characteristic in the crossing horizontal lines, instead of being normal horizontals; they had a diagonal presence to emphasize the ceiling’s shape which would integrate the mural with the architectural physical space. Furthermore, the pale orange (appears as beige) was used in the amended version to repeat the colour from the surroundings and also to bond the whole design and to emphasize its stability.
Fig 5.18
The word Halyard written in The Graffiti Creator
Fig 5.19
The text ‘Halyard Centre’ being manually applied to the nominated composition

Fig 5.20A
The second design (initial version)
The third design in this series, which was considered to be much more radical, I used the same basic composition but with a different approach. I just used it as an outline or as a signature (fig 5.21); all of the graffiti text was taken away and the outline was transferred into a metallic movement on the same background. Some traces of the graffiti characters, that had been eliminated, were deliberately leftover to retain the concept of graffiti and to look like an unfinished or a cleaned up old graffiti.

Both designs (fig 5.20 & 5.21) were approved by the youth centre panel, but they preferred the idea of having a real graffiti wall that was encapsulated in the second design.
It was planned from the beginning as part of the agreement between the youth centre and myself, that young people should be involved in the execution and the developmental process of this project in order to learn from artistic experience. A full planned schedule was made for that purpose. As part of the practical study of this research, I also proposed to use formal and informal methods of evaluation (appropriate to the age groups involved) to gather feedback about the project. I was particularly keen to get feedback from the youth group involved concerning their feelings and interaction towards the project as well as their impressions of the artistic skills and experience gained through the developmental process.

It was also planned to provide an evaluation form to be filled in by the participants, their families and carers, the staff and invited dignitaries at the formal launch for the mural.
Unfortunately, because of the lack of funding, the project was not realised the feedback was on the initial designs only.

However, a self-evaluation was made applying the critical template used in Chapter Three to test out how far this mural would attest its sites-specificity. In doing so the outcome can be summarised as follows:

- All physical and spatial features were taken into account, and that was explicitly reflected on both the pictorial composition, and the compositional structures used in the mural.
- The cultural and social elements of the space had a direct impact in determining the mural type which resulted in choosing the graffiti style as the main theme.
- I would suggest that if the mural was executed a further reflection would have been obtained, however, applying the critical template on the design suggests that it is likely to fulfil the site-specificity of the youth center.

5.3 The Learning Resources Centre Commission UOB - Luton Campus

_Work title: The Knowledge_

_Dimensions:_ 3.83m x 2.40, Maximum projection = 30 cm.

_Location:_ University of Bedfordshire, Luton Campus, level 1 at The Learning Resource Centre (the lobby that leads to the reading area).

_Materials used:_ Timber, hardboard, mosaic tiles, opal glass sheets, convex acrylic mirror, brass pipes, printed wallpaper, Modelling materials for the semi-sphere, and for the painted areas, I have used gold leaf, acrylic paints, varnish and patina.

_Artistic description:_ Installation/ site-specific art.
The design for this mural installation was based on a sketch made as part of the analytical process for one of the classical works I have been working on (fig 5.22). This design was also one of the attempts that had been undertaken in an early stage of the research to take further steps in emphasising the interaction between the mural and the architectural space. Considering this concept, I found that creating poetical space where the mural’s image consists of materials coming from the activities of the human environment would be the best way to start.

Manipulating the physical presence of the materials that would be used to incorporate some features of the space in the design (which are not explicitly significant) would also emphasise the coherence between the mural installation and the space. Such features include: repeating the visual perception of the pillar (that can be seen on the right in fig 5.23); reflecting the whole space, especially the opposite doorways in the convex mirror; repeating the visual perception of the handrail by using vertical and horizontal lines (fig 5.24 & 5.25). To further secure the process of mural/space interaction, the materials within the design were deliberately selected to resemble those of the surroundings.
Fig 5.22.
Detail from the initial design after being partly enhanced digitally in a transformation process from the 2D to 3D format.

Fig 5.23.
The original site before applying the design
Fig 5.24, 5.25 show the original design after being digitally placed in the nominated space
In addition to the points mentioned, this pictorial composition was chosen with this particular space for the following reasons:

**Visually**
1. It contained obvious vertical and horizontal lines, which are essential to be used in this space for repeating the surroundings.
2. It contained a big circle that gives a dynamic aspect to the design which breaks the overwhelming static rhythm of the space that emerged from the constant relation between verticals and horizontals.
3. The triangle that emerges from the pillar, the circle and the semi-sphere, retain the stability of the mural and binds all the elements of the design together giving unity to the mural.
4. Using different types of calligraphy also added another rhythmic order, as well as reflecting part of the human activities being practiced in this area.
5. This pictorial composition also would cope with the compositional structures chosen for this mural (the layering compositional structure) to create physical depth in such closed area.

**Conceptually**
1. I have used multi-language-calligraphy (English, Chinese, and Arabic) to indicate that this place is a multicultural educational institution. To fulfil the cultural aspect of the space.
2. Calligraphy is an essential part of the design and it was implemented in two different ways: the first instance of this can be seen around the hemi-sphere at the bottom - this indicates that knowledge is generally approachable. The second one is behind the metal pipes on the left hand side of the design to indicate that knowledge sometimes may not be easily reached, and one should break some boundaries to get it.
3. The Red colour inside the circle acts like a gate or a window visually to give some depth to the mural and conceptually to indicate that the more knowledge one can have the deeper one’s reactions and behaviour will be. It also indicates that some knowledge is dangerous and should be carefully utilised.
4. The projected parts of the mural installation, the physical presence of the materials used, the written text and the mirror, would cause some of the passing viewers to stop, read, touch and interact with the mural, which may change the normal circulation of the space. This would generate physical interaction between the viewers and the mural.

After the main design was finished (as a hypothetical design for this space) I found that too many details had been emphasized especially after transforming the primary design into 3D format. These details emerged from the shadows made by the relief parts and also from the colour scheme used. Therefore, it was necessary to produce other versions of the same composition to try it with different façades, reducing the colour range and the textures emerging form the written text.

Two versions of the same composition were developed, the first one (Fig A 1&2) transformed the whole design into a monochrome, using white colour. That would visually integrate the mural much more effectively with the space. It would also reduce the possible confusion that might occur when using that much texture and colour. I preferred this version more than the original one for the aforementioned visual observations.

The second idea was almost the same approach of the first one; the only difference was that I replaced the written text with Islamic patterns. This was done to add a significant characteristic façade to the mural, which would emphasize some contemporary issues both visually and conceptually (fig B 1&2). The visual aspect was about testing the post-modern style and defining the potential of using this architectural approach in contemporary murals. The conceptual aspect was about the interpretation of some contemporary political issues concerning the cross-cultural interaction and globalization.

The set of designs was presented to the Learning Resources panel that decided to proceed with the first design, the coloured one, presuming that it would give some life to the nominated space with its vivid colours. The white version also found approval but its impact was considered to be too clinical.
Fig 5.26A
The monochromic version using the same composition.

Fig 5.26B
Digitally installed on the wall
Fig 5.27A
The Islamic version

Fig 5.27B
Digitally installed on the wall
5.3.1 Remarks on the Execution Process

1. The realization of the piece involved a collaboration of a poet to compose a site-specific poem to replace the suggested text in the mural. This involved some visits to the actual site where the mural would be installed and discussion of many ideas about what knowledge is and how it might be represented visually and the key words that might be used.

2. I was inspired by some key words that had been used in the poem, and that was very helpful in determining the materials and techniques to be used. My concern then, in the making of the mural was to expose the same visual contents and composition obtained in the virtual design combined with a physical presence that would visually interpret the notion behind the poem. One of the best means of doing that was to use gold leaf to cover the foreground layer structure and then use the Patina technique to emphasise some of those keywords like: Treasure chest, Gems, Be furlued in gold (fig 5.28).

3. The dominant circle shape was interpreted physically into mosaic tiles to achieve the required depth, and also to attain the richness and robust presence of the mosaic technique, which would subsequently emphasise the notion of the term Knowledge (fig 5.29).

4. The poem was translated into the Chinese and Arabic, beside the original English version as the most three spoken languages on the globe (fig 5.30).

5. The juxtaposition of the mosaic technique forming the circle and the patina technique used on the foreground layers; generated the presence of an antique piece of work represented in a deconstructive compositional approach (fig 5.31).

6. The poem also was digitally printed onto textured wallpaper sheets to integrate with the overall approach after being digitally designed on a relevant background (fig 5.32)

7. All parts of the installation were made in the studio and then moved to the actual space to be installed. It took 2 months of work in the studio and ten days for the installation.

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4 Dr. Gavin Stewart, Post Doctoral research fellow at the RIMAD, University of Bedfordshire
Fig 5.28
Gold Leaf before applying the patina technique

Fig 5.29
Different types of the mosaic tiles used including opal glass sheets
Now rich return
Go hold your heart
Be furled in gold
A treasure chest.
Then speak in gems
Or dragon's breath
Be sure we're hold
Both recompense.

Fig 5.30
The original poem in English by Dr. G. Stewart, and the translation in Arabic and Chinese
Fig 5.31
The juxtaposition of the mosaic and the patina techniques

Fig 5.32
Detail of the poem after being printed onto textured wallpaper and installed on the wall
Fig 5.33

The final mural after installation

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Fig 5.34

The final mural after installation
Evaluation Methodology

There is a high degree of reflexivity in the production of this thesis, which enables a process of structured self-evaluation in which contextual knowledge forms one of the bases of the mural making experience. The fact that general feedback from a public audience (the main audience for such public art) tends to be descriptive rather than being analytical, makes it difficult to generate and extend the experiential knowledge obtained through the process of making. However, in order to fulfil a holistic and nuanced evaluation, I have conducted other forms of evaluation qualitative methods including interviews, observation and focus group. The feedback received from these methods can be summarized as follows:

- **Interviews**, as described by Arksey and Knight\(^5\), are means of producing qualitative data in order to gather information about a particular topic. During the installation process and after the mural was installed, I conducted a number of interviews with those who were interested and keen to know more about the nature of the mural. The main concern was to explore how they perceived the mural in terms of its pictorial composition and its integration with the architectural space. The comments received were generally descriptive and did not meet in depth the criteria required in the questions posed. However, it was encouraging that some of the viewers described some features used in the installation in exactly the way they were meant to be. For example, Dr. J. Samuel\(^6\) explained how she explored the mural, identifying the pictorial composition in the same way it was designed. Samuel was excited to find “here in Luton” someone who could be regarded as belonging to (what she called the *Transvangarde artists*) such as El Anatsui, Ahmad Mostapha and Anish Kapoor, who bring together and critically engage with modernism along with the cultural traditions of both east and west. Samuel also commented that she was worried about the ‘seat’ because a gap had developed between it and the wall when she saw it and she wondered

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\(^6\) Samuel, J., PhD in Intercultural Studies and Art and Design Education, University of London. UK
if it was intended to be both functional and sculptural? I explained that the use of the space was fully taken into consideration prior to the installation, but it seems that the structural quality of this seat is not adequate.

- **Observation**, it was particularly important to observe how people perceive and interact with the mural. I made several visits to the mural location and took some photographs and notes to document spectator’s interaction with the mural. The outcome of this method was significantly influential, as it gave me a clear idea about the most attractive features of the mural and also addressed the way in which the audience interacted with the various elements of the installation (fig 35, 36, and 37).

Excluding the written text all other elements were physically dealt with either by touching or laying (on the protruding curved seat). These observations were positively invested within the experiential knowledge gained through the process. For example, it was found that some students have overused the curved ‘seat’. Although the durability aspect of this feature was pre-considered, (presuming that it is likely to be used in such way), but the inappropriate usage has affected its stability. I have asked Tim Stone (Head of the LRC and the commissioner) to hang a note near the mural asking the student not to sit on this part but he refused claiming that they will do so anyway. This shortcoming should have been reconsidered to fully attest the site-specificity of the mural by making this ‘seat’ more functional.

- **Focus Group**, As a potentially effective evaluation tool, a focus group was organized to get feedback from a targeted sample (people who would be able to articulate valuable insights on aspects of the mural). I invited different types of audience such as university staff members\(^7\), local artists who have graduated from the university\(^8\), academic staff members\(^9\) and students from various disciplines.

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\(^7\) Maureen Daley, Field Administrator and Tim Stone Director - learning resources, University of Bedfordshire
\(^8\) Patricia Ellis and Alison Goodyear, MA Fine Art, University of Bedfordshire.
\(^9\) Dr. Gavin Stewart and Joanna Callaghan, Media Dept. University of Bedfordshire
Compositional Structures in Mural Design

Chapter 5

A. Abdelrahman

Fig 5.35

Fig 5.36
A date was set for this focus group (04/06/09) at one of the social places located at the University of Bedfordshire. Not all of them actually could attend this focus group; however, the feedback I had from those who attended was distinctive and gave me some critical insights. I asked the attendees to have a deeper look at the mural prior to the discussion. I initiated the focus group by explaining the topic and the purpose of this open discussion. I have also tried to give hints about my research questions, aims and objectives to get the reflection upon how much I have fulfilled the criteria established through my practice. In summary:
On compositional structure:
- The organic shapes used in the installation are in contrast with the man-made surroundings (straight lines in the architectural space) this contrast generates tension between both.
- The text behind the brass bars forces confinement.
- The curved seat was described as a basin holding a tree resembling the garden of knowledge (with its red and green) that would invite you in.

On how did the mural affect the space:
- The mural has transformed the space from nowhere to somewhere.
- The mural has transformed the space to somewhere with identity.
- The mural transformed the action of the people using the space, like standing in front of the mirror or lying on the seat.

Although the above-mentioned comments tend to be slightly descriptive, but they have generated new insights particularly the last two comments that underpin how the mural transformed the space and how it also created new poetics for the space such as defining and emphasizing the identity of the space.

I placed a notebook near the mural and a written note was hung above it asking the passing viewers to write down their comments and their reactions towards the work. The feedback I had from this method was completely descriptive and questions were raised about why I have not use other languages.

Reflecting on the aforementioned feedback from the diversity qualitative methods I have identified the following points as the most subjective and worth to be considered in the future designs:
- From the notebook placed close to the mural, the most common comment received was about why I have only used those three languages, what about other languages? Although this point seemed to be of a minor importance, but it gave me an indication that the cultural and social aspects of the mural were not fully grasped as planned, and
some or part of the spectators may be offended. Thus, such cultural issue needs to be considered in future designs.

- From the interviews and the focus group methods, I have received several comments and concerns about the protruding curved seat as being misused. Although this particular point was considered during the installation process, but it was not planned for this protruding part of the mural to function as a seat. This might be seen as a shortcoming that needs to be reconsidered in the future.

- In the focus group, although most of the outcome was descriptive, it indicates that people have responded to the mural in a way that emphasizes its site-specificity. A number of comments were describing the relationship between the red and green colours in the mural as the garden of knowledge. This indicates that the cultural aspect of the mural was fulfilled and that was really rewarding.

- A comment made by an interviewee about eastern influences being presented in the mural was also rewarding. Although this was not deliberately made, the acknowledgment that part of my cultural background is presented in the mural was gratifying and merits further consideration in future designs.

- Although I have tried to minimise the subjectivity and the superficially descriptive outcomes by giving certain questions, the fact that I have not received a critical comments concerning the main issue of this study such as the pictorial composition used or the compositional structure employed was expected. I believe that the self-evaluation and self-reflection is the main device that generates experiential knowledge.
Fig 5.35
View of the mural from inside the reading area
Fig 5.39
Side view
Chapter Six: Conclusions

6.1 Argument for the Research Questions

In the context of this study I have addressed a concern in problematic contemporary mural practice. Throughout my research, I have found that in the production of contemporary murals, there is often little relationship between the compositional aspects and the architectural physical spaces for which they have been made. This type of relation between murals and their architectural context is what distinguishes murals as site-specific art forms. This study identified the Italian Renaissance as a significant age where murals enjoy a high standard of compositional quality that characterizes the site-specificity element. This element, therefore, forms the major concern of this study.

In setting the two research questions, my strategy was to establish a critical inquiry to investigate the relationship between murals and architecture in contemporary practice. Through the literature review I have raised the issue of murals as site-specific art forms.

To answer the research questions, I used the following research methods:

- An analytical study of mural paintings produced in the Renaissance, Baroque and Rococo periods in order to identify the elements that made these murals fulfil their site-specificity. Giving examples and visual evidence that proved this idea, which seemed to be omitted or overlooked in previous studies; the advantage of this analytical study was the identification of visual and conceptual elements that attest to the site-specificity of murals. This analytical method was also the main device that enabled me to identify the term ‘compositional structure’ which, through this research, proved to be the most effective element in fulfilling the site-specificity of murals. The site visit made to Italy was a significant part of this analytical study. The privilege of this field research enabled me to study and analyse the relationship between the pictorial composition of the Renaissance murals and the architectural physical space for which they were made. The results achieved through this field research is unlikely to have been attained from any other type of references.
A critical study was made in response to a number of contemporary murals in the Western World as well as in Egypt. The aim of this critical study was to test the applicability of ‘principles of compositional structure’ in contemporary mural practice, and to determine to what extent a theory of ‘compositional structure’ could help in achieving the integration between murals as site-specific art forms and the architectural space. Applying a critical template, the advantage of this analytical study, as a qualitative method, was the establishment of a critical inquiry that manifested the main shortcomings in contemporary mural design that disqualify these murals from fulfilling their site-specific function in relation to the architectural context.

Moreover, my research pointed out that contemporary architecture has had significant changes in its infrastructure, facades, materiality and concepts. This observation led the research to develop the notion of a deconstructive mural methodology. This notion was explained with examples which proved (theoretically) its favourable outcomes in contemporary mural practice. The aim of developing such a deconstructive concept was to identify a contemporary approach in mural practice that could cope with contemporary architecture styles.

The third method was practice-led research to implement the theory of ‘compositional structure’ through the production of hypothetical designs of contemporary murals for specific architectural spaces. These hypothetical designs were created digitally and could therefore envisage the spatial relationship between mural and architectural space. These hypothetical mural designs were also the empirical process that demonstrated the reciprocation between theory and practice in this research. This subsequently resulted in my being commissioned to develop and execute three mural designs.

A reflective practice methodology in this research was crucial in order to test and analytically evaluate my findings in the theoretical approach of this study. This practical study was the main device that enabled me to generate personal knowledge through the design process.
The most significant practice aspects considered in this thesis are the designs for three mural commissions made for different architectural environments. A detailed description of the nature of these commissions was posed in Chapter Five in an exploration of integrative approaches. Also in Chapter Five, an analytical evaluation methodology was developed to evaluate the findings of this research after being applied through live mural commissions. The analytical description of the hypothetical designs produced in Chapter Four and the analytical evaluation methodology of the live murals conducted in Chapter Five together form the main device used to make the personal knowledge achieved through the making process transferable.

New contribution to knowledge, however, may be summarised as:

- Theoretical outcomes (see 6.2) which include:
  1. The identification of murals as site-specific art forms.
  2. The establishment of a critical template that was used as a method to identify and evaluate the site-specificity aspect of contemporary murals. This critical template is based on the analytical study made to identify the relationship between murals and their architectural settings in the Renaissance.
  3. The development of the notion of a deconstructive approach to mural design.
  4. The use of qualitative methods to evaluate the practical aspect, particularly the live commissions developed during this research, and then reflecting on these findings in order to establish experiential knowledge.
  5. The use of a studio journal as a main record in documenting the artistic outcomes.

- Artistic outcomes (see 6.3) which include:
  1. The development of virtual mural designs.
  2. Identifying the possibility of murals as non-permanent art forms.
  3. The use of digital technology in the development of contemporary mural practice.
  4. Producing live mural commissions both permanent and temporary, which gave me the advantage to reciprocate between theory and practice.
6.2 Theoretical Outcomes: Objectivity of Research Methods

- Documenting the reflection on my practice was a well-recognised method used in this research to record and reflect on progress. It had the advantages of creating a critical agenda that enabled me to evaluate my findings and to develop new strategies. One incident illustrates its advantages: I identified a number of randomly organized pictorial compositions that were constructed from discarded materials left in the studio. The visual experience gained from this incident was documented and enabled me to reflect on and research serendipity and montage in artistic practice. It drew my attention to an area that was previously ignored in my research. Considering this particular aspect in my practice made significant changes in my way of thinking about how to develop new approaches in my design methods, which initially resulted in producing the Hat Factory mural. This mural installation also was an opportunity to test the notion of a frameless deconstructive mural. Thompson argues that:

   ‘It is mistakenly assumed that engaging in practice, then stopping to reflect on that practice, practising some more and then reflecting some more will somehow produce learning and higher standards of practice- as if by magic. Of course, the reality is much more complex than this. Reflective practice does involve a degree of reflecting on our practice, but in specific ways and as part of broader process- and not simply a process of pausing for thought’

This study played out the previous statement by Thompson in a practical way. The documentation of the aforementioned incident was not recorded on the sequence of practicing and then pausing to reflect, it was rather an autonomic process of creation, observation and reflecting.

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The method of analysing murals in their original architectural settings through the field research in Italy has the advantage of testing and evaluating the relationship between pictorial composition and architectural visual and conceptual elements in a tangible way. This field research gave me an insightful opportunity to study closely the different types of pictorial compositions used in producing murals in the Renaissance and also to identify how these murals fulfilled the site-specificity aspect in a tangible way. The analytical study conducted in this field research generated syntheses of knowledge that helped in developing the ‘compositional structures’ theory.

The development of the notion of a deconstructive approach to mural design arose from these methods. A particular landmark in the development of this notion was, the Art and Design Department mural installation. This design was the starting point for me to think more radically in my designs and to emphasise the notion of the deconstructive mural. It was the first chance to develop a real mural installation that gave me the opportunity to test and evaluate the theory of ‘compositional structure’. This mural demonstrated the notion of ‘compositional structures’ as one of the main elements to fulfil the site-specificity of a mural.

After identifying the possibility of murals as non-permanent art forms, I employed the method of making hypothetical murals using digital technology. This method had the advantages of developing new insights in the realm of murals such as the use of projection installation in producing virtual murals. These new insights would generate new approaches in the design process to produce murals that can attest their site-specificity with certain architectural styles such as those that embody non-permanent walls. This stage was of particular interest in the progression of my practice and was a launching point for a number of designs that were based on the use of digital technology.

The pivotal point of my practice was the development and the execution of the LRC mural. This mural was the second chance to engage with actual architectural space. Apart from the implementation of digital techniques in this design; most of the knowledge
developed through previous stages was invested in this mural alongside my long-standing practice in murals.

A combination of compositional structures based on the Renaissance murals, the deconstructive methodology obtained during this research and personal experience influenced by my conventional cultural background had accumulated to construct this mural installation. A number of evaluation methods were undertaken to evaluate this particular mural critically such as interviews, observations and focus group. The advantage of using these qualitative methods was the diversity of feedback gained from various types of audience. Although this feedback was generally descriptive, the responses raised some critical points concerning social and cultural aspects that should be considered in future projects.

The disadvantage of these methods was that they did not explicitly help in generating experiential knowledge needed in this kind of practice-led research. I suggest that the main reason is that the practitioner is the only person who can judge, evaluate and reciprocate between his practice and his theoretical bases. This in turn would generate both experiential and personal insights that could be applied more generally in a wider scale.
6.3 Artistic Outcomes

The artistic outcomes and the conclusion of this thesis can be summarized as follows:

- This study identified murals as site-specific art forms. This concept seemed to be missing or absent in the previous studies (see 2.1.3). To articulate this concept, this research identified the most important elements that should be considered in mural design to fulfil the aspect of site-specificity. These elements are: the architectural context, the urban environment particularly for outdoor murals, the conceptual influences which include the cultural, political and social elements that may be reflected in the conceptual aspect of a mural and finally the structural systems used to reflect and emphasise all the above-mentioned elements.
- The research identified ‘compositional structure’ as the most important element in fulfilling the aspect of site-specificity in mural design.
- The practical study conducted in this research argued that the nature of modern architecture in relation to some of its infrastructural elements, particularly the walls, made it possible for the walls to be removed or the space to be transformed, as discussed in Chapter Two. This significant change in contemporary architecture would subsequently affect the concept, the design techniques and materials used in the production of contemporary murals. Therefore, this research suggested that new media techniques like projection art and virtual art provide alternative approaches for contemporary murals that would integrate with a number of architectural styles.
- One of the most important outcomes of the research is that murals do not necessarily need to be seen as permanent art forms due to the significant changes made in the infrastructure of contemporary architecture, particularly the walls. The research clarified that a number of modern and contemporary buildings, particularly public buildings frequently feature internal walls that are not permanent. This may significantly change the idea of murals as permanent by providing an opportunity to seek new insights into the realm of mural design. The ‘Sketch’ is a live example of a temporary mural that was discussed in detail in Chapter Five.
- The notion of a ‘deconstructive mural’ is a significant aspect highlighted in this research. The development of this concept evolved as a contemporary implementation of
‘compositional structures’ and articulated the extent to which the theory of ‘compositional structures’ could be applied in contemporary mural practice.

- A number of hypothetical mural designs and three live mural commissions have been developed throughout this research. These designs are the main practical elements of this study that accumulate the artistic outcomes as discussed in the above points.

6.4 Expectations and Recommendations for Further Research
In reaching these conclusions the arguments presented provide a number of important statements on the aesthetics as well as the design techniques of contemporary murals. Some of these will provide the basis for further work in this area.

This thesis makes the following recommendations:

- Further practice-led studies in the field should be undertaken in conjunction with digital technologies to extend the exploration of the potential these media have for mural design and production.
- There is scope for further research based on cross disciplinary collaboration between artists and architects and/or artists and new media technologists, which could produce substantial new literature in the field and, could subsequently provide a significant contribution to the development of contemporary murals.
- Defining murals, as site-specific art forms could extend the scope for a review of the way in which traditional murals have been seen and practiced across art history until the 20th century. This would also extend the research area for practitioners, art historians and theorists.
- In the history of murals the narrative approach was the main influential aspect in producing murals until the beginning of the 20th century. More recent contemporary approaches to mural design have drawn on a number of different terminologies from both art and architecture. Terms like Post Modernism, Abstractionism, Deconstruction, Organic and Robotic were stimulating and influential in the realm of art and architecture, also terms like Hyper-Structure, Cyber Space, Poetics of Space and Politics of Space as conceptual and philosophical terms had their impact in reforming the characteristics of contemporary artists and architects. I believe that studies made to investigate the aesthetics and the potential of the aforementioned terms may be inadequate and that more research might be conducted in order to highlight how far these terms could enhance the quality of murals.
- One of the most important issues this study aimed to address is how to invest the knowledge gained through this research in new pedagogic developments.

This can be summarised in the following points:

1. The pictorial compositional schemes identified in Chapter Two could be applied as guidelines or templates to be used in the mural design process particularly at
undergraduate level, with the demonstration of how each pictorial scheme could emphasize the picture format.

2. The theory of ‘compositional structures’ established in this study is fundamental in the teaching of a mural design course as an essential element to address the issue of site-specificity in relation to the mural. The pedagogical method is based on the consideration of this theory in contemporary mural study and practice.

3. Studying the ‘site-specificity’, elements identified in Chapter Three in relation to mural design will enable the student to think more broadly about his/her design in relation to the other aspects and features particularly the architectural context, and therefore becomes an essential part of the curriculum.

4. The implication of digital technology in mural design as a contemporary alternative to traditional murals could be a perfect solution for temporary murals that may be produced for certain architectural styles. This research suggests that the use of digital technology as a contemporary method in mural design could be discussed and taught at Masters’ level.

5. This research drew attention to the absence of academic debate in mural design of the concept of ‘Poetics of Space’. As a philosophical concept, it seemed not to have been taken into account in the realm of mural design in the academic arena particularly in the Egyptian institutions. This thesis suggests that the development of this notion as part of a pedagogical approach (at masters level and PhD) could result in enhancing the quality of contemporary murals. Moreover, a further concern towards the ‘poetics of space’ merit investigation in my post-doctoral research. This has been already planned for my future practice based research.

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Compositional Structures in Mural Design

Chapter 6

A. Abdelrahman

- www.bris.ac.uk/parip/par_phd.htm Accessed: 2009
- www.bristol.ac.uk/parip/biggs.htm Accessed: 2009
Appendix No 1: DVD

These DVDs contain photographs and videos taken during the field research conducted in Italy. All photographs presented in their original state without any digital enhancement. Moreover, I have selected only the good quality videos taken during the field research, as many of the visited locations did not have good lighting conditions.

The DVD also includes a short movie that demonstrate one of the hypothetical mural projects developed in Chapter Four *The LRC entrance at the University of Bedfordshire (Luton Campus)*. This short movie showcases the idea of using projection installation in murals.
**Shape 1**

![Fig A.1](image1)

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<th>Location</th>
<th>Ceiling mural at Chiesa di Santa Maria ai Monti, Rome.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + (Vertical Zigzag)+ Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>1A</td>
</tr>
<tr>
<td>Remarks</td>
<td>The diagonals used echoed outer features into the pictorial space</td>
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</tbody>
</table>

![Fig A.2](image2)
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<th>Location</th>
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</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>S curvature + Diagonals + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>1B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with architecture</td>
</tr>
</tbody>
</table>

Fig A.3

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa de S. Giorgio in Isola, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Angles laying across + Diagonals + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>1C</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with architecture</td>
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</tbody>
</table>
### Fig A.4

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di San Simon, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Entities + Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>1D</td>
</tr>
<tr>
<td>Remarks</td>
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</tr>
</tbody>
</table>

### Fig A.5
### Location: Chiesa di S.Geremia, Venice

<table>
<thead>
<tr>
<th>P.C Used</th>
<th>Circle + Rhomb + Zigzag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme Code</td>
<td>1E</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with architecture</td>
</tr>
</tbody>
</table>

*Fig A.6*

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S.Geremia, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Concentric circles + Upside-down arc (wave)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>1F</td>
</tr>
<tr>
<td>Remarks</td>
<td>This pictorial composition echoes the niche</td>
</tr>
</tbody>
</table>
General remarks on Shape No.1:

- The most common Pictorial schemes used with this pictorial format are the zigzag, S curvature and concentric circles.
- Diagonals are usually used to bond the elements of the composition.
- Rows are also used to divide the verticality of the picture plain.
- These pictorial schemes were used in most of the (shape .1) murals investigated in this filed research.
Shape 2

Fig A.8

<table>
<thead>
<tr>
<th>Location</th>
<th>Santa Maria del Carmin, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + Diagonals + Cross</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2A</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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Fig A.9
<table>
<thead>
<tr>
<th>Location</th>
<th>Santa Maria del Carmin, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Concentric circles + Zigzag + Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2B</td>
</tr>
<tr>
<td>Remarks</td>
<td>The composition emphasizes the uplifting nature of the arch</td>
</tr>
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</table>

**Fig A.10**

<table>
<thead>
<tr>
<th>Location</th>
<th>Santa Maria del Carmin, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + Bows + Triangles + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2C</td>
</tr>
<tr>
<td>Remarks</td>
<td>The composition emphasizes the uplifting nature of the niche</td>
</tr>
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</table>

274
Fig A.11

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S. Maria del Rosario (Gesuati), Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Ellipse (new) + Triangle + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2D</td>
</tr>
<tr>
<td>Remarks</td>
<td>The composition emphasizes the architectural structure of the vault</td>
</tr>
</tbody>
</table>

Fig A.12
<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S. Maria del Rosario (Gesuati), Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>S. Curvature (spiral) + Entities</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2E</td>
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<tr>
<td>Remarks</td>
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**Fig A.13**

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S. Maria della Visitazione, Venice</th>
</tr>
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<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + Zigzag</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2F</td>
</tr>
<tr>
<td>Remarks</td>
<td>No Significant integration with the architecture</td>
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</table>
Fig A.14

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di Santa Maria Gloriosa dei Frari, Venice</th>
</tr>
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<tbody>
<tr>
<td>P.C Used</td>
<td>Figure 8 +Zigzag</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2G</td>
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<tr>
<td>Remarks</td>
<td>No Significant integration with the architecture</td>
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Fig A.15
<table>
<thead>
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<th>Chiesa di Santa Maria Gloriosa dei Frari, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + Zigzag + Rhomb</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2H</td>
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<td>Remarks</td>
<td>No Significant integration with the architecture</td>
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</table>

Fig A.16

<table>
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<th>Chiesa di Santa Maria Gloriosa dei Frari, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Figure 8 + Rhomb</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>2I</td>
</tr>
<tr>
<td>Remarks</td>
<td>No Significant integration with the architecture</td>
</tr>
</tbody>
</table>
General remarks on Shape No.2

- The most common pictorial schemes used with this pictorial format are the zigzag, S curvature and figure 8.
- Diagonals are usually used to bond the elements of the composition.
- Rows are also used to divide the verticality of the picture plain.
- Pictorial schemes used in Shape 1 and Shape 2 are almost the same.

These pictorial schemes were used in most of the (shape.2) murals analyzed in this filed research.
**Shape 3**

**Fig A.18**

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa della Badia Fioritina, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Wave + Rhomb + Cross</td>
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<tr>
<td>Scheme Code</td>
<td>3A</td>
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<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</table>

**Fig A.19**

<table>
<thead>
<tr>
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<th>Basilica Di Sant' Andrea Della Valle, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Figure X (new) + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>
### Fig A.20

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa de S. Giorgio in Isola, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Concentric circles+ Bows (new)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3C</td>
</tr>
<tr>
<td>Remarks</td>
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### Fig A.21

<table>
<thead>
<tr>
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<th>Chiesa de S. Giorgio in Isola, Venice</th>
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<tbody>
<tr>
<td>P.C Used</td>
<td>Bows (new)+ Rhomb</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3D</td>
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<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</table>
Fig A.22

<table>
<thead>
<tr>
<th>Location</th>
<th>Complesso Monumentale di Santa Croce, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>V under V</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3E</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</table>
### Fig A.23

<table>
<thead>
<tr>
<th>Location</th>
<th>Complesso Monumentale di Santa Croce, Florence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>V under V + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3F</td>
</tr>
<tr>
<td>Remarks</td>
<td>The composition repeats the architectural elements</td>
</tr>
</tbody>
</table>

### Fig A.24

<table>
<thead>
<tr>
<th>Location</th>
<th>Complesso Monumentale di Santa Croce, Florence</th>
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</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>V under V+ Bows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>3G</td>
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<td>Remarks</td>
<td>No significant integration with the architecture</td>
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Shape 4

Fig A.25

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica del Santi Cosma e Damiano, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Rectangle moved to the corner + Triangle</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4A</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>
Fig A.26

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica del Santi Cosma e Damiano, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Triangle (pyramid)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>

Fig A.27

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica del Santi Cosma e Damiano, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Bows (new)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4C</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>
## Compositional Structure in Mural Design

**Appendix 2**

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### Fig A.28

<table>
<thead>
<tr>
<th>Location</th>
<th>San Pietro Vincoli, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Horse Shoe (new)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4D</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>

### Fig A.29

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Bows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4E</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>
### Fig A.30

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S.Maria dell Carmelo, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Entities + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4F</td>
</tr>
<tr>
<td>Remarks</td>
<td>The arches used in the composition repeat the actual arches</td>
</tr>
</tbody>
</table>

### Fig A.31

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S.Maria dell Carmelo, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle + Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>4G</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>
General remarks on Shape No.4

Certain schemes were not common to be applied in this shape such as S.curvature, Figure 8 and Zigzag.

**Shape 5**

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa Santa Maria di Lorito, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Triangle + Ellipse</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>5A</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>
### Fig A.34

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di S. Guiliano, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Angles on coming/Angles laying across</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>5B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>

### Fig A.35

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica di Santa Maria Maggiore, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Diagonals+ Multiple figure X</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>5C</td>
</tr>
<tr>
<td>Remarks</td>
<td>The diagonals integrate the mural with ceiling</td>
</tr>
</tbody>
</table>
### Fig A.36

<table>
<thead>
<tr>
<th>Location</th>
<th>San Giovanni in Laterano, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Ellipse+ rectangle moved to the corner+ diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>5D</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>

### Fig A.37

<table>
<thead>
<tr>
<th>Location</th>
<th>San Giovanni in Laterano, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Tear drop shape (new) + diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>5E</td>
</tr>
</tbody>
</table>
Remarks

<table>
<thead>
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<th>Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Giovanni in Laterano, Rome</td>
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</tr>
<tr>
<td>Bows+ Triangle</td>
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Shape 6

<table>
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<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Vatican Museum, Rome</td>
<td>No significant integration with the architecture</td>
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<tr>
<td>Noose</td>
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Fig A.38

Fig A.39
### Fig A.40

<table>
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<th>Vatican Museum, Rome</th>
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<tbody>
<tr>
<td>P.C Used</td>
<td>Tow Conjoined Nooses (New)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>6B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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### Fig A.41

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</tr>
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<tbody>
<tr>
<td>P.C Used</td>
<td>Rows + Arcs (waves)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>6C</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</table>
### Compositional Structure in Mural Design

**Appendix 2**

**Fig A.42**

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Rows + Arcs (waves)</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>6D</td>
</tr>
<tr>
<td>Remarks</td>
<td>The pillars depicted bond upper mural with this one</td>
</tr>
</tbody>
</table>

**Fig A.43**

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
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</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Horizontal Zigzag + Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>6E</td>
</tr>
<tr>
<td>Remarks</td>
<td>The symmetric composition unites the upper mural with this mural to create the illusion of one piece</td>
</tr>
</tbody>
</table>
Appendix 2

A. Abdelrahman

**Fig A.44**

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di San Rocco, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Ellipse + Angles laying across</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>6F</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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**Shape 7**

**Fig A.45**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7A</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>
Compositional Structure in Mural Design

Appendix 2

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Fig A.46

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica di Santa Maria Maggiore, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle+ Zigzag</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7B</td>
</tr>
<tr>
<td>Remarks</td>
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Fig A.47

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle+ Rhomb+ V under V</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7C</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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### Fig A.48

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</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle+ Rhomb+ Angles laying across</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7D</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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### Fig A.49

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</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Rhomb+ Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7E</td>
</tr>
</tbody>
</table>
Remarks | No significant integration with the architecture
---|---

Fig A.50

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Scale</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>7F</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>

Shape 8

Fig A.51

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica di Santa Maria Maggiore, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Bow+ Angles on coming</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8A</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
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<tr>
<td>No significant integration with the architecture</td>
<td></td>
</tr>
</tbody>
</table>

**Fig A.52**

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Angles on coming +Rows</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8B</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>

**Fig A.53**

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Bow+ Triangle</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8C</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>
### Fig A.54

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Bows + Circle</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8D</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>

### Fig A.55

<table>
<thead>
<tr>
<th>Location</th>
<th>Vatican Museum, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Multiple Ellipses + Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8E</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
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</tbody>
</table>

**Fig A.56**

<table>
<thead>
<tr>
<th>Location</th>
<th>Chiesa di San Zaccaria, Venice</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Character+ Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>8F</td>
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<tr>
<td>Remarks</td>
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</table>

Shape 9

**Fig A.57**

<table>
<thead>
<tr>
<th>Location</th>
<th>Basilica di S. Maria Maggiore, Rome</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C Used</td>
<td>Circle+ Diagonals</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>9A</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
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<td>Remarks</td>
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</table>

**Fig A.58**

<table>
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<tr>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Basilica di S. Maria Maggiore, Rome</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P.C Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two opposite triangles (star) + Diagonals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scheme Code</th>
<th>9B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remarks</td>
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</table>

**Fig A.59**

<table>
<thead>
<tr>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiesa di Santo Nicolo dei Mendecoli, Venice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P.C Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle + Rhomb + Angles laying across</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scheme Code</th>
<th>9C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
<tr>
<td>Location</td>
<td>Chiesa del Gesu, Rome</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>P.C Used</td>
<td>Circle + Rhomb+ V under V+ Bow</td>
</tr>
<tr>
<td>Scheme Code</td>
<td>9D</td>
</tr>
<tr>
<td>Remarks</td>
<td>No significant integration with the architecture</td>
</tr>
</tbody>
</table>