

**An Examination of the Place of Fresco
in Contemporary Art Practice**

YoungSun Jin

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ABSTRACT

This dissertation is the outcome of a practice-based research inquiry into innovations in processes and materials leading to a contemporary fresco. The research is in three parts: 1) the textual establishment of a historical framework for fresco; 2) an exhibition, *Channelling Time*, at the Lethaby Gallery, from 22 April to 3 May 2003; and 3) a critical analysis and conclusion that defines the research.

The thesis is intended to explore issues in experimental fresco works and to provide a critical account of techniques, uses, and positions of fresco in twentieth-century art. It also aims to propose new aesthetic values in contemporary art.

Chapters I-IV reappraise modern fresco by weighing historical precedent and influence from other artistic mediums. Throughout these chapters it is argued that fresco can establish itself as a current in contemporary art by understanding how its contexts and media differ from traditional painterly approaches to contemporary fresco and an organic

relationship to architectural space.

The research also discusses how contemporary fresco extends its boundaries with three different types of works: 1) site-specific projects; 2) portable frescoes and fresco installations; and 3) fresco sculptures and frescoes in mixed media. Interviews with major fresco artists examine how their work contributes to the creation of contemporary fresco and its new aesthetics. This research was used as a basis for discussing fresco in practice. It is developed in Chapter V, 'An Ongoing Inquiry through Creative Practice' and was presented at the exhibition in the Lethaby Gallery, the catalogue of which is included. The crux of the exhibition and the culmination of my research is an analysis of fresco's autonomy, diversity, and development from a traditional to a contemporary medium. The exhibition *Channelling Time* set out to establish fresco as a protean genre that expresses a variety of discourses of fresco.

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CHAPTER I

INTRODUCTION

This research project explores the place of fresco within contemporary art and by 'taking fresco off the wall' sets out to extricate it from the confines of its history and traditions. The research has been developed through creative practice, critical and contextual inquiry, and an exhibition arranged as an essential part of the work in progress. At the centre of the project is the research through practice, for which the first four chapters of the thesis provide the contextual framework. Chapter Five outlines and evaluates the outcome of the creative practice research.

Fresco is the culmination of a genre that began in prehistory. It reached its creative peak during the Renaissance and then suffered a gradual decline when it failed to adapt its processes to new aesthetic values, foremost of which was and still is a desire for mobile artworks. Today, fresco, which continues to express a historical nature and narrative form, is on the fringes of contemporary art.

Although it is a great source of visual art, fresco has become today a rarefied genre whose practitioners show only moderate interest in contemporary art and art theory. It is not surprising, then, that most people think of fresco as an artistic tradition of the past. There may be number of reasons for this:

- 1) a deterministic view, which largely informs art historical methodology today, that fresco is a historical medium that sits outside to contemporary art discourse;
- 2) the difficulty of fresco technique and the uniqueness of its materials. A mastery of fresco's elegance, colourfulness, and enduring beauty requires relentless technical training and adjustments to always-different architectural spaces. The invention of a contemporary fresco would necessitate new materials to overcome technical difficulties, and the scope of its representation would have to be expanded;
- 3) fresco has failed to evolve. Since the advent of industrial society, contemporary art, thanks to the invention of various media, has enriched its expressivity. But fresco has been slow to change, maintaining its traditional methodology.

This study, unlike studies on traditional fresco, looks not only at fresco history, but at its options today. Looking at fresco in an historical context also means identifying differences between the past and the present, which is the critical focus of the study.

This thesis also intends to differentiate itself from others by offering alternatives to traditional fresco. In art history, famous Western and Eastern frescoes are rarely if ever compared with one another. It aims to broaden dramatically the historical context of fresco and to approach its function, subject matter, media, and techniques in new ways.

The goal of the research is to demonstrate the function and independent role of fresco in various contemporary art currents. It presents

the author's work and experiences in an exhibition and as a thesis. The exhibition suggests the kind of work that would be created when the originality of the fresco medium meets contemporary art.

The study confirms, through actual experiments, the possibility of the application of fresco in contemporary art and, as a result, in site-specific and portable installations, and in sculptures and mixed media. Departing from the conventional approach of studying fresco art as a means of preserving cultural artifacts, the research puts it in the same context as other major media by considering the statistics and results of experiments with fresco conducted as vital creative activities in the modern art scene. The meaning of the public building projects and the wall painting movement in the early twentieth century, which witnessed the revival of fresco, and actual cases of experiments with fresco by contemporary artists since the 1970s, are reviewed.

In the final stages of research inquiry, the following results are anticipated:

- 1) the broadening of the existing definition of fresco from a traditional art to a contemporary visual art;
- 2) the defining of contemporary fresco and its diverse materials and techniques, encountering the new meaning of space, and the displacement of text and context in the concept of traditional painting from centrality to otherness;
- 3) the discourse of the aesthetic privatisation of contemporary fresco as it has turned away from the concept of being a religious project;
- 4) and the examination of the place, time, appreciation, impact on

society, and history of fresco as mural painting.

The outcome expected from this research is that fresco, which has long been considered an art genre that belonged to the past, can now be recognised for its continuity with modern art. In the same way, as fresco created an organic art form in the architectural space of the past, so it is now possible that it will play a critical role in the creation of space in a modern city environment. This will constitute a valid reason for the contemporary existence of fresco as it will no longer remain subordinate to the construction of buildings. The final argument is that there is a need to go beyond looking at fresco diachronically as a past form of painting that included mural and ceiling paintings, and now to see it in a synchronic relationship with modern art.

The research presented in the following chapters elaborates on the creative method and materials of true fresco - that is, the application of colour to a wet plaster surface - as groundwork for a renewal of contemporary fresco that reconfirms its historical weight. None other than William Blake sparked an eighteenth-century fresco revival when, in response to the no less eminent Joshua Reynolds's comment, 'Well, Mr. Blake, I hear you despise our art of oil painting', he famously retorted: 'No, Sir Joshua, I don't despise it; but I like fresco better'.¹ Inspiring words for any contemporary fresco artist who, with considerably more modesty, of course, looks forward to a similar development in the twenty-first century.

¹ Peter Ackroyd, *Blake*, Vintage, 1999, pp. 61-62.

CHAPTER II

THE HISTORICAL CONTEXT OF FRESCO MURAL PAINTINGS

II.1 Introduction

Long before humans expressed themselves by inventing the written word or constructing grand edifices, they painted on cave walls. The prehistoric cave paintings discovered in Altamira, Spain, and in Lascaux, France, are shining proof that, since time immemorial, people have been giving vision to their expressive yearning, aesthetic instinct, belief in community achievement, and common goals.

Later, with the beginning of civilisation, such expressive proof was found in the wall paintings of ancient Egypt and Mesopotamia. Although there are no examples of Hellenic Greek frescoes, the Minoans in Knossos on Crete, were the creators of the earliest frescoes of a highly developed technical nature. Prior to the Romans, the Etruscans, established in present-day Tuscany, left some underground tomb paintings painted directly on stone walls, sometimes with a kind of tempera, sometimes with something close to true fresco and secco. The frescoes unearthed in Pompeii, during the Roman Empire, were an artistic revelation. Fresco painting continued in medieval Italy and reached its apogee in the Italian Renaissance. Even colonial America tried its hand at fresco. By

then, however, fresco had been in decline for centuries.

In Asia, a number of significant mural relics have been discovered that shed light on the origin of its painting and fresco. The Ajanta cave paintings, in India, thought to have been executed between 200 B.C. and 600 A.D., were painted directly onto rock walls, without medium, using water-ground pigments applied to fresh lime paint coat *intonaco* laid over rough mud plaster. This technique seems to have passed elsewhere, to the Gandhara Buddhist paintings and Afghan Buddhist paintings of the first century, and even to the Dunhuang tomb paintings in China, also of the first century. The sixth-century Takamatsuzuka tomb paintings in Asuka, Japan, excavated only since 1972, were painted with pigments and even gold and silver leaf directly onto plaster. The fourth-century Koguryo tumulus paintings in Korea receive a complete treatment in Appendix II.1.

II.2. Cave Painting

It is generally accepted that prehistoric cave paintings are the oldest and most important art objects in existence today, and that they inaugurate the history of art in both the East and the West. The extremely limited number of surviving cave paintings and wall paintings from ancient times gives us a glimpse into daily life, religious belief, dynastic evolution, and ancient government. Even then, art was widely used for recording history, informing the public, and decorating architectural space.²

² One of the most important mural paintings in pre-dynastic period of Egypt is <Men, Boats, Animals> found in Hierakonpolis which depicts the authority and domination of

A detailed description of the functions of fresco mural is important because, along with sculpture, it is the only art genre that has existed since prehistory. The cave paintings that appeared in the last stage of the Paleolithic era are not crude, primitive doodles but real art with essential subjects and themes that illustrate mankind's desire to express objects, convictions, and styles. Cave painters rubbed colour directly on the rock wall until it was incorporated into it, with no intervening layer of plaster. The quality of the painting justifies an existence evolved not overnight but over thousands of years. The high number of human skeletal remains of those who lived and died under protruding rocks or in caves discovered in Spain or southwestern France explain why paintings are primarily found in caves.³ This also implies that many talented artists existed even then⁴ and that their works served a significant community purpose.

II.3 Pompeii, a City of Frescoes

According to Ralph Mayer, 'during the entire period of the Roman Empire, fresco was the customary method of mural decoration'.⁵ In this context, the Roman city of Pompeii was indeed a city of frescoes. Inner and outer walls of buildings were covered with them. On 24 August 79 A.D., nearby Mount

Pharaoh and his dynastic succession. It is important for the use of fresco to express political issues.

³ H.W. Janson, *History of Art*, Abrams, New York, 1977, p.23.

⁴ Andrew Ladis, *The Art of Renaissance Fresco Painting: The Brancacci Chapel*, Florence, George Braziller, New York, 1993, p.7.

⁵ Ralph Mayer, *The Artist's Handbook of Materials & Techniques*, Faber and Faber, 1991, pp.361-377

Vesuvius erupted, burying the city under a three-metre-high sea of volcanic debris. It was not until the eighteenth century that the remains of the city were uncovered and frescoes of such beauty were discovered that Pompeii immediately became a treasure. If this city, not even one of the thirty largest of the Roman Empire, contained so many frescoes, we are left to imagine the quantity and quality of lost fresco production elsewhere in the Roman Empire.⁶

The creators of the Pompeii frescoes used a similar technique to their late Minoan period and Greek antecedents. Like them, they were expert plasterers, using limestone, marble and stone powder, and sand in from one to three undercoats.⁷ Artists applied brightly coloured pigments to rectangular divisions of walls while the plaster was still damp. The resulting frescoes were stunningly luminous, a necessary attribute, for rooms in Pompeiiian households were windowless.⁸

II.4 Renaissance Fresco

Although its painting process and materials were essentially the ones inherited from Greece, Rome, and medieval Italy, Renaissance fresco's context and role became more specific, rich, and functional. Its large-scale religious projects were catalysed, beginning in the thirteenth century, by the growth of the

⁶ Maxwell Anderson, 'Pompeian Frescoes', *The Metropolitan Museum of Art Bulletin*, 1987/88, p.5.

⁷ Ralph Mayer, *The Artist's Handbook of Materials & Techniques*, Faber and Faber, 1991, pp.361-377

⁸ Michael D. Gunther, *Old Stones*, 'Roman Painting', <http://www.art-and-archaeology.com/roman/painting.html>

Dominican and Franciscan orders of the Catholic Church and Italian city-state.⁹

The flourishing of Renaissance fresco was also a function of the availability of money for important projects. Private money enticed fresco out of public places into private spaces; it stimulated artists and created projects. Why were fresco projects favoured above others such as architecture or the religious festivals that had been historically fuelled by the new wealth and power of the city-states? Why were they preferred to stained glass and mosaic, preventing them from having a similar renaissance?

The answer may be threefold. Firstly, people may have believed that fresco was aesthetically superior to stained glass and mosaic.¹⁰ Secondly, fresco may have cost less to create and been easier to preserve than any other media, which may explain why there were numerous projects that involved replacing mosaics or stained glass with fresco.¹¹ Thirdly, after the recent cleaning and restoration of the chemical and temporal damage to treasures in the Sistine Chapel, frescoes reveal a stunning luminosity and colour that demonstrate a durability surpassing that of many other media. Fresco's permanence and techniques will be detailed in the next subtopic, but, as Giorgio Vasari marvelled in *The Lives of the Artists*, the luminosity and colour saturation of frescoes were characteristics that he called 'virtues'.¹²

⁹ Andrew Ladis, *The Art of Renaissance Fresco Painting: The Brancacci Chapel*, Florence, George Braziller, New York, 1993, p.7.

¹⁰ Ibid.

¹¹ Giorgio Vasari, *The Lives of the Artists*, Oxford University Press, New York & Oxford, 1991, Preface

¹² Ibid, p. 277.

II.5 The Historical Decline of Wall Fresco, the Endurance of the Fresco Technique

Fresco went into a steep decline in the centuries following its culmination during the Renaissance and through the onset of modern industrial society. Mortal insults to it were the small walls of new buildings and the inhospitable humidity of a northern hemisphere that was the new political, economic, and cultural leader of the world.¹³ Its coup de grâce, however, was the invention of oil painting. Oil painting, a surer and easier medium than fresco, shattered the belief that painting needed special techniques and materials. Oil paintings were easily transportable and believed to be as durable. Fresco did not, of course, disappear entirely. It continued to be included in major projects such as the building of cathedrals, though Renaissance-scale religious projects were noticeably fewer. Social change and the invention of new materials had transformed the art scene, turning the practice of fresco into a refuge for dedicated small groups.

The revival of fresco in Mexico, in the nineteen-twenties, was distinctive for a number of reasons. Its expression, born of the Mexican political situation, was perfect for traditional public frescoes. Like its counterparts in Greece and Italy, fresco flourished in Mexico's dry and sunny climate. Yet this renewal of fresco remained a largely Mexican art movement because Mexico's singular social and cultural events failed to catalyse events elsewhere. One exception, however, was how the Mexican mural movement had a significant impact on the

¹³ YoungSun Jin, 'Content and Techniques of Fresco Painting', *Johyung Nonchong* (Visual Arts Review no.5), 1985, p.213.

New Deal programmes introduced to alleviate the Great Depression, in the USA.

Artists in the twentieth century, particularly in the nineteen-seventies, challenged traditional perceptions of fresco murals by experimenting with modern forms. Fresco was still tied to large public projects, but now, for the first time since Ancient Rome, there were moveable frescoes. Moreover, artists have been experimenting with fresco sculptures and installations, and, today, fresco is being combined with recent art genres such as new media. Instead of explaining these experiments as another (temporary) revival of fresco, a better explanation would be that, thanks to its enduring beauty and value, it is now finding a place in contemporary art.

The mural movement of the twentieth century originated in Mexico and succeeded in expressing the political nature of fresco by focusing on ideologies and propaganda, thus fulfilling the time-honoured function of a fresco that communicated public information and provided a foundation for public awareness. Here, fresco was both public and private - a wall that in its expressivity relayed information for the common good, that encouraged public participation, and was a private channel for an appreciation founded upon aesthetic sentimentality and acceptance giving rise to the sublime.

II.6 Medium and Technique

Al fresco eine Malerei für Männer, die Ölmalerei eine Malerei für Weiber nannte. (Called al fresco, it is an art for men, whereas oil painting is an art for women.) --Michelangelo¹⁴

¹⁴ George Mucho, *Buon Fresco*, Briefe aus Italien über Handwerk und Stil der echten Freskomalerei, Tübingen, 1950, p.10.

Das Fresko wurde von den größten Meistern immer zärtlich geliebt und als dasjenige malerische Verfahren angewant das am stärksten inspiriert.
(Fresco has always been the beloved of the great masters and the most inspiring painting method.) – from the diary of Ingres¹⁵

Fresco was no longer widely practised and it therefore required defence and
championship. It is the most beautiful of all pictorial techniques, and also the most difficult. – Vasari¹⁶

Fresco has traditionally been painted on walls. This is why most people think that murals and frescoes are the same. They imagine frescoes as tomb paintings or scenes painted on walls and ceilings of churches and monasteries. True to Canaday's and Vasari's words, fresco is indeed the most suitable medium for creating murals.¹⁷ The materials and techniques of today's fresco have changed little since the first examples of it were discovered in prehistoric cave paintings. In what follows, however, based on what is familiar already, I will present, analyse, and compare the contemporary applications of fresco that have been the subject of my work for the last twenty years. I will also present empirical statistics and a list of a broadened range of fresco materials.

To understand the importance of fresco, one must know the medium and the technique. It is often said that fresco is the noblest yet most difficult art.¹⁸

¹⁵ Ibid. p.10.

¹⁶ Millard Meiss, *The Great Age of Fresco*, George Braziller, Inc. New York, 1970, p.16.

¹⁷ John Canaday, *Fresco, Metropolitan Seminars in Art*, Portfolio 8, 1958, p.7

¹⁸ Ibid. Canaday. The author emphasises that every technique has its own qualities, limitations, and flexibility. Oil is the most versatile paint. Tempera is the most precise

The word *fresco* describes a specific technique, the freshly applied, still wet plaster containing pigments ground only in water. The Italians say *dipingere a fresco*, to paint on the 'fresh' (plaster). In Italian, *fresco* means fresh. Despite the mystery and trade secrets surrounding fresco techniques, one can create fresco with the right materials and methods followed by experimentation and research. That said, it requires substantial technical knowledge to control the dampness of the plaster and to use pigments properly.

In general, 'pigment' is simply colouring matter; a 'binder' is any substance that holds pigment together and makes paint out of it; a 'medium' is a modifying substance that the artist may mix with the paint to bring it to the proper working consistency for the purposes. Technically speaking, painting means fixing tiny pigment particles to one another and then to a support such as a canvas. In all painting systems, pigments are mixed with various binding media and applied to a ground. For example, pigment mixed with linseed oil becomes oil paint; mixed with glue it becomes watercolour; mixed with egg yolk it becomes tempera; and so on. An exception is the fresco technique, in which pigment is mixed only with water. It is the ground that, through the carbonation of the lime contained in it, binds the pigment particles. Microscopic examination of a fresco painting reveals penetration of the pigment into the interstices of the plaster surface, in contrast to the surface adhesion to support oil and tempera paints.¹⁹

True fresco (*buon fresco* or *fresco buono*) is based on the pigment-on-

and offers the greatest rewards to the pure craftsman. Watercolour is the most vivacious and sensitive. True fresco is the noblest and difficult to master.

¹⁹ YoungSun Jin, *Ibid*, p.202

wet-plaster technique; in *secco*, the surface of the plaster is allowed to dry. Pigments are mixed with a binder such as glue or egg yolk and then applied to the plaster after the chemical actions involved in drying are completed. Since *secco* does not penetrate, but is bound only to the surface of the plaster, it is more likely to chip, peel, or powder off, and is more vulnerable to scratching and rubbing. Michelangelo used *buon fresco* in the Sistine Chapel, while Leonardo da Vinci partially used *secco* in painting *The Last Supper*, in the Covent of Santa Maria delle Gracie in Milan, and even experimented with oil. The comparative states of conservation of these two masterpieces are well known. Michelangelo's *buon fresco* technique has endured the test of time. Leonardo's *secco* has not fared as well.

Mural paintings found in Asia feature mixed techniques of *buon fresco* and (*fresco*) *secco*. Indian and Chinese Buddhist mural paintings are mostly painted using *secco*, and tomb paintings in Korea *true fresco*.²⁰ A majority of Chinese murals in caves located in western China depict the Buddhist theme of a peaceful passage into eternity. Questions abound on how the artists came to use both dry and wet processes to paint these murals and others elsewhere. The most compelling explanation is that the wet method was imported from Europe where it had been influenced methods used in Egypt. But, as for the dry method, because it existed before European artists used it, no compelling records reveal its origins. The spread of Buddhism in China was accompanied by a flowering of mural painting the best examples of which are on the ancient

²⁰ Jongsang Lee, 'Historical Observations on the Ancient Fresco Mural Paintings and Research on the Material and Technique'. *Hankook Minjok-munhwa Nonchong* (Korean Cultural Review, Seoul, 1973 and <http://www.Ilang.co.kr>).

temple walls in Shansi province. Chinese artists here and elsewhere completely covered not only the walls but also the ceilings of temples with paintings of religious subjects.

A good example of true fresco in Asia is found in the early fifth-century tomb paintings of the Koguryo Dynasty. The materials and technique used are identical to those of the Renaissance. Tomb paintings were executed in Koguryo between the fourth and the seventh century A.D. at the height of the power and territorial expansion of the Koguryo Kingdom.²¹ They are concentrated in the Ji'anxian of Jilinsheng and along the Yalu River, both now in China, and in Pyongyang, North Korea. Their subject matter is human figures and daily life, king's envoys, and decorative motifs. If European murals exude epic gravity, the Koguryo murals are detailed, down-to-earth scenes. Their human depictions tend to be flat and two-dimensional, without, of course, Western perspective. Most fresco murals were painted in the difficult accesses of royal tombs that were carefully designed to face either west or southwest.²² In 1996, I made a reproduction of Koguryo tomb paintings in the National Museum of Korea as part of a government project to give the Korean public a glimpse into this historically important legacy that, because of its location in North Korea or China, remains largely inaccessible.

Fresco techniques and medium are in fact not very difficult to learn

²¹ Huijoon Ahn, *The Transformation of Korean Painting: National Treasure*, Yekyung-sa, 1986, pp. 200-201.

See also Youngjoo Lim, *Korean Tomb Painting*, Mijinsa, 1983, p. 54, and Tai-ho Lee, 'Research on Ancient Landscape Painting', National Museum of Korea, *Misul-jaryo* 38 (Art Documents, National Museum of Korea) 1987, p.30.

²² Ki-woong Kim, 'Tomb Paintings of Koguryo Dynasty', *Space Magazine*, Seoul, September 1984, pp.38-39.

when one follows the instruction carefully. The difficulty in creating a fresco is in finding a site. To overcome this problem, contemporary fresco must develop autonomous styles that converge with modern art. Detailed suggestions are presented in the Innovations of Processes and Materials and Definition of Key Terms .

CHAPTER III

MODERN ART AND THE EXPANSION OF MEDIA

III.1 Introduction

The diversification of artistic media in the twentieth century was stimulated by the spread of the modernist belief that the 'idea' itself can be a 'form'; there was greater freedom, therefore, to select different materials to create a manifestation of it. Based on this thinking, artists also started to make more detailed and individual explorations of the uncertainties of illusion. Questions regarding the purpose of art no longer held significance; rather, a work of art was now perceived as a 'fine effect'²³ of the artist's freedom.

After this modernist doctrine, however, artistic tendencies shifted once again. The complex and pluralistic art that emerged after modernism – the era of the return of the image – offered alternatives to the revolution led by conceptual art, one example of which was the revival of narrative painting. These trends had actually been predicted by Roland Barthes in the early 1980s when he wrote: 'The subject reproduced by a photograph is, in reality, always there. Even if people cannot touch the reproduced scene, the painterly truth always remains in reality.'²⁴

In the 1990s, about a decade after Barthes, Hal Foster used the

²³ William Dunning, *Changing Images of Pictorial Space*, Syracuse University Press, New York, 1991, p. 210.

²⁴ Roland Barthes, *Camera Lucida*, Jonathan Cape, London, 1981, pp.76~87.

expression, 'The Return of the Real' to emphasise the representation of the pluralistic and the concrete following the decline of an aesthetics dominated by modernism.²⁵ These initiatives were formed on the basis of a re-evaluation of tradition, a larger variety of materials spawning the coinage of the expression multimedia, and a diversity of expressions in the upsurge of pluralistic aesthetics. In this context, it was only natural for fresco to be revived in the modern age. What was unexpected, and is being emphasised today, is the fact that a revitalized fresco has brought with it different and more expanded mediums of representation than before.

III.2 Painting and De-painting

The purpose of this section, 'Painting and De-painting', is to examine the differences in materials and contexts that exist between a traditional, painterly approach to modern fresco, and one which is more pluralistic and non-painterly. De-painting is described here as a frame of reference for questioning the nature and practice of painting. When elements of institutionalised definition are discounted, painting can be opened up to a challenging invasion of new ideas. De-painting suggests expanded ideas, a wide-ranging proposition of something beyond painted forms with which, it is implied, there would be an element of confrontation.

²⁵ Hal Foster, *The Return of the Real: The Avant-garde at the End of the Century*, The MIT Press, 1996, pp.127-165.

Fresco is the oldest form of painting remaining today, and has always existed as the main activity to pursue within the context of surface painting. Fresco pre-dates the advent of lettering, providing concrete proof that painting existed long before writing. Just as the expansion of media in modern art is replacing conventional beliefs of formalistic aesthetics, modern fresco is also bringing about numerous variations. In other words, it is now being executed outside the context of painting. It is constantly reinventing itself, in the process shattering the traditional definition of fresco as existing only on walls or ceilings.

The perception of fresco as bound by its space is based on the premise that it is painted on a wall or a ceiling. With the creation of moveable frescoes, however, such a premise no longer holds true. Now fresco can leap out of flat, two-dimensional media and be reborn into a three-dimensional space. In short, this de-painting is opening new possibilities for the expansion not only of the media but of the representation as well. Although the word *de-painting* is proposed mainly for critical effect, it does seem appropriate on a number of levels. It is more about ideas and about how we perceive, or might perceive, the work of fresco painting in different forms.

Modern fresco strives to become more than mere embellishment. It is shifting into the sphere of public space and information where it can communicate organically with the public. Such a transformation can be detected in the effort to break the conventional mould of obsession with the religious themes that provide little consideration for environmental harmony and accommodation to the viewing public.

III. 3 Expansion of Media

Fresco was previously perceived simply as a method of painting on walls and ceilings. Today, fresco is a more wide-open medium than in its traditional form. This is in line with the evolution of painting itself as it has adopted more varied methods than the mere meeting of brush with canvas.

To understand contemporary fresco, it is necessary to gain prior knowledge of the characteristics of its materials, the process of their modifications in the modern era, and the changes in the use of space. As stated in the previous chapter, the word *fresco* (meaning 'fresh' in Italian) derives from the fact that the painting was executed on a fresh, damp lime plaster in the case of *buon fresco* (or true fresco) or dry plaster in that of *fresco secco*. As the lime particles harden the paint pigments also become hardened as they seep into the plaster. Because of such a unique method of creation, fresco is often perceived as a 'painting of materials and techniques'. Because of their permanence – they would stay in place until their walls crumbled - frescoes were painted on catacomb and church walls and ceilings.

Due to these characteristics, education and perception about fresco painting have mostly focused on its techniques and materials. In the twentieth century, however, the mural movement, which started in Mexico in the 1930s, used the fresco technique to transcend the theme of religion, embrace a wider function than decoration, break free from the frame of building walls, and move beyond the perception of simply being material art. The mural movement's

frescoes painted on public buildings lived and breathed with the public by conveying ideological and social messages.

Since the 1970s, experiments with contemporary fresco have led to the development of moveable frescoes, and frescoes have been incorporated into sculptures, constructions, and even video art. In short, fresco has been transformed into a total art form. It is distinguished from easel painting not merely because the sizes of the surfaces or the methods employed are different. A mural has its own method which distinguishes it from a large oil painting hanging on a wall. Fresco murals require distinct composition, drawing, modelling, and special pigments, and only when these requirements are met can they be acknowledged as murals.

Marie-Claire Ropas-Wuilleumier, in her book *The Dissimulation of Painting Deconstruction and the Visual Arts*, asks how one can approach the truth of painting:

How does one speak of painting without referring to it by means of a discourse of truth that remains foreign to it because it remains exterior to the idiom of art? But how can one let it be thought that the truth of painting belongs only to painting, whereas it never ceases giving a voice to the opinions of those who think they possess the truth? Either discourse masks painting or else the silence becomes the voice-person of the subject.²⁶

Desmond Rochfort, a theorist and a fresco artist, defines the starting point of twentieth-century fresco as the inter-war years of the 1920s and 1930s. This, he says, was the period when fresco began to break away from its traditional

²⁶ Marie-Clair Ropas-Willeumier, *The Dissimulation of Painting, Deconstruction and the Visual Arts*, eds. Peter Brunette and David Wills, Cambridge University Press, 1994, p.65.

form, a movement led by Jose Clemente Orozco, Diego Rivera, David Alfaro Siqueiros in Mexico, and Jean Charlot in the USA.²⁷ The three Mexican artists (*Los Tres Grandes*) studied Maya and Aztec civilisations and created a distinct Mexican style reminiscent of the legacies of pre-Columbian art. Their renderings mostly depicted the revolutionary spirit of the people, a dramatic departure from the traditional religious or aristocratic themes, a new context of fresco which ultimately achieved its freedom from the confinement of edifice walls.

The significance of these changes was that they allowed fresco to become a channel of communication with the public and a conveyor of information. The artists deliberately selected streets or unidentified places to render their frescoes, and in doing so, shattered the conventional perception of fresco as existing only on the limited surface of a wall. They also overturned the traditional perception of the purpose of this form of art. It was no longer produced on flat surfaces for the mere self-satisfaction of artists or the nobility; instead, it was executed on other than flat media to embrace social issues, the public, and to disseminate information.

For these reasons, some critics who support Mexico's fresco murals identify the form as an alternative to the conventional style of Western modernism. It was a direct challenge to one of the most often quoted remarks in modernist theory, originally made by Clement Greenberg, which describes how the artist: 'Retiring from public altogether...sought to maintain the high level of his art by narrowing to the expression of an absolute in which all relatives and

²⁷ Desmond Rochfort, *Mexican Muralists*, Laurence King Publishing, London, 1993, pp.6-9.

contradictions would either be resolved or besides the point.'²⁸

Admittedly, the Mexican artists did not usher in a revolution or lead a 'stylistic evolution' as witnessed in modernist painting. What they did do was to employ their murals as the channel for visual dialogues with the public. This was in stark contrast to the European aesthetics of the 1920s and 1930s when artists were preoccupied with their own monologues and the creation of art for art's sake. They brought painting back to murals, and did it, not for the purpose of decoration, but for the purpose of speaking for and communicating with the public.

Therefore, pro-modernist criticisms that the contents of the painting were nothing new or of a low level hold little significance in the face of the artists' purposes and objectives. The support for Mexico's mural movement, expressed by the critics of late twentieth-century modernism, is an attempt to emphasise social consciousness in art and its need to communicate with the public. The Mexican muralists executed their work mostly on public edifices, and excluded any commercial dealings. In short, their work seemed to be rendered strictly with social objectives.

Caroline Cass, the author of an influential book on 20th century fresco, *Modern Murals*, calls modern fresco 'progressive murals'²⁹ to differentiate it from the frescoes of yore. By progressive murals, Cass refers on the one hand

²⁸ Clement Greenberg, *Art and Literature*, No.4: (Spring 1965), pp.193~201.

²⁹ Caroline Cass, *Modern Murals*, p.11. In this book, Cass examines David Novros, Cinalli, Wickham, and Chia as progressive muralists. She focuses on their progressive departure from the traditional painting method of fresco, in terms of scale and representation.

to the artists who participate in the process of reproduction of fresco and on the other to their progressive departure from the traditional painting method of fresco in terms of scale and representation.

This thesis will put emphasis on a discussion of the nature of fresco since the 1970s and try to offer a broad perspective on contemporary fresco, using this term to refer to works produced in that period. In particular, attempts will be made, through a comprehensive approach, to explain fresco's radical departure from the traditional painting method by reviewing some of the monumental works of this era. Otherwise, an explanation would simply not be convincing enough. Most of the works to which I will refer were commissioned with private or public funds, and they are too strongly coloured and too large to be installed in households.³⁰

The reason for fresco's dramatic break away from contextual painting and move to non-contextual painting and, thus, to a freer style of painting, will give an important clue to determining the status of contemporary fresco. Therefore, the examination and comparison of the works of the important artists who pioneered the changes in the style and concept of modern fresco, especially since the 1970s, will also reveal the distinction between the conventional and contemporary forms. Such a research method will at least transcend some of the constraints of the existing definitions of painting, which, according to Brandon Taylor, confine it to the narrow paradigm consisting of only the plenary and automatism. The method used in this study will adopt a broad

³⁰ Ibid, p.118

definition of painting that can also deal with some of the new issues in modern art.³¹

In his collection of essays, *The Truth in Painting*, Jacques Derrida points to the shift in the role of painting from that of conveying the artist's subjective truth to relaying objective information or communicating with the public - in other words, expressing deconstructive truth. Derrida does not take the post-impressionist artist Paul Cézanne's remark, 'I owe you the truth in painting,'³² as indicating the effort or morality required to retain the creator's emotive state in painting. Instead, he defines it as the rediscovery of truth.

Derrida divides truth into four categories: discarded truth, painted truth, moving truth, and visual truth. The philosopher asserts that painting feigns to imitate truth, and then raises the question of what is the essence of the image that truth conveys. This is why he interprets 'I owe you the truth in painting' as 'I owe you the truth about the truth.'³³ Such a redefinition is Derrida's aesthetic reinterpretation of Immanuel Kant's *Critique of Pure Reason*, and it is also closely associated with the attempt to remove some of the painterly elements

³¹ Brandon Taylor focuses on the context of post-modernism as resurrection of realism or de-high art or formalistic automatism. Brandon Taylor, *Modernism, Postmodernism, Realism*, Winchester School of Art Press, 1987, Winchester, pp.5-22.

³² Cézanne's never-ending humble and heroic search for truth is the moral condition of art and a primary source of its greatness. His truth is the truth of art in the keeping of the senses. In his faithfulness both to nature and to art, his synthesis of minute visual sensation with grandeur of formal construction, Cézanne stands alone. See Ellen Johnson's *Modern Art and Object*. Thames and Hudson, 1976, p.65.

³³ Marie-Clair Ropas-Wuilleumier, *The Dissimulation of Painting, Deconstruction and the Visual Arts*, eds. Peter Brunette and David Wills, Cambridge University Press, 1994, p.65.

from conventional, pure painting.

Studies of the painterly and the de-painterly have continued by a variety of methods throughout the twentieth century, even before the revival of fresco. In line with the return of the real, artists who opposed the prevalent definition of painting as existing only on a flat surface remained relentless in their effort to seek the truth. The styles and contents of true fresco adopted by artists in the late twentieth century differ considerably, making it difficult to organise them into categories. This thesis concentrates its view on the following artists: Sandro Chia and Koji Kinutani, who execute classical realistic work using frescoes; David Novros, who continues to produce renderings of abstractions in vivid colours on murals, and on Pericoli with his big wall figures; Enzo Cucchi, who, with the architect, Mario Botta, adorned a modern chapel in the Alps; and Francesco Clemente, who works in fresco on a series of panels in his distinctive style.

Contemporary fresco artists, as in the past, are commissioned with both private and public funds. But because they are rarely found in private households, being an integral part of a wall, large and very durable, there is a widely held belief that frescoes are works that are predominantly public in nature.³⁵ Most works continue to be executed on flat surfaces that emphasise the painterly nature of fresco, but their themes have become more varied. They now range from everyday life to the public, an individual's life, and figures. There will be a detailed examination of the characteristics of these works in Chapter IV with this chapter dealing exclusively with a discourse on the

³⁵ Cass, *Modern Murals*, p.118

changing characteristics of fresco since the expansion of its mediums.

Modern fresco has taken an independent path throughout this process of modification in modern art. Admittedly, there are no new inventions yet. However, as this independent path seems to be the central thesis in the return of fresco, more active models are expected to develop. In particular, the wide-ranging variations witnessed in the de-painterly field appear likely to become the centre as well as on the periphery of fresco; this will enrich the art form even though they will not bring about immediate aesthetic results.

According to Ernst Gombrich, frescoes were traditionally produced at the special behest of sponsors, both public and private, who more often than not sought religious, mythical, epic, and narrative contents and styles.³⁶ As a result, they were often didactic in their messages and were close to objective art in nature. They were physically and psychologically separated from the public and its sentiments, being firmly insulated from social issues and concerns.

The development of portable frescoes and fresco sculptures were just two of the changes that allowed fresco to approach the public on an equal footing with other contemporary forms of art. The old perceptions and patterns of fresco, which were confined by special purposes and imperatives, were eliminated, and led, for example, to the emergence of the Mexican mural movement. This gave universality to fresco – from its creation to its display, and in its approach to the viewer, fresco now began to be regarded as a

³⁶ Gombrich points out in his book *Means and Ends, Reflection on the History of Fresco Painting* that Leonardo is scathing about his colleagues who violate his unities, saying in another note that a painting with various horizons looks like a shop with merchandise displayed in various rectangular pigeonholes. Thames and Hudson, London, 1976. p.11.

contemporary art genre.

Fresco's shift toward easier access to and familiarity with the masses became all the more noticeable with the emergence of pluralistic aesthetics. This branch of aesthetics was a study that sought interconnection with the public, being one of the main issues of cultural research in the twentieth century. These cultural changes freed art from sacrosanct icons and brought it closer to the public. The artwork itself was no longer credited with undue significance, and visual art was placed more comfortably in harmony with walls and other media. Howard Caygill, who explained art's break away from traditional imperatives, asked the following question:

How to think of art without aesthetic, while recognising that we cannot avoid thinking aesthetically? How to think what might be 'without' or 'beyond' aesthetic, since aesthetic already include its other, which is calls 'sublime'? And finally, how to meet the obligation of art without aesthetic?³⁷

In particular, in today's art scene, where inter-contextual and multi-dimensional crossovers between works are frequently observed, static art, fixed to a large wall like a drawing on a blackboard, can play only a limited role.

³⁷ Howard Caygill, *Aesthetics and the Obligation of Art, Thinking Art: Beyond Traditional Aesthetics*, eds. Andrew Benjamin and Peter Osborne, Institute of Contemporary Art, London, 1991, p.17.

CHAPTER IV

EXTENDING THE BOUNDARIES OF FRESCO

IV.1. The Revival of Fresco Murals in the Twentieth Century.

This chapter looks at the art of fresco in the context of modern and contemporary artists' creative activities. In the development of twentieth-century fresco mural, the Triennale di Milano was an important event.³⁸ Yet, despite its historical importance, its fresco projects have not received much attention. Nor, for that matter, have the techniques, thinking, and atmosphere of the period, not to mention the ongoing interest in fresco at the beginning of the twentieth century in Italy.

From 1933 to 1940, the fifth, sixth, and seventh Triennale³⁹ highlighted fresco – the fifth, in fact, was conceived around a special mural project by De

³⁸ The Triennale di Milano was inaugurated in 1923 as the International Exhibition of Decorative Arts, a biennial that brought together decorative arts, industrial arts, and architecture. Beginning in 1929, however, it switched to a triennial calendar and a policy of showing fine art from across Europe. This switch, from design to fine art, became immediately evident in 1936, when it awarded its grand prize to the Swiss designer and sculptor Max Bill.

See Richard Hollis, *A Monumental Talent*, The Guardian Features, 1994, p.31.

See also Bjorn Stuben, *Muri ai Pittori*, VDG, Weimar, 2000, p.77

³⁹ From the beginning to the middle of the twentieth century, the Triennale di Milano presented to the public many fresco artists – most notably Giorgio De Chirico, Mario Sironi, Campigli, and Carrand – and their masterpieces. True, these works seemed to recreate and remind the public of the monumental context of the past; yet, in their diversity, they functioned as witnesses to the new century, a figuratively painted scene and text that touched society with its immediacy. A culminating moment for fresco occurred in 1933, when, for the fifth Triennale, De Chirico created on a wall of the Pallazzo Dell Arte a monumental ten-metre-long mural filled with the metaphors and surrealist themes for which he became famous. The same holds true for the fresco of Sironi, who participated in the same Triennale.

Chirico, Sironi, Campigli and Archille Funi (Fig 1V-2) – and especially how its relations with the industrial and decorative arts and architecture had turned this classical medium into a contemporary project.⁴⁰ Another principle of the Triennale di Milano was that there should be a meaningful meeting and dialogue between art and society. The Triennale sought to create a culture of discussion around the question of immediate and ongoing communication between realist and figurative art and the spectator. Everyone more or less agreed that the one art genre that could foster this discourse was fresco.⁴¹



Fig. IV-1 Brochure for <Triennale di Milano>, 1933, front and back cover

⁴⁰ Dario Marchesoni, 'The Palazzo dell'Arte and the transformation of the function areas', *La Triennale di Milano*, Electa, p.10.

⁴¹ Vittorio Fagone, *Muri ai pittori*, Mazzota, 1998, pp.13-56

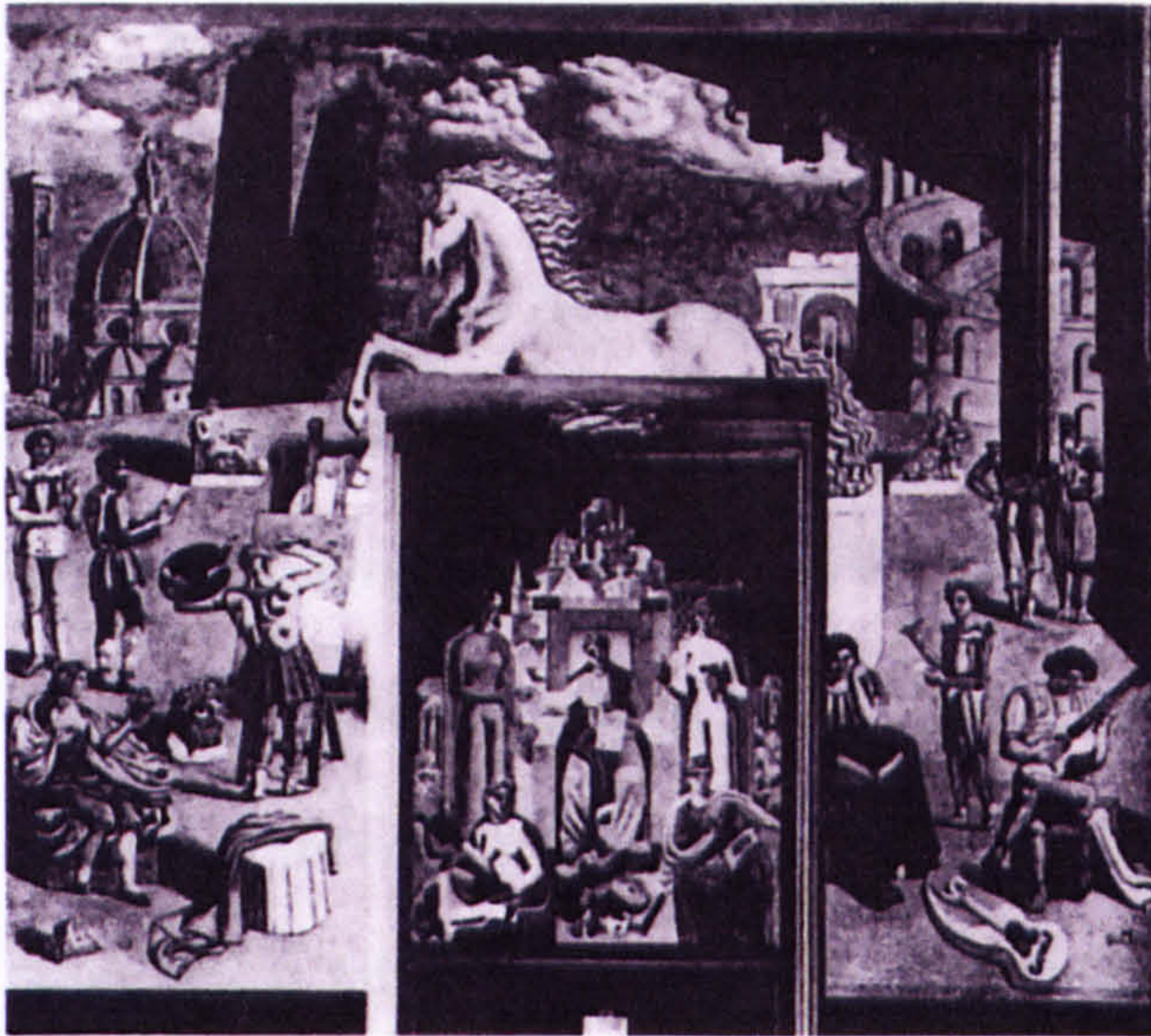


Fig. IV-2 Giorgio de Chirico, <Cultura Italiana> in the Salone d'Onore, 1933



Fig. IV-3 Gianfilippo Usellini, <Le Quattro era> 1933



Fig. IV-4 Alberto Ziveri, <Casa di campagna per un'uomo di studio>, 1933

In the USA, fresco first began to show signs of rebirth with the immigration of Mexican muralists in the 1930s. But it was the establishment of the Works Progress Administration (WPA) as one of the New Deal projects that precipitated the revival. Among the fresco artists who moved from Mexico around this time were Diego Rivera, José Clemente Orozco, and David Alfaro Siqueiros. The Paris-born artist, Jean Charlot, also played an important role. Despite demonstrating representation techniques and themes different from one other, these artists showed one characteristic in common: they valued fresco as an important medium and language for a public art.

Frescoes created by Rivera and Orozco are representations of reality based on realism; as such, they are set apart from the traditional frescoes that expressed illusions, myths, religious themes, or, in the twentieth century, socialist realism. These frescoes are specific, as if expressing reality through texts.⁴² This thesis does not intend to discuss Mexican muralists and New Deal murals in depth, concentrating more on contemporary fresco development since the 1970s. .

IV.2. The Development of Fresco Since the Nineteen-Seventies

Fresco began to gain recognition in the late twentieth century as a possible new medium for contemporary art when artists became interested in its techniques. This interest played an important role in reviving fresco in Europe and American.

⁴² Peter Buerger, 'Aporias of Modern Aesthetics', *Thinking Art: Beyond Traditional Aesthetics*, Institute of Contemporary Art, London, 1991, p.12.

In 1968, an exhibition organised at the Metropolitan Museum of Art in New York, 'The Great Age of Fresco', provoked an initial public awareness. This was followed by a second, postmodern awakening in 1994. 'Fresco: A Contemporary Perspective', was an exhibition noteworthy for its presentation of fresco at the end of the twentieth century.⁴³ It was co-curated by the American fresco artist, Robert Bunkin and his fellow fresco artists Lesley Anne Doyle and Sheilah Rechtschaffer. Although the exhibition was limited to fresco, it took a profound look at many developments in contemporary art.

'Fresco: A Contemporary Perspective' was remarkable for being a *fin-de-siècle* exhibition about fresco, whether easel painting or the imposing postwar American abstract expressionist painting using the traditional methods of fresco.⁴⁴ Bunkin describes the purpose of the exhibition in the catalogue: 'Rather than a progressive or evolutionary transition from the historical to

⁴⁴ The exhibition was at the Parsons School of Design, in Manhattan, and the Newhouse Center for Contemporary Art, on Staten Island, New York, from October, 1993 to January, 1994.

This travelling exhibition (after New York it moved on to Boston College) was noteworthy for showing several aspects of contemporary fresco in a single space. The National Endowment for the Arts' sponsorship of the exhibition symbolised that a major public institution believed in the future of contemporary fresco.

Among the artists in 'Fresco: a Contemporary Perspective,' Diego Rivera stood out at the beginning of the twentieth century for his great contribution to an American fresco movement and his leadership in Mexican mural painting. So did Jean Charlot (1898-1979), who holds a unique position in American fresco, and Ben Shahn (1899-1969), (Henry Varnum Poor who played a key role in the New Deal frescoes. Also important were William King, Al Blaustein, John Wallace, Sydney Simon, Anne Poor, and Jose Guerrero, who left their mark on American fresco in the nineteen fifties. As for contemporary artists in the show, there were 41 artists including Yoda Yohai Andors, Lucienne Bloch, and Robert Bunkin. And, in the exhibition catalogue, there was a letter sent by President Roosevelt to his friend and former Harvard classmate George Biddle (1885-1973), who painted the famous murals for the Department of Justice Building in Washington, D.C., and worked closely with the president to institute the Federal Arts Project which aided American artists during the Depression.

current practices, we are presented with the fragmentation of traditional elements, invigorated by the present. The exhibition has been designed to draw attention once again to fresco, a medium which has proven adaptable to contemporary expression.'

Despite these developments, works of fresco artists had been viewed only from the perspective of the revival of painting in the 1970s and '80s, and traditional materials, intentionally employed, had received little attention. I would argue that the evaluation of these works lacks consideration of what is the most important process and motivation for artists in setting their aesthetic goals and producing art works. My research suggests that so-called post-modernists' tradition-oriented thinking has been much influenced by its association with fresco art.

It is not widely known that David Novros, Enzo Cucchi, and Francesco Clemente have created extensive bodies of frescoes. In this chapter, works of major fresco artists are divided into three categories:

- 1) *Site-Specific Projects* – David Novros, Enzo Cucchi, Mark Balma, Tullio Pericoli;
- 2) *Portable Frescoes and Fresco Installations* – Francesco Clemente, Koji Kinutani, and Joyce Kozloff;
- 3) *Fresco Sculptures and Frescoes in Mixed Media* – Francesco Clemente and YoungSun Jin.

IV.2.1. Site-Specific Projects

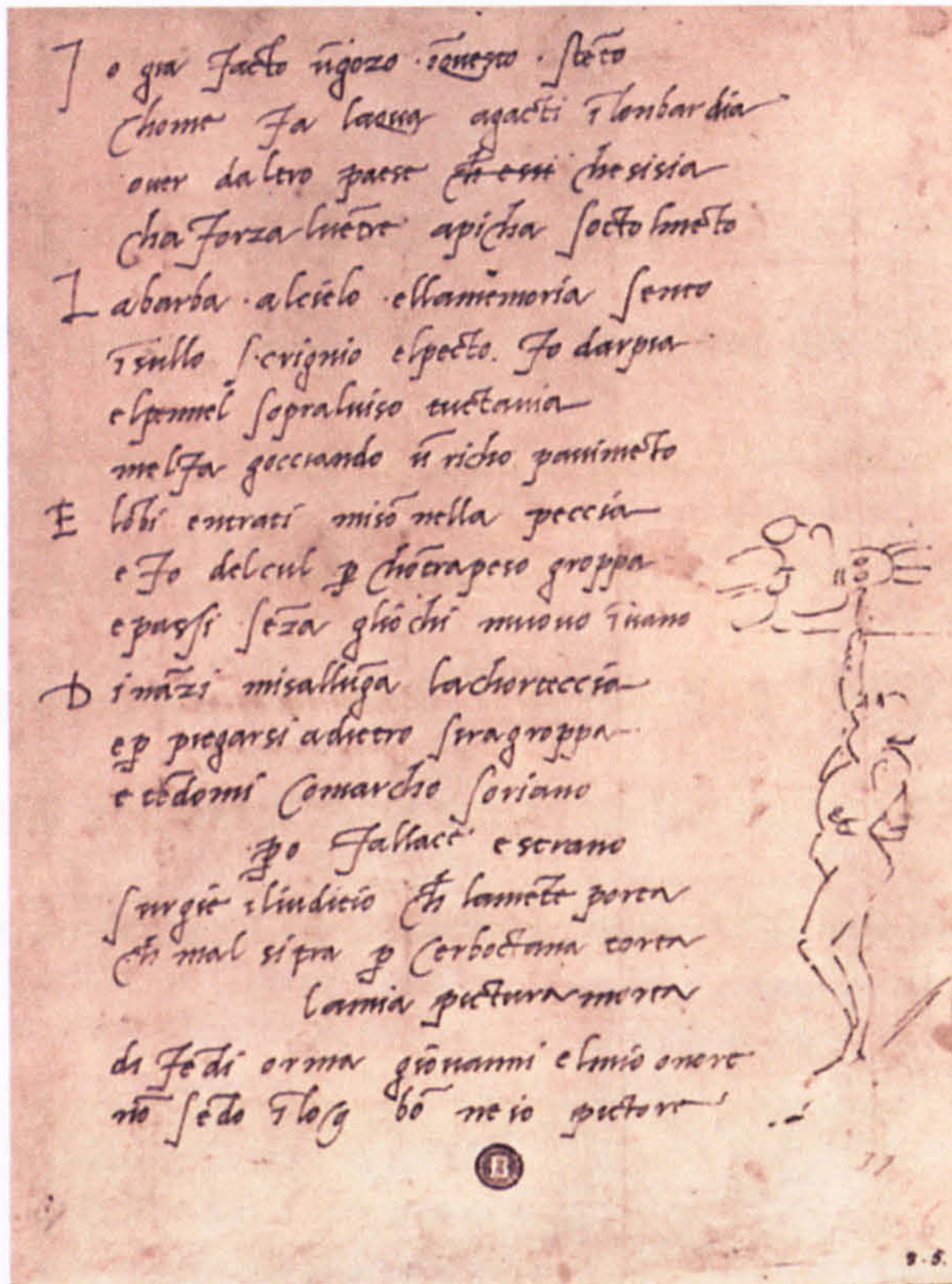


Fig. IV-5 Michelangelo, poetry and drawing

I've got myself a goitre
from this strain . . .

My beard towards heaven, I
feel the back of my brain

Upon my neck, I grow the
breast of a harpy;

My brush, above my face
continually,

Makes it a splendid floor by
dripping down. . .

Pointless the unseeing steps
I go.

In front of me, my skin is
being stretched

While it folds up behind and
forms a knot.

And I am bending like a
Syrian bow.

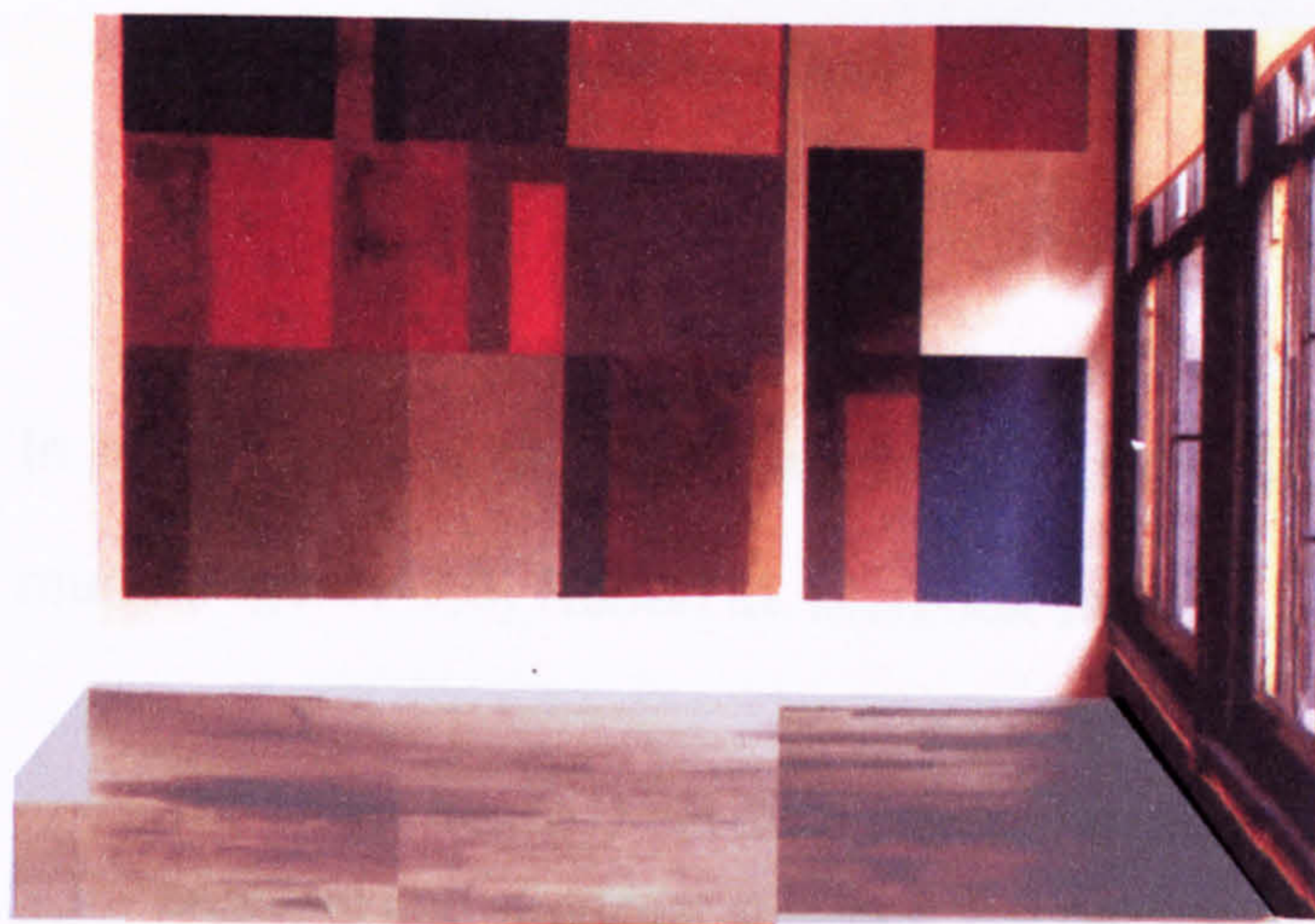
Michelangelo Buonarroti, working on the scene of the *Creation* in the Sistine Chapel, lamented on the difficulty of fresco painting.⁴⁵ He maintained that the difficulty of fresco technique, and especially working on ladders and scaffoldings (he spent four years in the Sistine Chapel) to execute the murals, was incomparable with any other painting process.

⁴⁵.David Wilkins, *Art Past Art Present*, Harry N. Abrams, Inc., New York, 1997, p.316. See also John Frederick Nims (trans) *The Complete Poems of Michelangelo*, The University of Chicago Press, Chicago and London, 1998 p.10.

VI.2.1.1 David Novros:

<Gooch Auditorium>, University of Texas
<Old Federal Courthouse>, Miami

David Novros' first site-specific fresco was at Donald Judd's studio (Fig IV-6).⁴⁶ Having asked for and received permission from Judd for a wall to paint on, Novros set out to paint a fresco by following the recipes of the old masters he admired – Massaccio, Giotto, and Fra Angelico – as well as early Romanesque painters. The resulting fresco is a blocky patchwork of warm, earthy colours that absorb the harshness of direct sunlight and reinforce the permanence of its presence by looking like something more particular to Padua



than New York City. The whole idea of *fresco buono* obsessed Novros and the results, for him, seemed magical. He studied its technique, its durability, its plastering, and especially its pigment colours.

Fig. IV-6 David Novros <Judd's Studio>1976

⁴⁶ The painting is presented in 'Donald Judd – Pioneer of Loft Living': *The World of Interiors*, February, 2004, p.78.



Fig IV-7 David Novros, <Old Federal Courthouse>, Miami, 1984

In his discussion on Novros's sense of colour in the Miami Courthouse fresco mural (Figs. IV-7,8) Robert M. Murdock says:

The Miami fresco is the most painterly Novros has done; it is also the brightest and strongest in colour. The painting suggests a passage from dark to light – from bituminous, umber areas through deep Pompeiian red sections to bright reds, oranges and blues. This colour sequence, repeated in the balcony, relates both to our physical passage through the architecture and to the changing sunlight flooding the open courtyard.⁴⁷

⁴⁷ Robert M. Murdock, 'Public Passages: David Novros' *Art in America*: January 1985, p. 109



Fig IV-8 David Novros, <Old Federal Court House>, Miami, 1984

About the same work, Lynn Nesmith writes:

By completing the project, which involved painting covering more than 6,300 square feet (567 square metres) of walls, archways, and ceilings of the spaces encircling the interior courtyard, the artist revived the technique of *fresco buono* by drawing from a traditional palette of colours.⁴⁸

Another of the artist's on-site fresco paintings is in the lobby of Gooch Auditorium, on the University of Texas campus (Fig. IV-9). Executed in 1977,

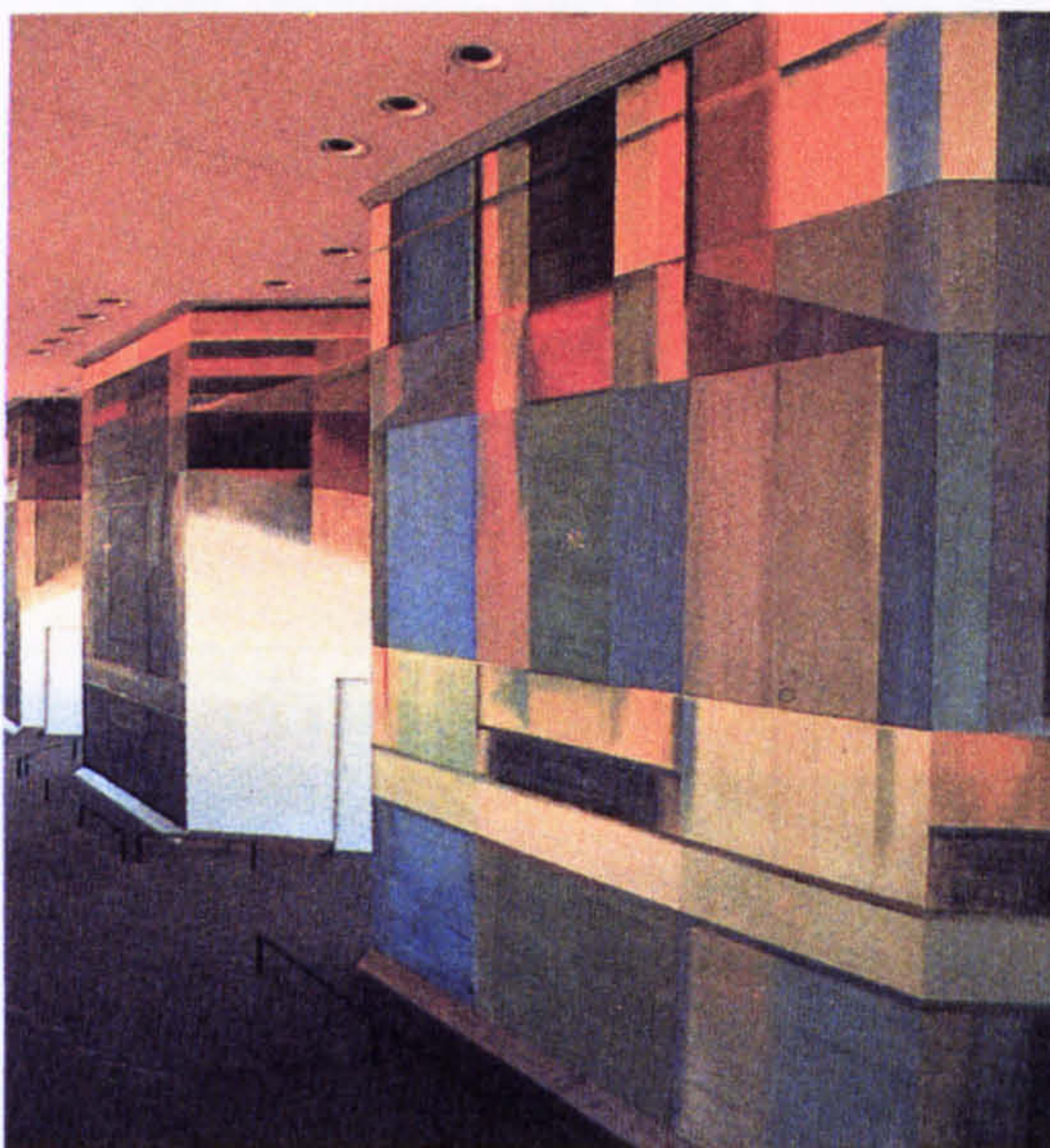
⁴⁸ Lynn Nesmith, "Courthouse Walls Become a Canvas" *Architecture*: June 1986, pp.20-21.

the 100-foot long, 22-foot high (30.5 x 6.7 metres) fresco achieves its unity from its horizontal lines crossing the entire length. . Working with the abnormal surface composition of the walls, the artist, instead of representing figures or shapes, chose to create a work of geometric abstraction. (Fig. IV-10)



Fig. IV-9 David Novros, Drawing for Gooch Auditorium, University of Texas

Since the auditorium lobby channels a continuous traffic of students and professors, the artist decided to treat the space and the painting as one object.



Not surprisingly, the fresco can be considered only in the context of the space.⁴⁹ The style of the work also takes into account the nature of the auditorium as a forum for information and knowledge. The work's geometric abstraction, reflecting strict discipline, seems more appropriate to the artist than a poetic abstraction or an

Fig. IV-10 David Novros, Gooch Auditorium, Fresco, 1997

⁴⁹ Murdock, p.107.

abstract expression.

I conducted three interviews with Novros during which he explained some key elements of his work.⁵⁰ Since 1970, fresco has been the constant, all-consuming genre with which he has worked. He has found in it a confluence of elements central to his concern with architecture and site specificity. Fresco has influenced his work elsewhere; reciprocally, his mastery of fresco has allowed him to adapt it to the more painterly and gestural approach of his recent work in other media.⁵¹ He has drawn most heavily on the surface divisions and sequential aspects of early fresco cycles. In describing this influence, he regrets that other contemporary painters have not had the chance to explore the medium:

I am particularly interested in the dialogue between fresco's narrative and formal elements. I followed Rothko's definition of the mural. Mondrian designed murals, and Newman, Still, and Pollock are really muralists. I am positive that if they had known the fresco technique they would have made fresco paintings.

⁵⁰ Author's interview with David Novros, in his Broom Street studio, New York City, Jan. 11, 2000. I interviewed him on two previous occasions, in 1987 and 1999.

⁵¹ In the same interview, Novros talked about fresco, from cave painting to *buon fresco*: 'People think that Lascaux paintings are fresco. They are not. What happened was that the cave painters just locked pigment into the rock without any binding medium. Then, in the course of centuries, water dripped down the walls and covered the paintings with pure lime wash. They became frescoes by accident. Egyptians created bas-reliefs, because limestone is very soft and easy to carve. They liked to carve hard edges and then paint precise painting using pigment that dried quickly. Then there are the Greeks. Their frescoes have almost all disappeared. The only examples you find today are in ruins of Greek buildings. They are very skilfully done and highly polished, adding a touch of civilisation. The whole idea of *buon fresco* is magical.' Author's interview with David Novros, New York City, Jan. 11, 2000.

IV.2.1.2 Enzo Cucchi: The Frescoes in <La Cappella del Monte Tamaro> (The Chapel of Monte Tamaro)

There are as many modern as traditional examples of the direct relationship between fresco and architectural space. La Cappella del Monte Tamaro, built on the rocky flanks of the Alps, is an impressive example. The chapel, designed by Mario Botta and decorated on the inside with frescoes by Enzo Cucchi, exemplifies the beautiful harmony of contemporary architecture and fresco painting. In its artistic process, the Alpine chapel is a contemporary reference to cathedral projects of centuries past.

Fig IV-11 Enzo Cucchi <The Hand of God> Chapel of St. Mary of Angels at Mount Tamaro, Switzerland, 1993-4.

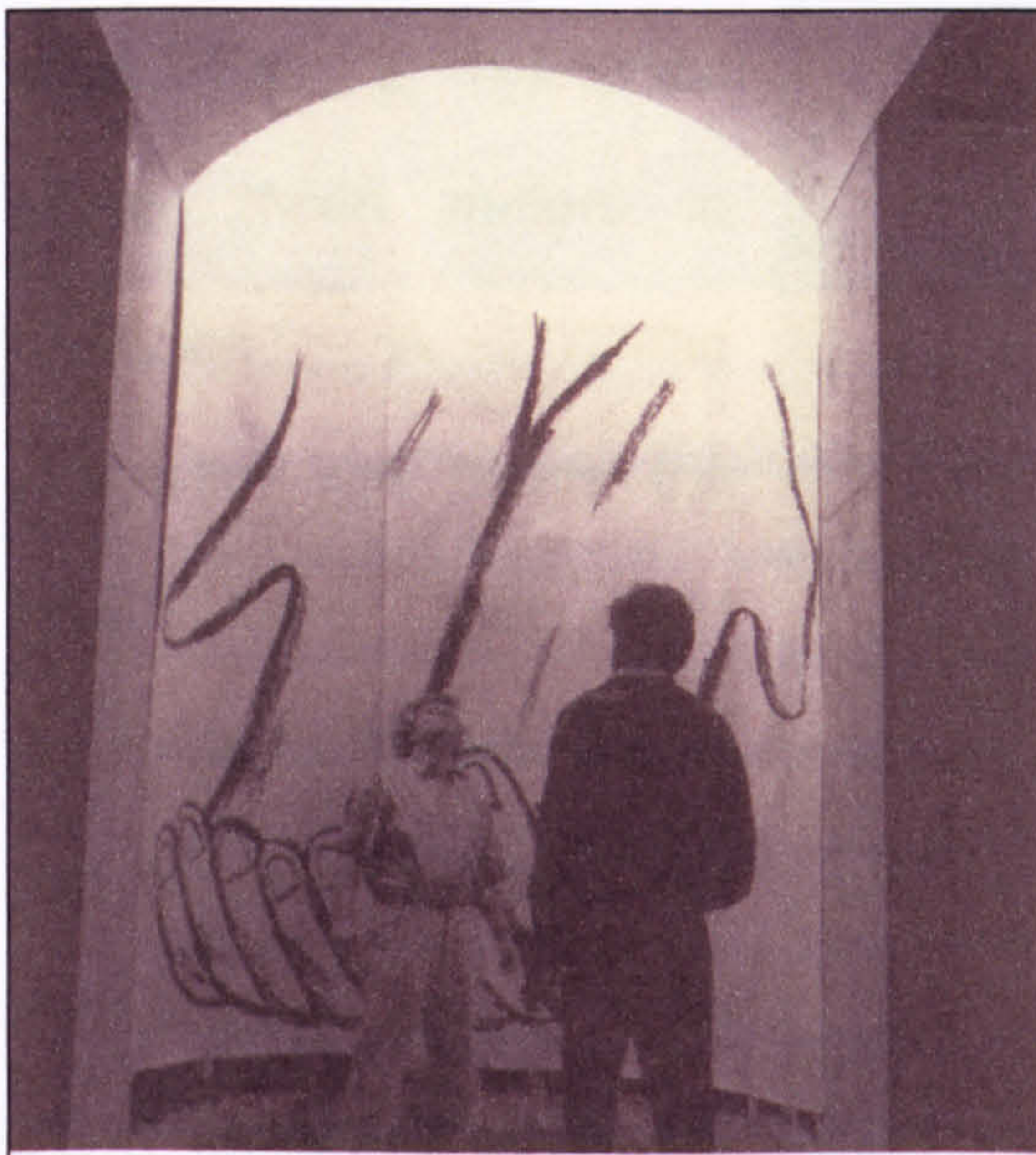


Fig IV-12 Enzo Cucchi with architect Mario Botta



Fig IV-13, Enzo Cucchi, detail

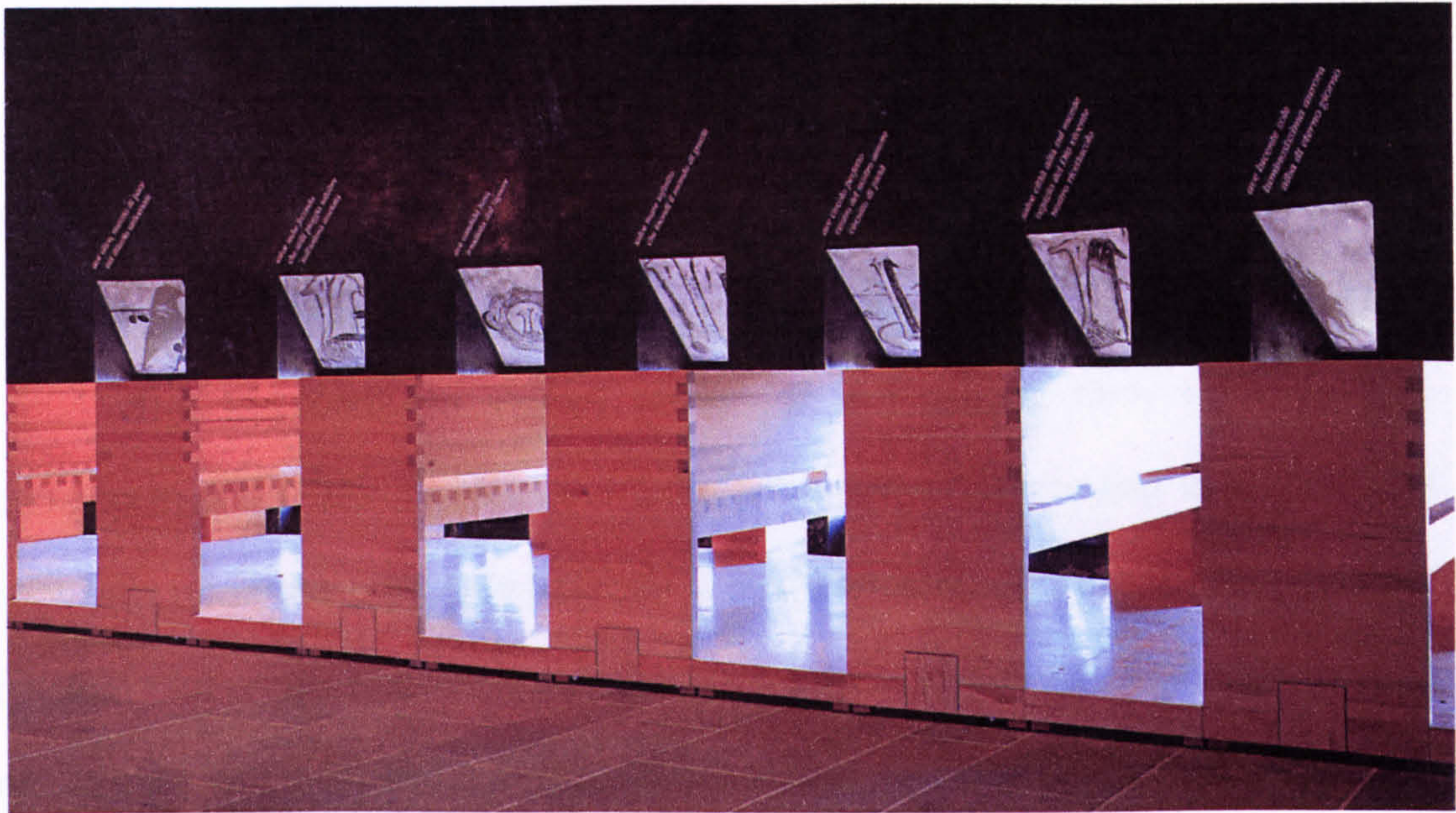


Fig IV-13, 14 Enzo Cucchi <The Chapel of St. Mary of Angels at Mount Tamaro> Switzerland, 1993-4.

The chapel, situated at 1567 metres above sea level, has a cylindrical shape fifteen meters in diameter. A strong overhead light floods the small apse that hold paintings by Cucchi and a pair of praying hands set into a blue ground. *The Hand of God* (Fig. IV-11) emerges from the clouds, symbolising His presence



and power in a past era when it was forbidden to create His image. Along the base of the circular walls, two series of eleven windows rise up, offering views of the valley below. Above the windows, twenty-two fresco panels are set into the walls (Fig. IV-13).

The frescoes are indeed made for the chapel. Only here do they develop their full significance and expressive power. According to Cucchi: 'As light falls upon the pigmented plaster it illuminates a semi-transparent glaze of calcium carbonate crystals. The reflected light creates a soft, luminous glowing effect from within.'⁵² In La Cappella del Monte Tamaro, Mario Botta and Enzo Cucchi express a kindred spirit (Fig. IV-12): 'We collaborate so closely because we have the same objectives.' and 'We don't do much talking -- we simply understand each other right away.'⁵³

IV.2.1.3.1 Tullio Pericoli: <A Labyrinth of Words>

Another example of site-specific fresco is Tullio Pericoli's 'A Labyrinth of Words' (*Il Labirinto Della Scrittura*, Fig. IV-6) executed on the walls of the Garzanti Publishing House, in Milan, Italy. Completed in 1988, the mural is integrated into a Gio Ponti modernist building designed immediately after World War II. Within its walls, the fresco exists as a psychological symbol of language and space for people going into and out of the building.

⁵² A conversation between the author and Enzo Cucchi, in Rome, June 16, 2003.

⁵³ Mario Botta, Enzo Cucchi, *La Cappella del Monte Tamaro*, Umberto Allemandi & C, 1994, p.10.

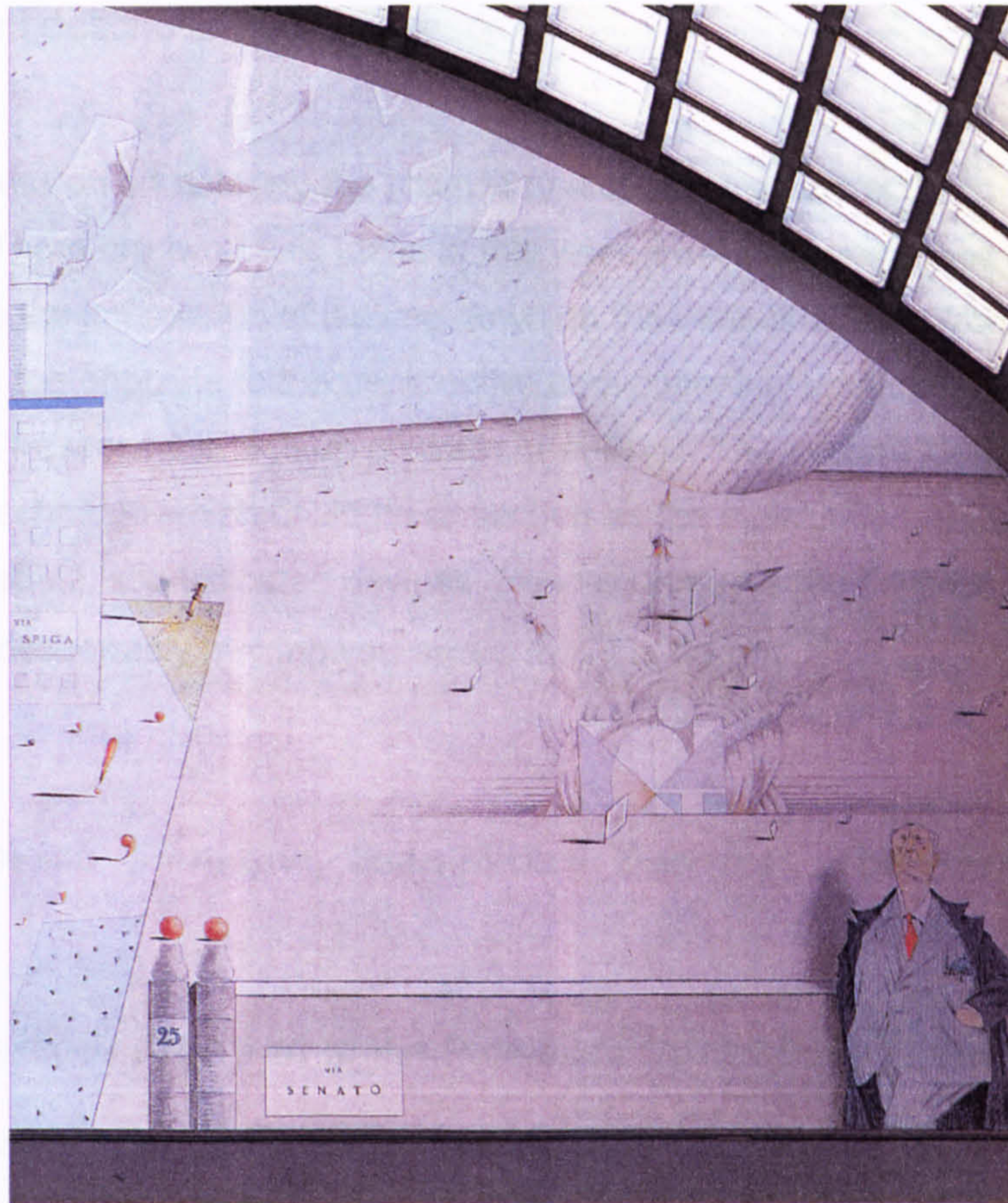
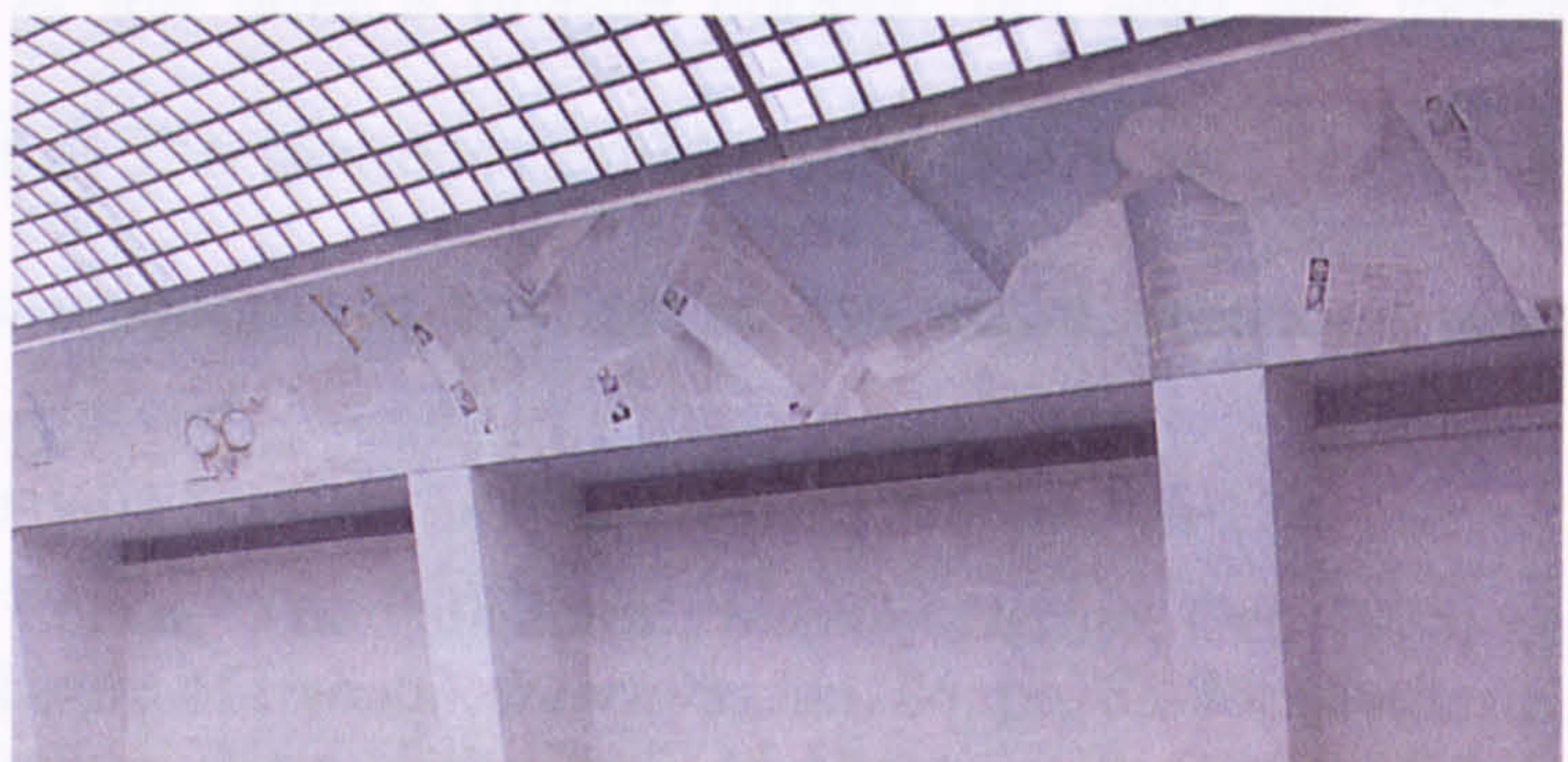
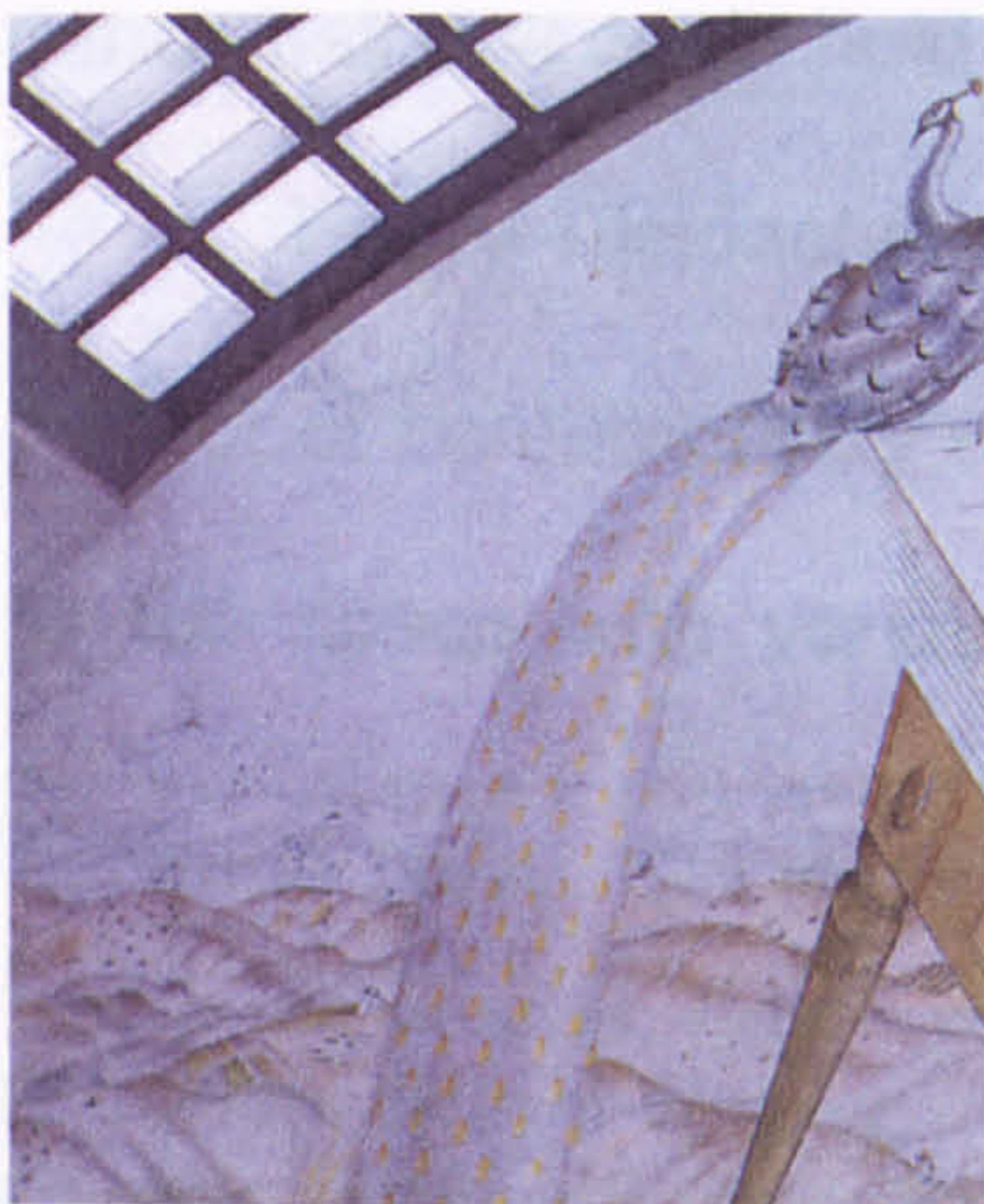


Fig IV-15 Tullio Pericoli, <Il Labirinto della Scrittura>, fresco, Garzanti Publishing House, Milan

The artist depicts only one full-length figure, the Milanese writer Carlo Emilio Gadda standing in the lower right corner of the work.



Figs. IV-16,17 Tullio Pericoli, <Il Labirinto della Scrittura>, fresco, Garzanti Publishing House, detail

Emilio Tadini describes Pericoli's work:

The first impression on entering the room is one of airy, transparent lightness. . . There are two basic ideas in this work. First the perspective, which creates the impression of looking down on the various scenes from above – quite the opposite to the perspective conventionally employed for paintings and frescoes set high up on walls or ceilings. The second idea is the use of a technique which could be described as the interruption of illusion. By means of small, sophisticated devices, Pericoli unmasks the fictitiousness of the mural, deliberately making you aware that it is fiction.⁵⁴

IV.2.1.3.2 Francesco Clemente, Jean-Michel Basquiat: The <Palladium Frescoes>, 1985

The *Palladium Frescoes* were part of the Palladium Discotheque⁵⁵, the result of the 1985 architectural transformation of an old New York City theatre's huge and historically decorated, 104,000-square-foot (9,360 square metres) shell, the ceiling of which is thirty metres in height. The manager of the project, Ian Schrager, hired the architect Arata Isozaki to transform the vacant and rundown theatre - originally built in 1854 for the Academy of Music - into a spectacular dance hall that could hold 8,000 people at once.

Henry Geldzahler, at the time a private curator, but also the former curator of contemporary art at The Metropolitan Museum of Art, was chosen to fill the space with various artworks: at the top of the stairs, frescoes were

⁵⁴ Emilio Tadini, "Il Labirinto della Scrittura" *Abitare*: Nov. 1988, pp.196-198.

⁵⁵ See the articles: Edie Lee Cohen, 'The Palladium', *Interior Design*, Oct. 1985, pp. 230-233; Michael Wagner, 'Theatre of Events', *Interiors*, Jan. 86, pp. 83-86; Charles K. Gandee, 'Heaven's Gate: Palladium, New York City', *Architectural Record*, mid-Sept. 1985; Gini Alhadeff, 'The Palladium: Immaterial Building', *Domus*, Oct. 1985; The New York Times, Nov. 17, 1985, Sec. 6, p. 26.

designed by Francesco Clemente who brought a crew from Italy to execute the work (Fig. IV-18); other frescoes by Jean-Michel Basquiat looked out across the mottled floor (Fig. IV-19). David Salle and Eric Fischl were brought in to make video art. The result, a multi-disciplinary cultural collaboration, was a dramatic range of visual arts, including architecture, painting, video, theatre, and interior design. The frescoes were part of the permanent installation. Other works, by Keith Haring and Andy Warhol, were on consignment. Plans were made for



Fig. IV-18 Francesco Clemente, Palladium Fresco, 1985

exhibitions by Georgia O'Keeffe, Jasper Johns, Ellsworth Kelly, and Jonathan Borofsky.

Sixteen months after the opening of the Palladium, a symposium, 'The Nouvelle Disco: Art in Popular Culture', and a workshop⁵⁶, 'Focus on Critical

⁵⁶ The symposium and workshop took place on November 7-9, 1986, at the Minneapolis College of Art and Design, in conjunction with The Center for Arts

Strategies for Writing about Art and Popular Culture', took place at the



Minneapolis College of Art and Design, in Minnesota. The symposium dealt with a then unparalleled kaleidoscope of visual arts, performance arts, architecture, and entertainment.

Fig IV-19 Jean Michel Basquiat
<Mural in Palladium> 1985, New York

IV.2.1.3.3 Sandro Chia

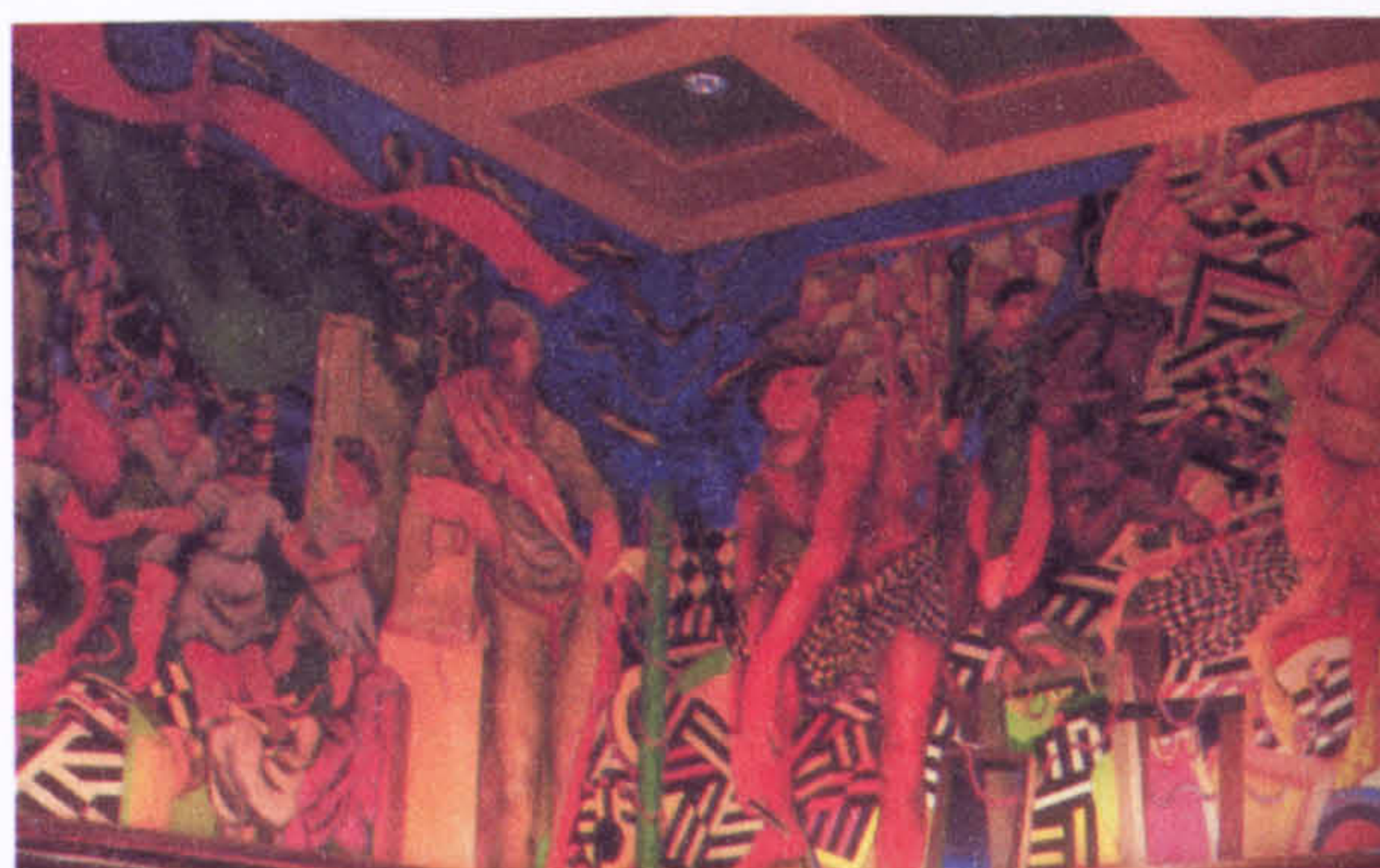


Fig IV-20, 21 Sandro Chia <The Palio> New York Equitable Center, fresco, 1983

Criticism, Walker Art Center. There, the artists, art historians, critics, and architects examined the experience of art in 'non-sanctioned environments'— specifically, the disco. Henry Geldzahler, the curator for the Palladium Project, delivered the keynote address, and the artist and critic Barbara Kruger, the art critic Barbara Rose, the professor and art/architecture critic Franz Schulze, and the editor of *Artforum* Ingrid Sischy participated in the discussion on the then controversial issue of art in popular culture.

IV.2.1.3.4 Francesco Clemente

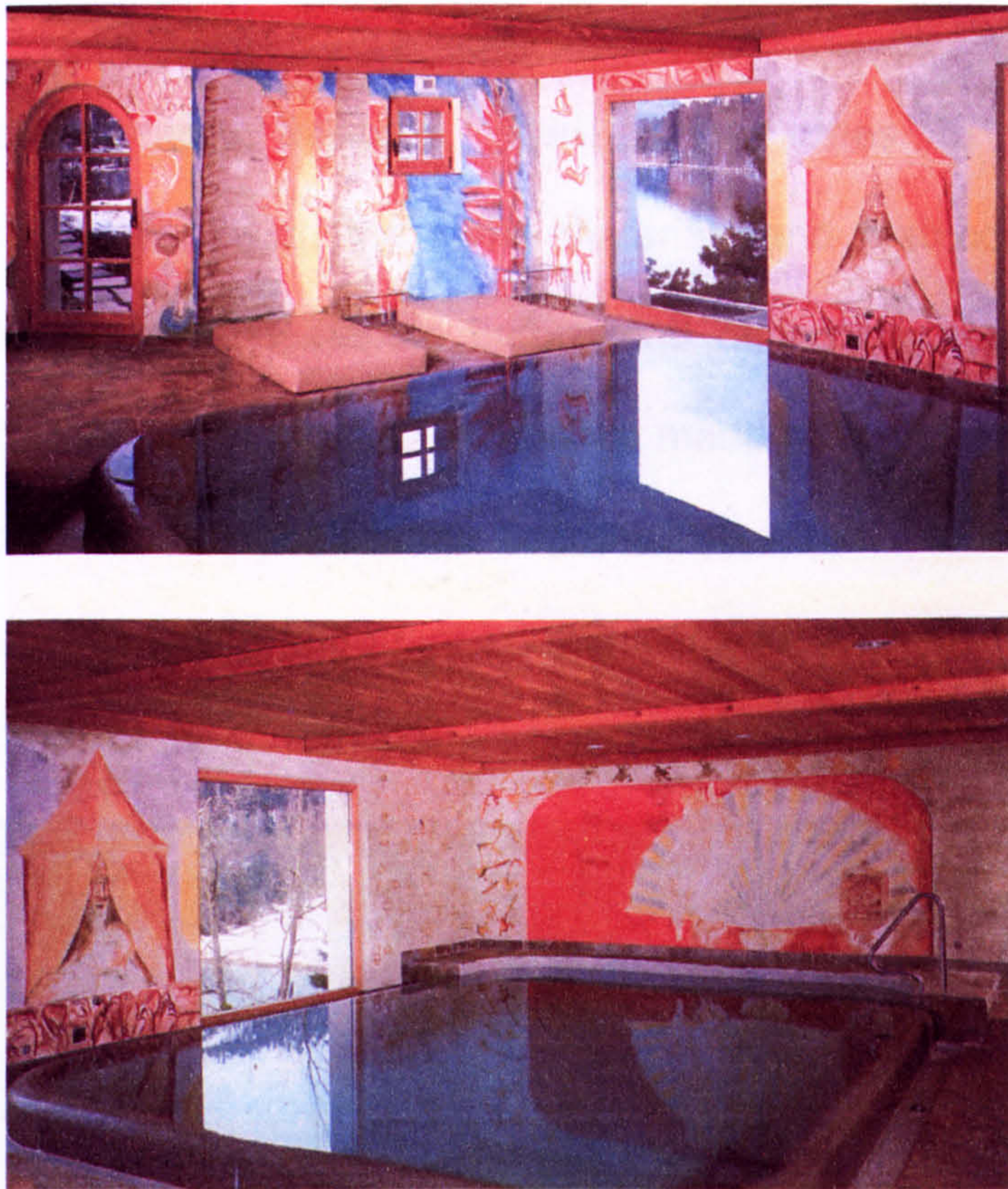


Fig IV-22 Francesco Clemente <Private Indoor Pool>
four walls in fresco, St. Moritz, Germany, 1982

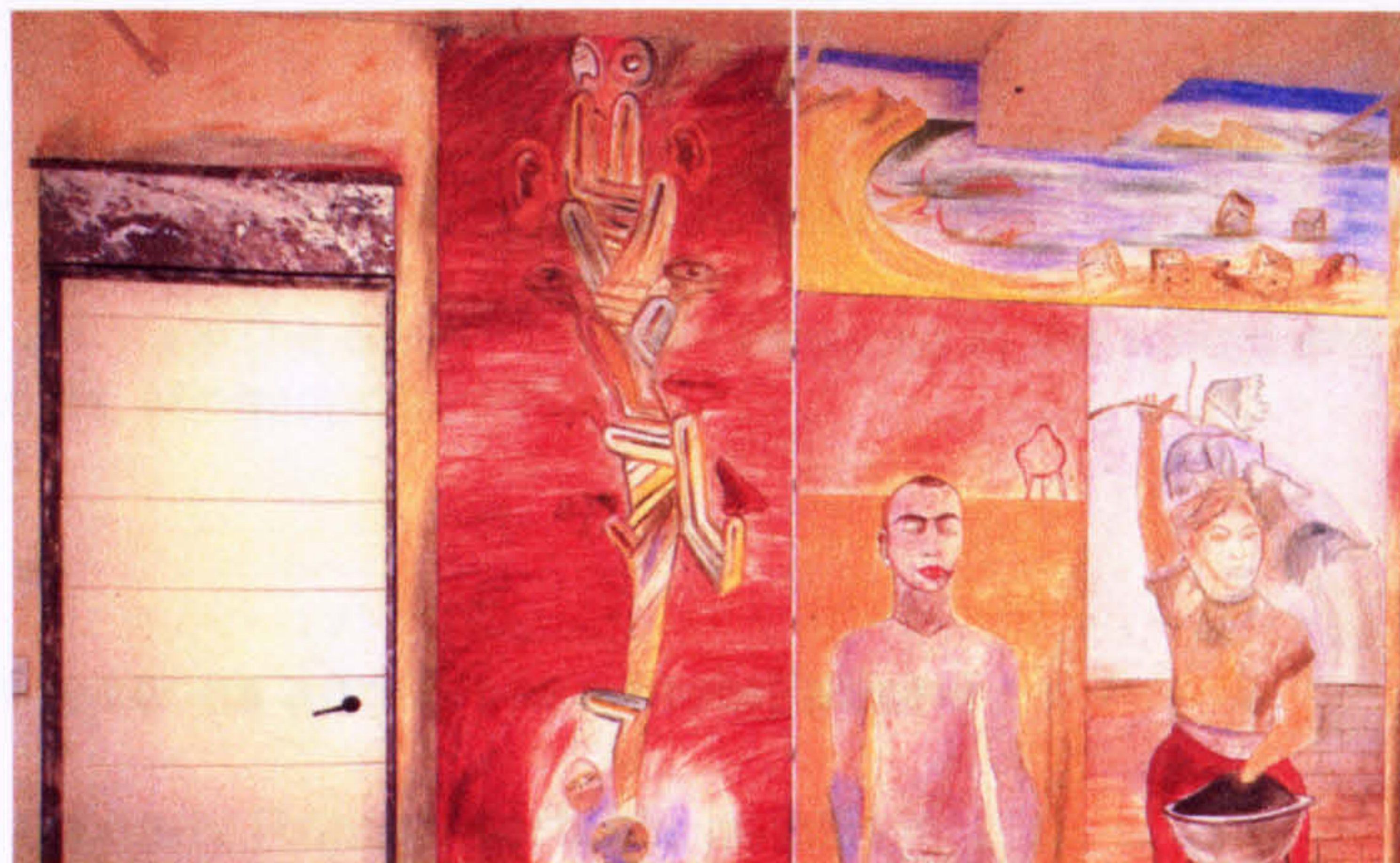


Fig. IV-23 Francesco Clemente <Julien Schnabel's Home>
fresco, 1987

IV.2.1.3.5 Mark Balma

In his contemporary frescoes, Mark Balmar tries to reproduce traditional fresco by employing the same materials and methods used by fresco masters like Giotto and Tiepolo before and during the Renaissance. Balmar, who went as far as to procure brushes made of boar hair from Italy that are similar to the ones Renaissance fresco artists used to prevent the alkalisation of lime, has made important contributions to a discussion on the materials and methods of modern fresco.



Fig IV-24, 25 Mark Balma <The Seven Virtues> frescoes in the atrium entrance to the University of St. Thomas, Minneapolis, 1993

IV. 2. 2 Portable Frescoes and Fresco Installations

Kurt Wehlte writes on early Roman portable paintings:

The Romans [already] painted small, portable frescoes in workshops and inserted them into the wall for which they had been designed. In the period of Syle IV at Pompeii the wall would have been prepared with typical decoration

prior to receiving the small paintings. The size of these frescoes was, of course, limited to transportable dimensions. It is assumed that the Greeks were the first to develop a technology that helped to free painting from its traditional support, the wall. They painted with tempera or encaustic technique onto wooden panels or slates that at first were of small dimensions. Unfortunately no examples of this early art has survived, except for the Alexandrian mummy portraits.⁵⁷

Although fresco is a form of painting that is quite actively used, mainly on religious edifices and large public buildings, it is rare that it is executed as an independent panel, like a framed painting, free from any reference to a particular building space and free to be viewed in museums and galleries. One example is a 1995 exhibition of thirty frescoes executed on panels by Enzo Cucchi and exhibited in the Arengario, part of the Royal Palace in Milan.



Fig IV-26a Enzo Cucchi <Foglie D'amore> fresco, 39" x 29" 1996

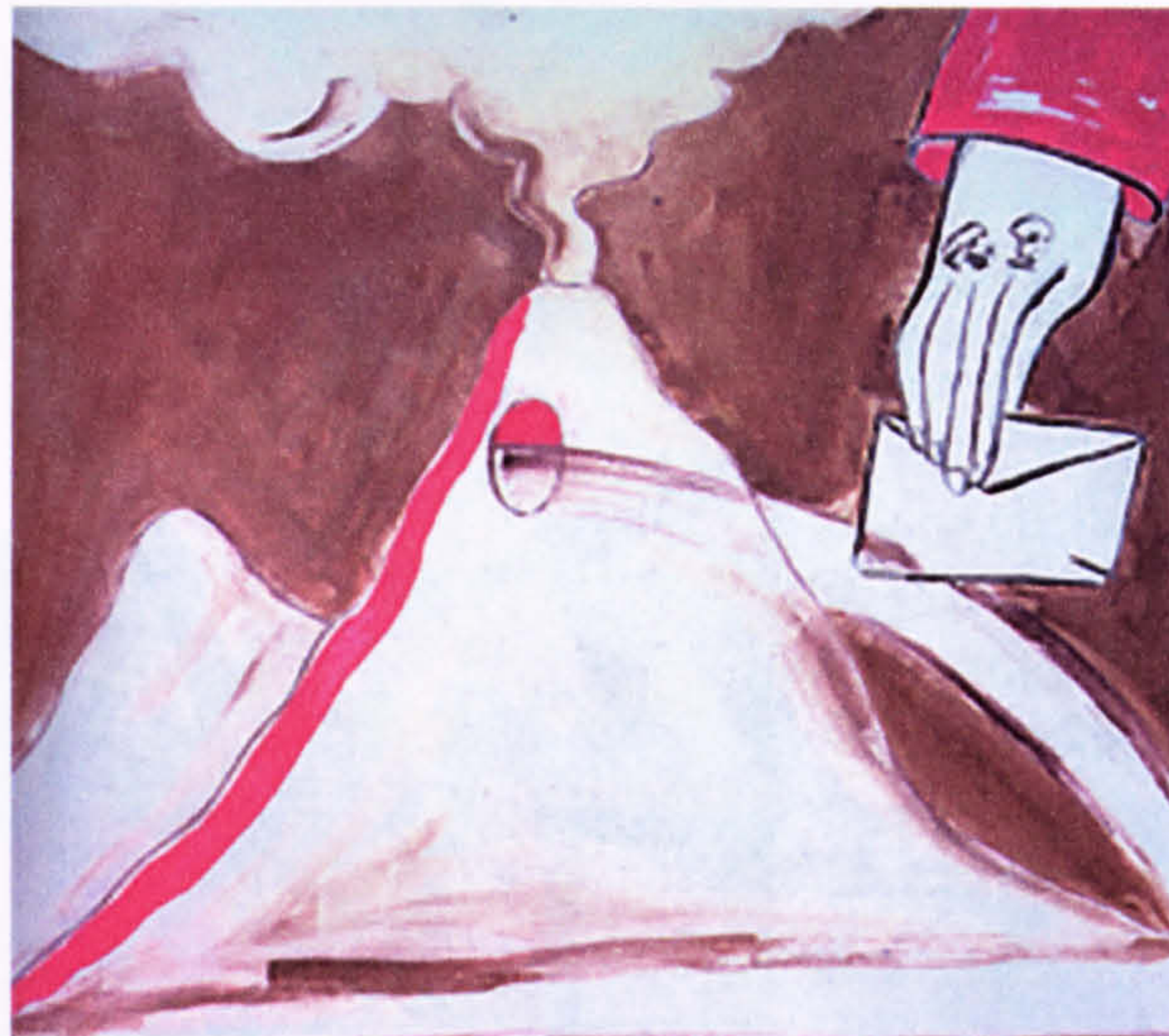


Fig IV-26b Enzo Cucchi <S.Uno> fresco, 39" x 35" 1996

A skilled restorer prepared the surfaces of the panels for the artist. The works were subsequently shown at the Shafrazi Gallery in New York, in 1997.

⁵⁷ Kurt Wehlte, (trans by Ursus Dix) *The Materials and Techniques of Painting*, Kremer, Germany, 1975, pp.321-322.

In the catalogue of the exhibition, Luca Marenzi wrote:

Specific to Naples, SIMM'NERVUSI are the representations of the mountains and the letter. The omnipresent mountain in *S.Uno* is Vesuvius, the defining landmark of the Bay of Naples. The letter is perhaps a sign of life from a soldier to his sweetheart, longing for home. It is a record of another moment in another place, the evocation of which is so closely linked to Cucchi's art that rendering of a special moment, of something simultaneously commonplace and extraordinary.⁵⁸



Fig IV-27
Francesco
Clemente
< Ora > 1980,
fresco



Fig.IV-28
Francesco
Clemente, <Interior
Garden> 1981
fresco, 3/4" x 9'10",
London

⁵⁸ Luca Marenzi, *Enzo Cucchi SIMM'NERVUSI* Tony Shafrazi Gallery, New York, 1997

IV.2.2.3 Joyce Kozloff

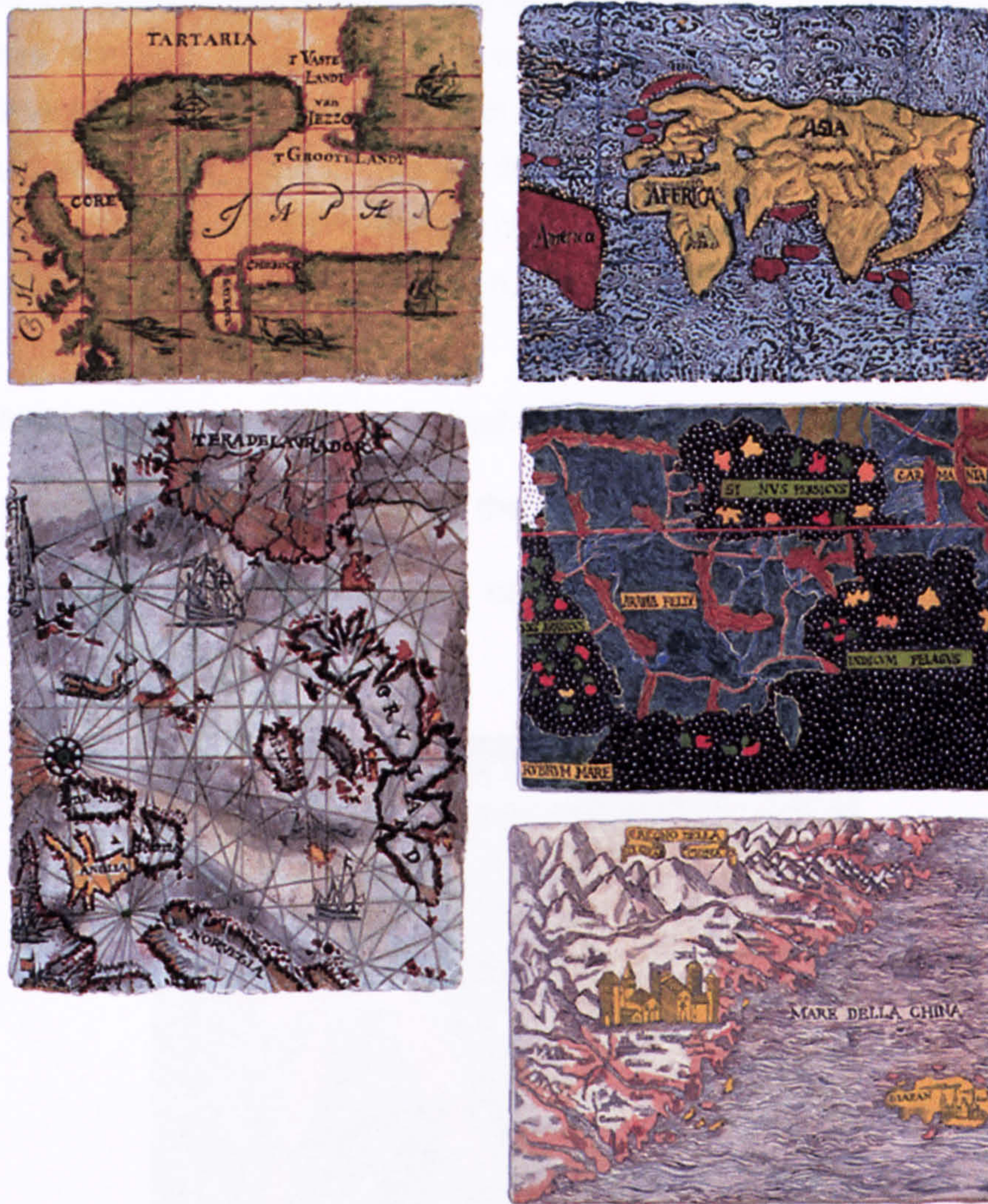


Fig IV-29 Joyce Kozloff <Knowledge> Series, fresco, 1998

IV.2.2.4 Koji Kinutani

Born in 1943, in Nara, the ancient Japanese capital, Koji Kinutani learned fresco painting techniques early in his artistic career. Innovating with them, he linked the classical arts of Japan and Italy, the two ends of the Silk Road. Not content to stop there, he took a stand in his art by exploring the emotions of his times.

In an interview, he told me:

I love the light that has spread all the way over the traditions and layers of time. I believe that truth, or a new vision, exists in what looks old and outdated. My creative energy has its source in such intangibles as love and the heart. Painters should acknowledge that we are just like scientists and people in other fields: we should appreciate traditions without clinging to them and try to take a step, or even half a step, towards the unknown, wonderful future.⁵⁹

When it comes to Kinutani's technique, it seems that his best frescoes were all executed on walls. He uses the *buon fresco* style, then detaches the work in *strappo*⁶⁰ and mounts it on canvas. When the fresco is too old to restore,



Fig IV-30 Koji Kinutani, <Midst of Light>
130 x 160 cm, fresco strappo 1980

⁵⁹ From an interview with Koji Kinutani, at Tokyo National University of Art, April 27, 2000.

⁶⁰ See “Definition of Key Terms and Technical Notes” on page 114 in this thesis.



Fig IV-31 Koji Kinutani, <Muralist Conversation with Model>
130 x 160 cm, fresco strappo 1985

he uses pararoid (an acrylic-based synthetic medium and adhesive) often combined with toluen (an organic thinner), then rabbit-skin glue spread on thin cloth. He detaches the work the way one would roll up a carpet, and attaches adhesive to it with clean, water-dampened mulberry paper.

IV. 2. 3. Fresco Sculptures and Frescoes in Mixed Media

Even since the late twentieth century, most fresco projects have continued to be dependent on public buildings. Nevertheless, some new elements, such as great freedom in painting styles and methods, set these projects apart from earlier works. These stylistic changes, the result of a visual convergence with changing aesthetic tastes, inspired certain artists to paint frescoes on panels assembled into three-dimensional – works and to marry fresco with mixed media.

IV.2.3.1 Francesco Clemente

In 1979, Francesco Clemente, the Italian trans-avant-garde artist, became probably the first European artist since 1945 to seek a revival of fresco. He is also original for his comparison of fresco to the white space aesthetics of Asian paintings:

From the beginning of the fresco onward, you can cheat, add things, but there is nothing you can subtract, because the fresco is already the minimum. The medium itself refuses any excess of personality. It is organic to the activity of building. With the fresco, the pigment exactly the way it is in nature. The beauty of the fresco parallels the Chinese conception of beauty, as in the expression, 'White comes last'.⁶¹

Clemente's observation also indicates that fresco is still not a medium like pencil and paper that allows for easy erasure and quick recovery. Fresco requires of the artist an almost alchemically painstaking accuracy and immediacy with each stroke, making the long-standing technique all the more mystical and difficult to master. But fresco's distinctive beauty is not what contemporary fresco artists cherish most; rather, it is fresco's near permanence, traditional materials, and harmony with modern architectural space.

Clemente, who was born in Naples, studied architecture, and then began an essentially nomadic existence, deliberately changing geographic and cultural perspectives with an almost disciplined regularity.

⁶¹ Francesco Clemente, *press release*, Peter Blum Gallery, 1999.

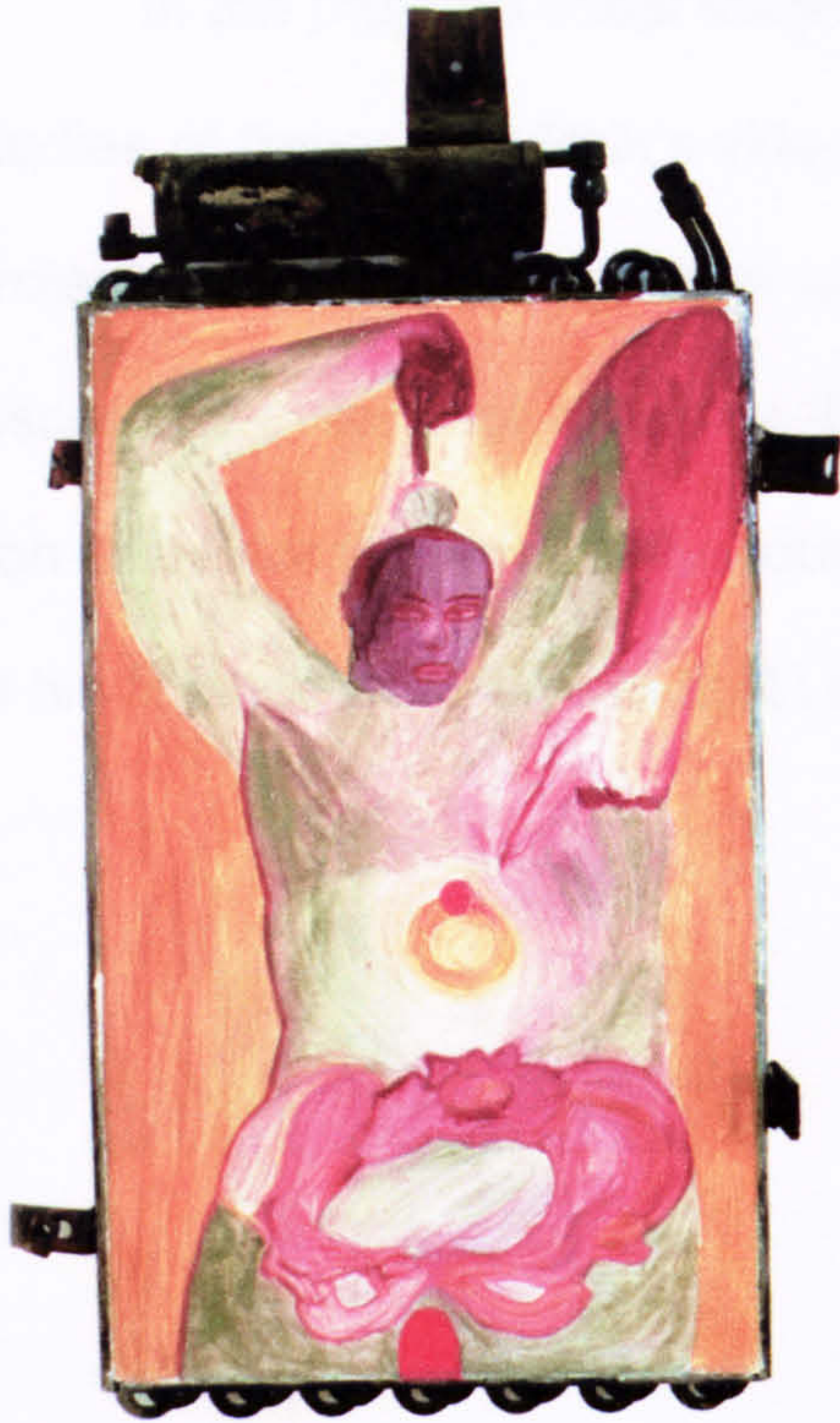


Fig IV-33 Francesco Clemente,
<Analogy > Fresco on radiator part
34" x 17" x 3 1/4" 1983, Gerald S.
Elliott Collection, Chicago

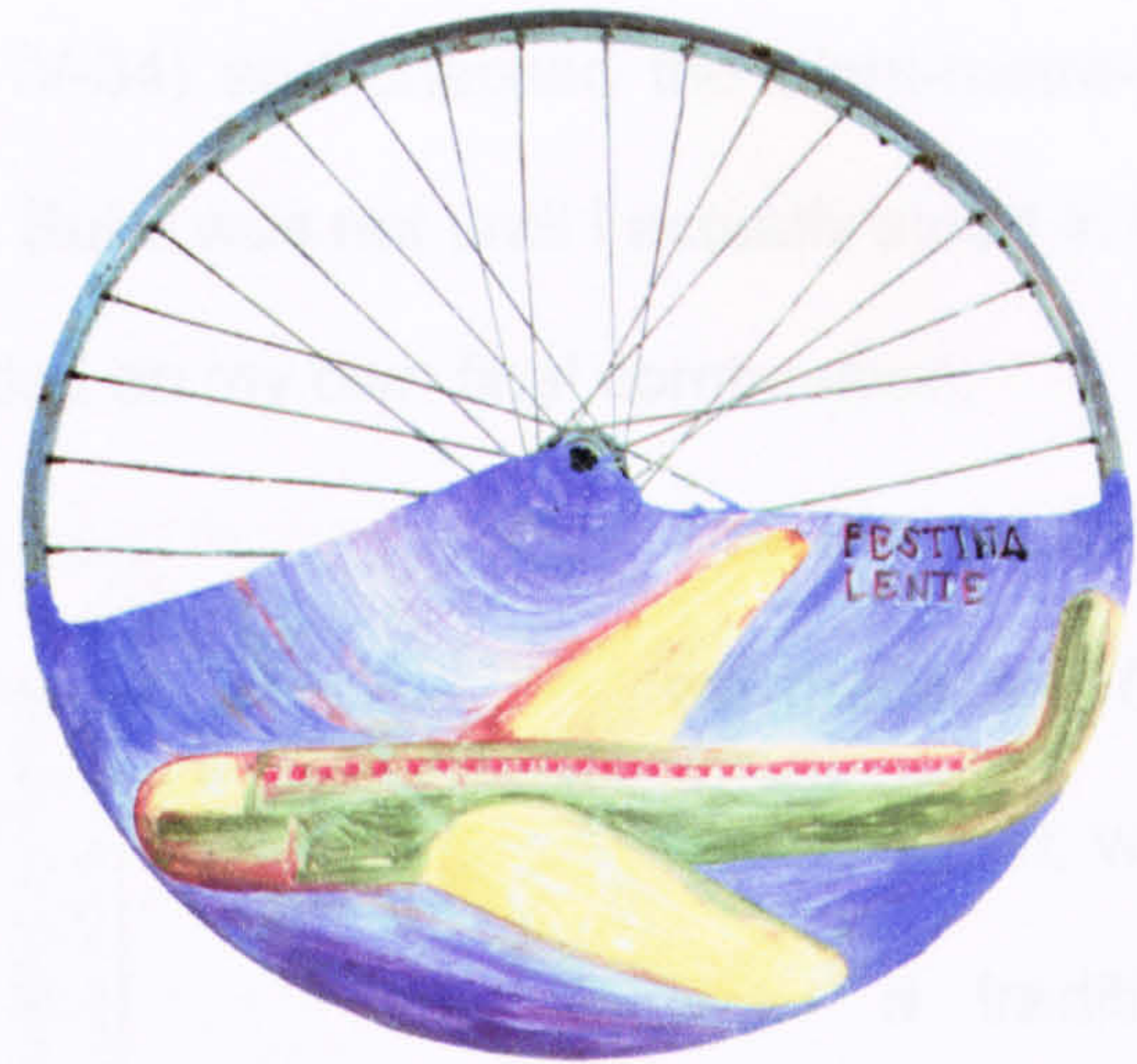
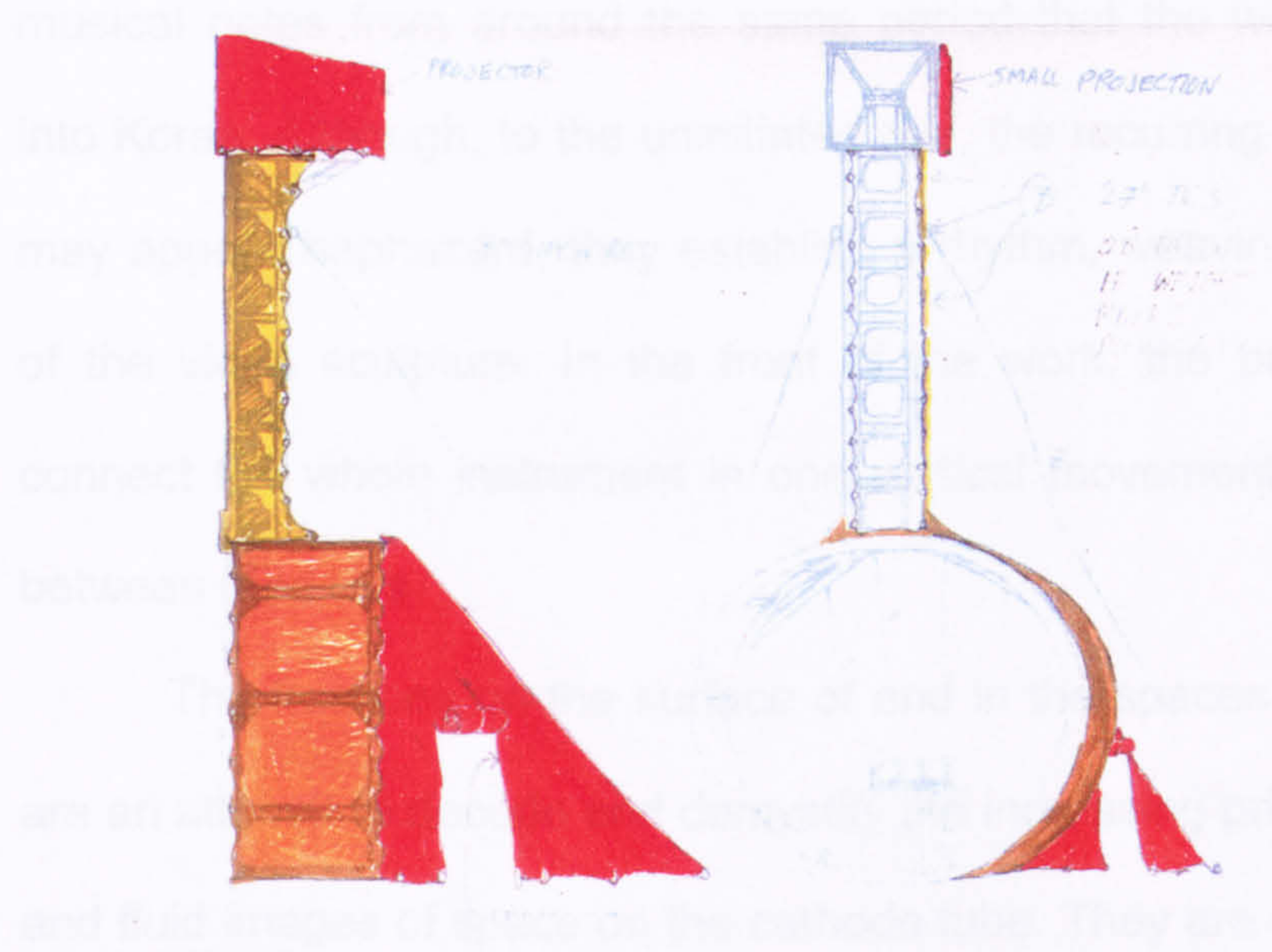


Fig IV-32 Francesco Clemente
<Festina Lente> fresco on wheel
25" x 25" x 3 1/2" 1983,
Courtesy Sperone Westwater, New York

IV.2.3.2.1. YoungSun Jin, in Collaboration With Nam June Paik: <DMZ 2000: The Tiger Lives>, Video + Fresco, 2000

The project goal was to celebrate the second millennium as the global age, with new standards of space, time, peace, and justice. Paik created site-specific video sculptures and I did site-specific frescoes. *The Tiger Lives* is a testimony to the iconic Korean animal that lives on in industrial society. Although a small country in a big world, Korea continues to uphold its identity. This is the message Paik seeks to convey at the beginning of the millennium.

In the project's initial stage, I found it difficult to translate my purely visual studies of fresco into Paik's video work. I spent months planning my part of the project and had four meetings with Nam June, ⁶² during which we created and discussed concept drawings (Fig. IV-34) and checked the eight-metre-high iron frame for the work at the foundry. But it was not until I actually stood in front of his finished work on site that I decided on my own final composition.



The two sculptures we made are *Cello* and *Wolgum*, which is a traditional Korean string instrument. The meeting of the two instruments, one Western, the other Eastern,

Fig. IV-34 Nam June Paik, <Study for Wolgum>, 1999

⁶² In my meetings with Nam June Paik, in his Mercer Street Studio, in New York City, we talked about folding screens, *bojagis* (Korean wrapping cloths), and his fondness for Giotto, especially his colours, which he wanted my frescoes to express on his video sculptures. He also said: 'When it comes to the folding screen, we need to view it as a whole, not panel by panel. It should be appreciated as an overall scene. It's like my TVs. When you look at each TV set separately, there's hardly any meaning in it.' Paik, on satellite-broadcast video added: 'My video art, which was relayed worldwide via satellite, on September 11, 1988, was entitled "Wrap Around the World." Figuratively, it softly wrapped the five oceans and six continents in a *bojagi*. An Orientalist, Professor Blythe, writing on Kusan, a seventeenth-century Korean poet, said that a *bojagi* can wrap one book when there is only one, or ten books when there are ten. And when it rains, it can be used as an umbrella. The *bojagi* is so versatile that it can be made to serve any number of uses.

should suggest the meeting of East and West at the dawn of the new millennium. For *Cello*, I studied different cello shapes and designs, before finally composing, sgraffitoing, ⁶³ and applying an overall blue colour to the ensemble. For *Wolgum*, I painted, in Venetian reds, variations on the ancient Korean musical notes from around the same period that the wolgum was introduced into Korea. Although, to the uninitiated eye, the recurring flat and active colours may appear haphazard, they establish a rhythm, weaving together the shapes of the video sculpture. In the front of the work, the painted wolgum strings connect the whole instrument in one vertical movement while filling the gaps between monitors.

The frescoes on the surface of and in the spaces between the monitors are an attempt to decode and demystify the increasing privatisation of the virtual and fluid images of space on the cathode tube. They are an attempt to make art sculpture and commercial boxes collide without a programme drawing them together. In other words, since the works were subsequently moved to the Sejong Grand Theatre in Seoul, and the programme runs only one-third of the time, there still needs to be colourful sculptures, not just stacks of monitors.

The work was transmitted live to seventy-seven nations via satellite by the BBC and by the American broadcasting companies ABC and PBS, on the eve of the millennium, as well as being Web cast. It also archived the site and performances in the DMZ (demilitarized zone) between North and South Korea.

⁶³ See 'Definition of Key Terms' and Appendix I.

The intricate flow of information from this event is, I feel, like the Korean concept of *chi*, the flowing life force underpinning all reality.



Fig IV-35 <Wolgum>, 1999
Video Sculpture: Nam June Paik, Fresco: YoungSun Jin

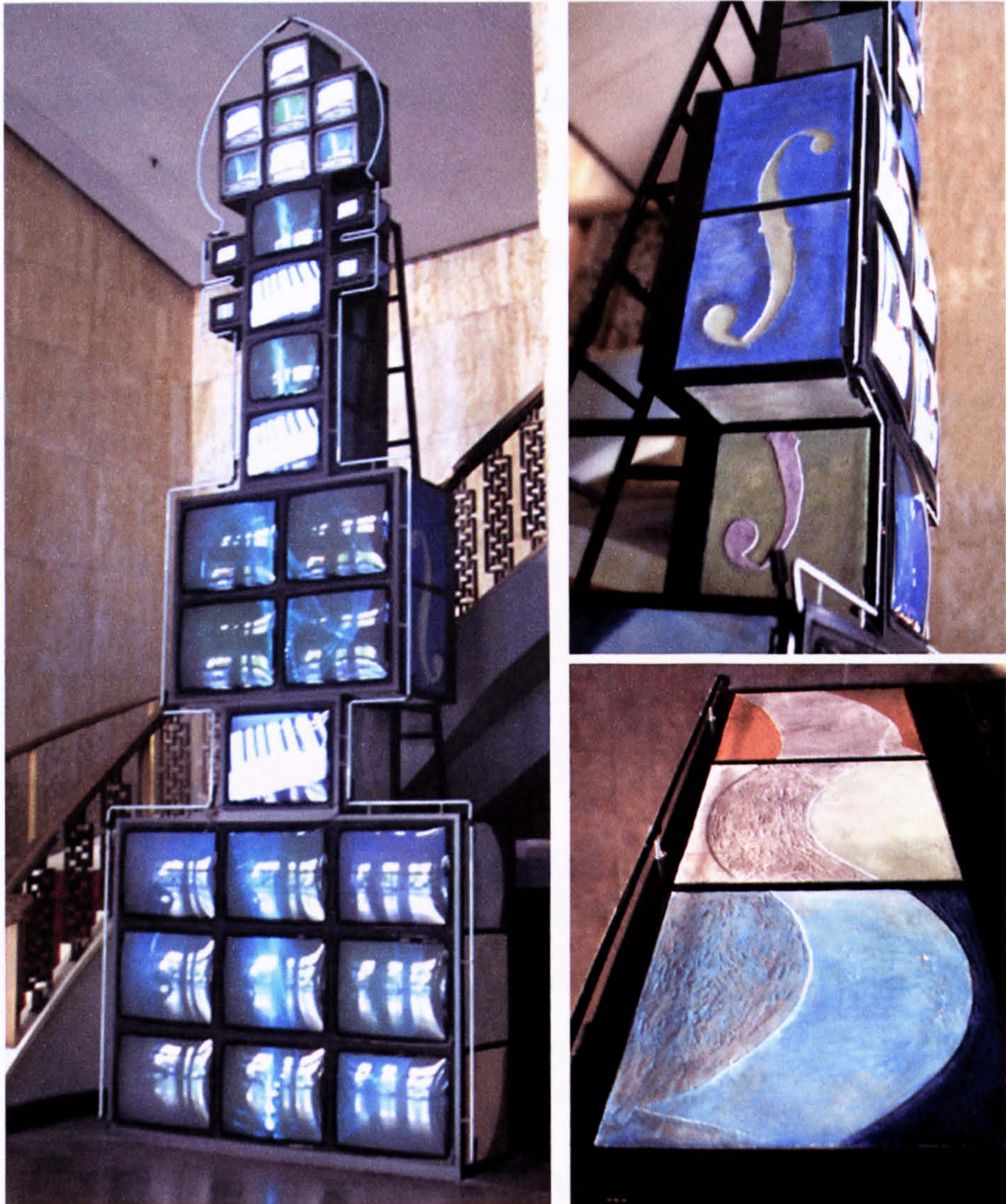


Fig IV-36 <Cello> 1999

Video Sculpture: Nam June Paik, Fresco: YoungSun Jin, 6M(H)

V.2.3.2.2 YoungSun Jin <Channelling Time>: Ecology Centre, Mile End Park, London

I created *Channelling Time*, a fresco and a ceramic mural, for the Ecology Centre in London's Mile End Park, one of the United Kingdom's major Millennium Projects for 2000. The project, undertaken as a partnership⁶⁴ between Tower Hamlets Council, which oversaw the plans, and

⁶⁴ In 1995 Tower Hamlets Council, The East London Partnership and The Envirotrust

other organizations, was to be a twenty-first-century renovation of the park. . As its name suggests, the park has a mile-long pathway with the new Green Bridge spanning the Mile End Road. The master plan emphasised the integration of art, sports, and ecology, and included an amphitheatre, an ecology park, an arts centre,

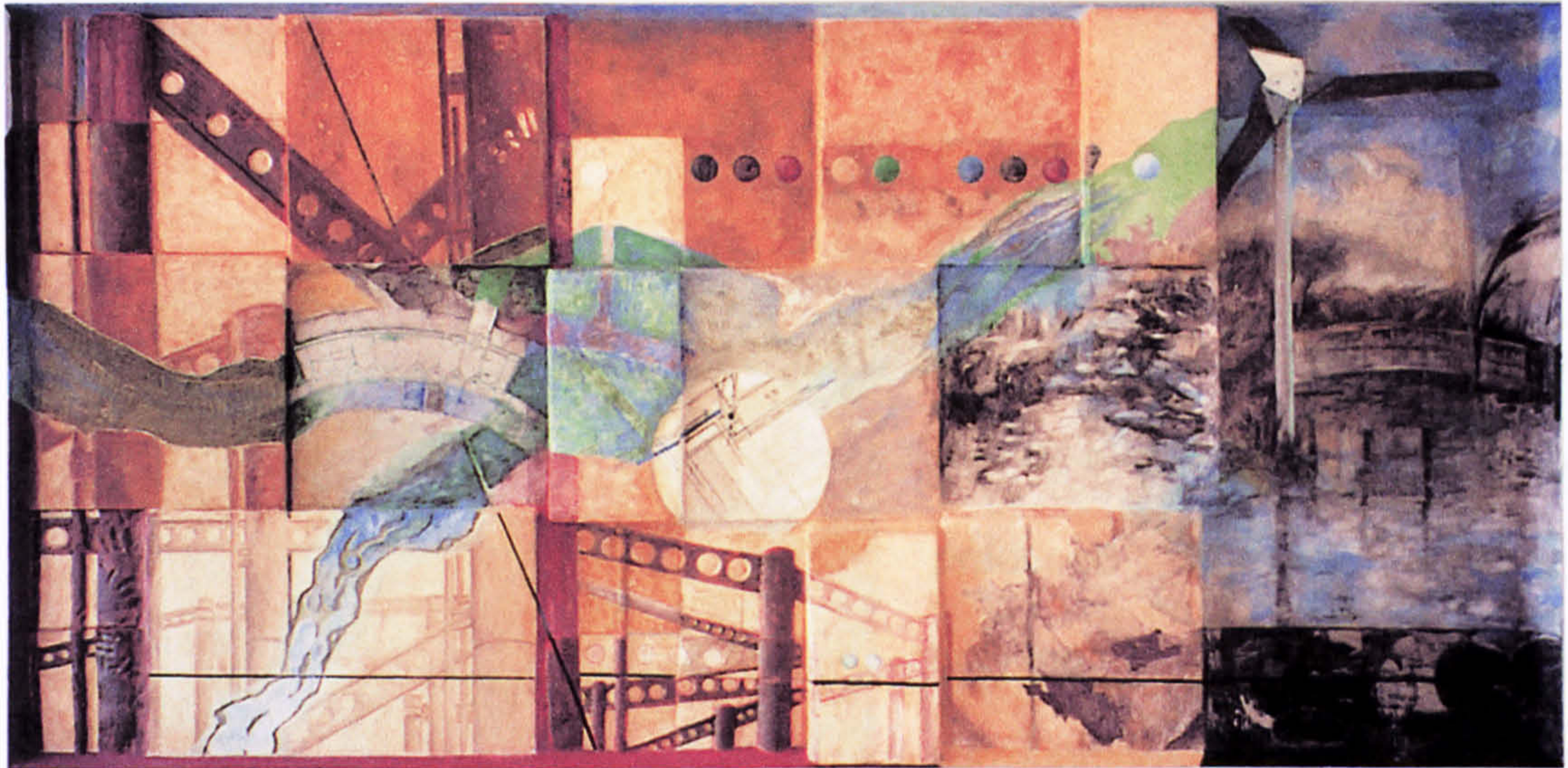


Fig. IV-37 YoungSun Jin <Channeling Time> fresco + ceramic mural, Ecology Centre, Mile-End Park, London, 2000-2001, 1.8M x 3.6M

an outdoor sculpture garden and a sports arena. The fresco and ceramic mural were installed at the innovative Ecology Centre, whose unique earth-heating system uses the soil surrounding it to store the heat generated in the summer months and then recycles it during the winter. I undertook the project while

got together to form the Mile End Park Partnership. The partnership submitted a bid to the Millennium Commission for funding to create a prestigious 70-acre park for the 70,000 residents of Tower Hamlets, Hackney and Newham. The Park has a mile long pathway, which vaults the Mile End Road with a new 25 metre high Green Bridge designed by CZWG. This unites the park and makes it a continuous Green Ribbon. The project finalised when the National Lottery awarded the project £12.5 million; this was to be matched by the Mile End Park Partnership. When the plans were finalised, building work commenced.

teaching fresco at the Central Saint Martins College of Art and Design in London. In a project studio, my students and I discussed different possibilities for a permanent installation at the proposed wall space. We then chose an initial concept, a production method, and a work process. Since we were unable to work at the as yet uncompleted building, we created the work in panels that could be transported easily from the studio.




Keeping primarily in mind the essential objectives in the re-creation of the park, after five rounds of visits and research, we produced a basic concept drawing of the park and its surroundings. A nearby gas tower,

a small stone monument that had been quietly gathering moss over the past few centuries, a

Fig.IV-38 study for the initial drawing

KEY ELEMENTS

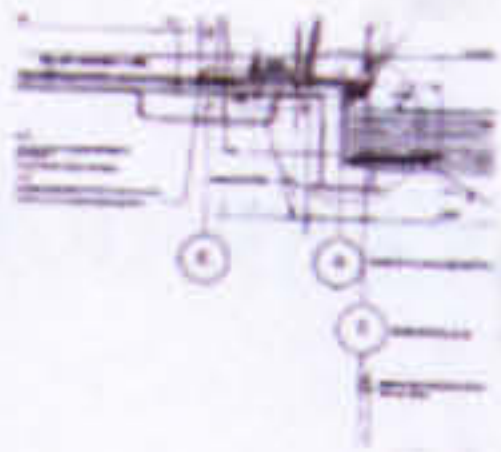
The key compositional elements finally used were chosen for the relevance to the projects.





Gas Towers: These metal giants have dominated the East London skyline for the last forty years.

In accordance with the redevelopment of East London and the premium for land, many of the towers are being demolished to make way for the changing face of East London.

Architectural Drawing: The particular drawing use is a direct reference to the development of Mile End Park. The linear structure of the drawing appealed to the group, and crystallized the actual birth and construction of the park itself.



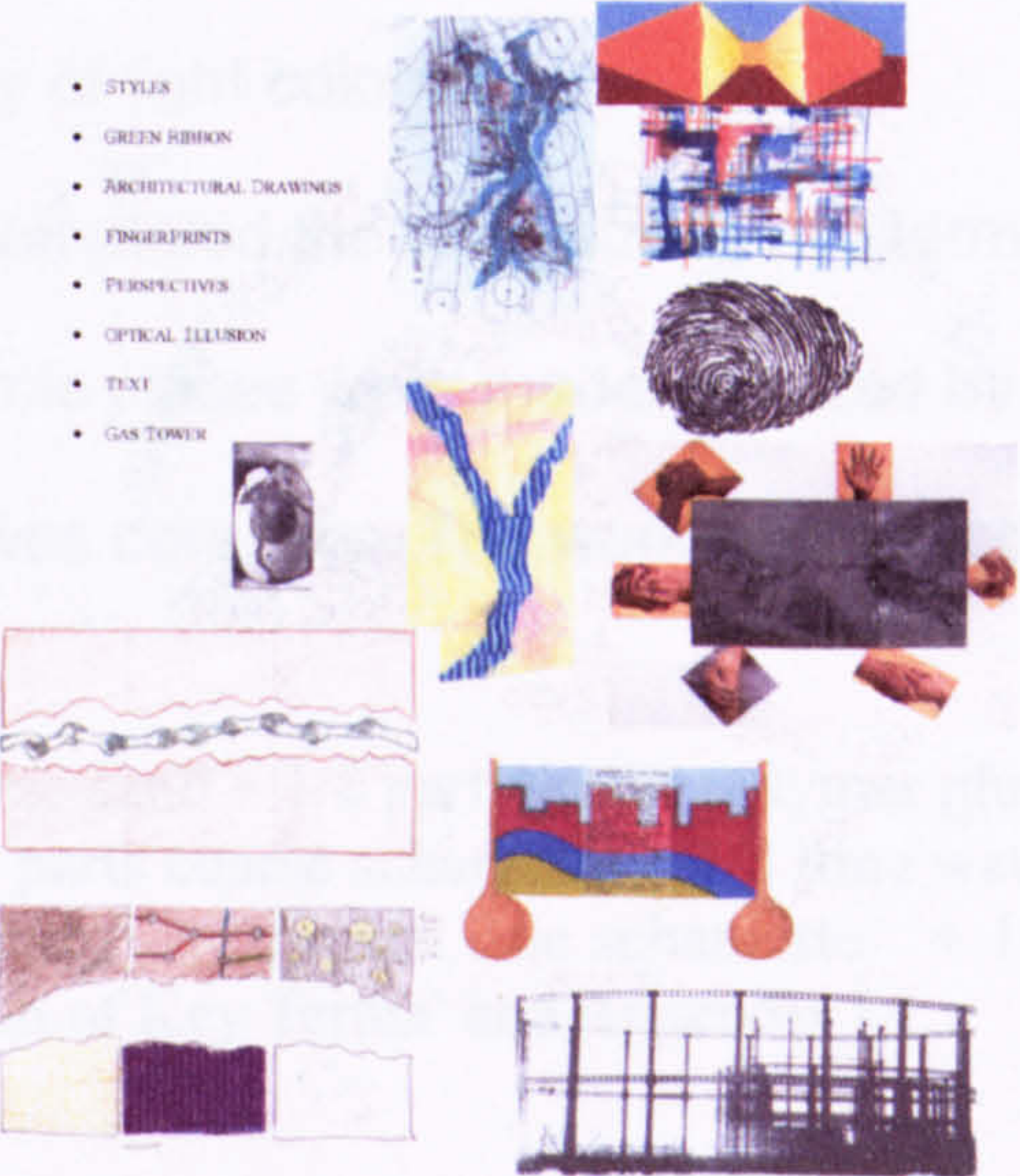
The Symbol: The symbol used in the fresco and throughout this document is an element that already exists within the park.



Green Ribbon: The Mile End Park development is generally referred to by all concerned as a Green Ribbon. This mass of green running through the city. We have taken this idea and used it to link all the other compositional elements together.

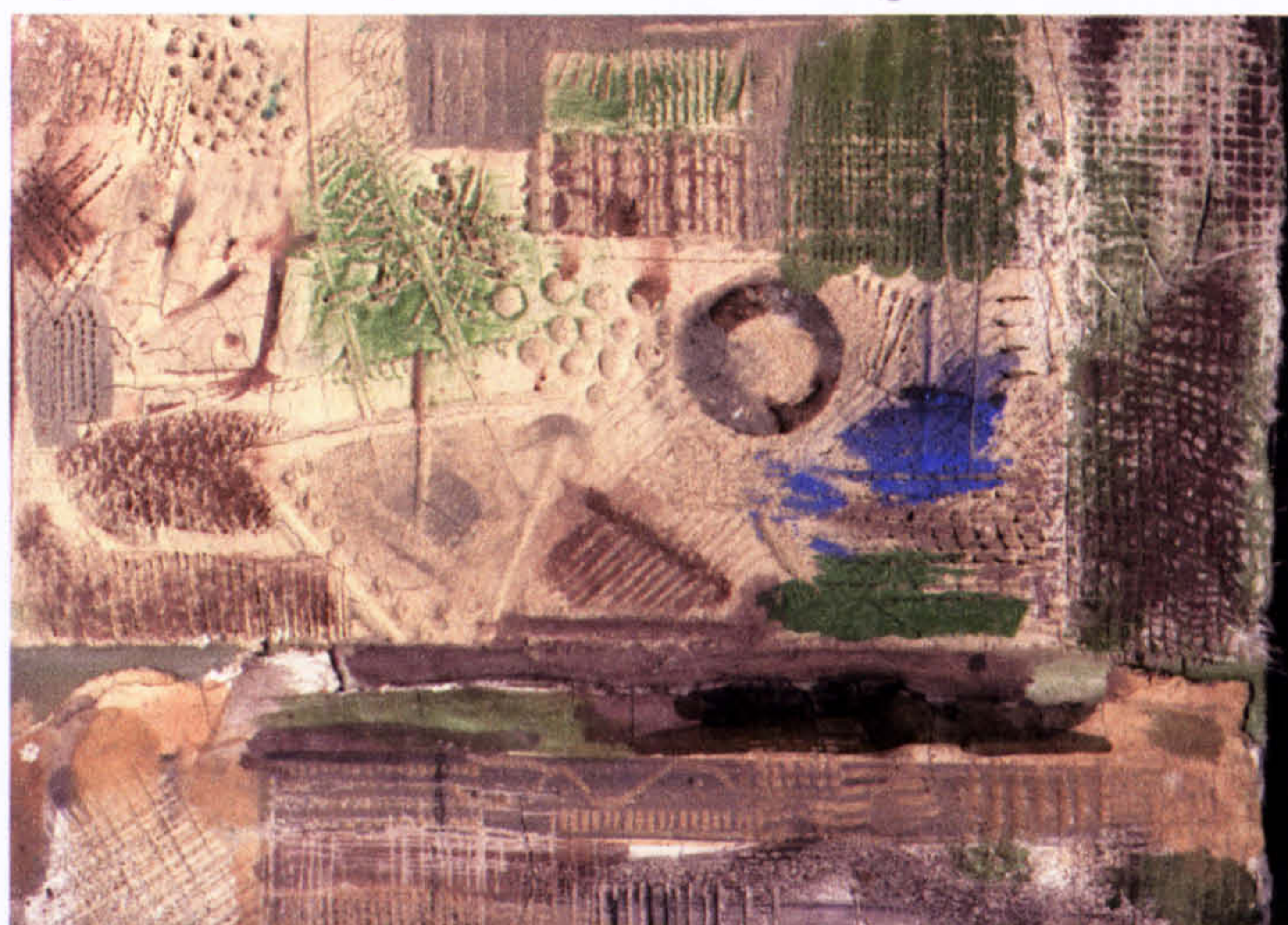
INITIAL IMAGERY

- STYLES
- GREEN RIBBON
- ARCHITECTURAL DRAWINGS
- FINGERPRINTS
- PERSPECTIVES
- OPTICAL ILLUSION
- TEXT
- GAS TOWER



fingerprint-like pattern etched on the monument, and a 3-D representation of a pillar derived by expanding the construction diagram became the main subjects of the work.

Fig. IV-39 test panel for <Channelling Time> 2000



The panels were of polystyrene covered with fiberglass mesh. Three layers of plaster were applied to them.⁶⁵

On a test panel, we combined all possible textures and colours. To

make true fresco, we applied earth colours, first diluted for forty-eight hours in distilled water, on a fresh lime plaster surface. The panel's overall hue was green, which we found appropriate for an ecology centre. I felt that, since the work included both a fresco and a ceramic, an irregular style was called for. In this way, as the illumination changed slightly according to the viewer's position, we were able to create a subtle harmony of light colours.

My student collaborators and I completed the work during two terms of my fresco-painting course and the ceramic pieces were made and fired by students whose principal course study was ceramics. The work was stored for

⁶⁵ Mortar: 1 part white cement + 1 part coarse sand + 1/8 part plaster polymer glue
Brown coat (*arriccio*): 1 part lime putty + 2 parts coarse schamotte + 1/8 lime water
Paint coat (*intonaco*): 1 part sieved lime putty + 2/3 part fine schamotte + 1/3 part marble dust. For more details, see 'Definition of Key Terms' and Appendix I.1.

twelve months, and then installed on the wall of the Ecology Centre lobby through which the spectator first comes upon it. During the installation, which was executed directly on the wall in the *fresco buono* manner, the right side of the mural was extended by twenty-five per cent. Presenting flowing Oriental brushstrokes, overlapping colours, and deep shadows, the mural depicts the poetic scenery of a pond, a windmill, a Japanese footbridge, water lilies, and amusing floating sculptures.



Fig. IV-40 Right end view.
fresco + ceramic mural, Ecology Centre, London

By engaging the public more intimately, modern fresco has transcended its traditional dependence on the institution and institutional art. It has encouraged the public to overcome the stereotype of fresco existing primarily in the service of religion. Moreover, today's fresco lovers (and art lovers in general) see art as much more than just a form of visual entertainment. For them, it is a direct line to something meaningful, even important.

CHAPTER V

AN ONGOING INQUIRY THROUGH CREATIVE PRACTICE

Channelling Time

23 April –3 May, 2003

Lethaby Gallery, London, England

V.1 Introduction

The exhibition at the Lethaby Gallery was the central focus of my research. It did not simply seek to interpret material and subject, but to transform the different categories within them and suggest meaningful differences between contemporary and traditional fresco. Contemporary fresco is more than variations on two-dimensional mixed media, installation, painting, and sculpture; how it embraces its own independent and expressive path is the subject of this text.

I have identified the diversity of contemporary fresco through the five innovations presented in this exhibition. Much of my work contradicts the tradition of fresco as being on the surface of an architectural support, most notably a wall or a ceiling. In my work, fresco becomes truly transportable, through its use of synthetic supports that dramatically lighten the weight of the works. Note that this innovation creates a portable fresco work that is



Fig. V-1 Installation View I at the Lethaby Gallery, 2003

essentially different from its Roman antecedents, which basically consisted of relatively small, removable fresco panels. This innovation has opened the way for me to create fresco-folding screens, fresco installation, and prints on fresco

(an experiment in the art of multiples), fresco as part of mixed-media work, and experimental techniques combining fresco with electronic and digital media. The portability of my frescoes is, of course, a function of a greater desire to make fresco become an essential genre in contemporary art, a desire that, in essence, distinguishes it from the function of Roman portable fresco whose panels were made in the studio only to fit in the planned walls to be a part of the wall. Portable fresco today leaves the wall entirely behind to seek sculptural space.

The first example is the portable fresco, which, since it can be presented in an exhibition space, transcends its traditional role as a decorative element in architecture. Although it has always been a temptation for artists to ponder on fresco as a portable independent medium, inherently it is considered to be a kind of painting on the surface of a wall or an edifice.

The second innovation is fresco sculptures and installations that transcend the traditional designations of wall painting and a two-dimensional art form. If the problem of weight can be resolved, fresco sculpture, thanks to its many creative possibilities, can be considered as a fine form of art. In this exhibition it was important to present fresco sculptures in various shapes using styrofoam support to reduce the weight. This solution opens the way to the creation of large, transportable fresco for a variety of innovative installations, such as pyramids that can float on water. It is still necessary to do more research into a form of sculpture and an installation medium for the fresco technique.

The third innovation is to combine print work with fresco. To do this, I created individual fresco panels, and then transferred a silkscreen image on to

them. This is the technique I used to print the imagery of Michelangelo's *The Creation of Adam* and the *Last Judgment*, Masaccio *The Expulsion from the Garden of Eden*, and others onto a fresco panel for the work *Fresco History*. I think the meeting, after an interval of half millennium, between the contemporary silkscreen image and the Renaissance image is an especially dramatic one because of the role of the fresco medium. Until now, fresco has

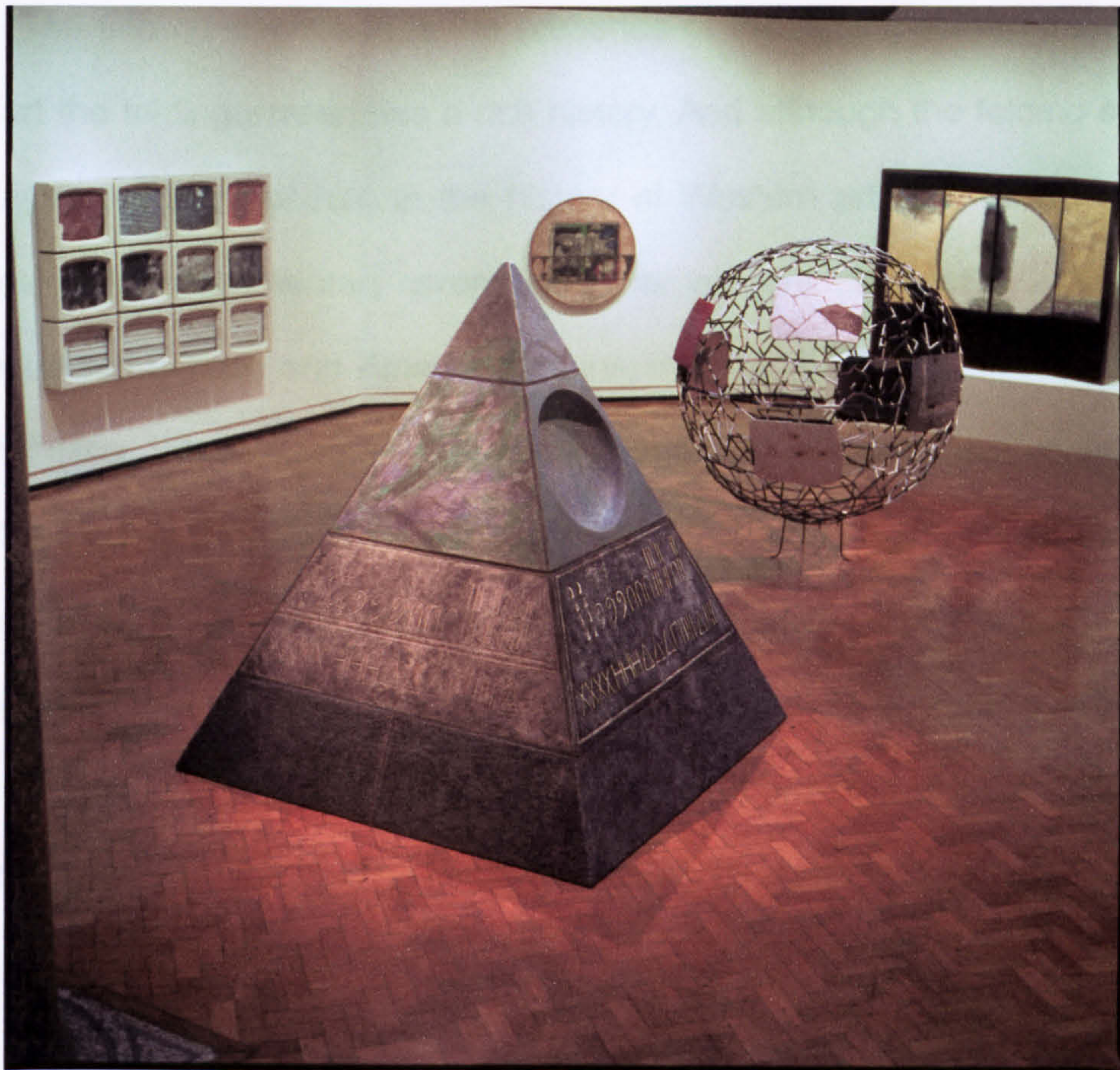


Fig. V-2 Installation view II at the Lethaby Gallery, 2003

always been an original work by an individual artist. The idea of a fresco as a multiplicity of different artists could be an intriguing new concept.

The fourth innovation is to combine fresco with digital media. At first,

when I considered this, I imagined a confrontation between modern technology and classicism leading to a horrible two-headed monster. I realised that the encounter between *avant-garde* and tradition would always create a taut discourse. Imagine a video projection encased in a round fresco concave in front of which there is a candle whose flame dances against the projected image. More than just a heavy screen, the fresco here transforms indifferent modern technology into humanist tradition.

The fifth concentration is the presence of the folding-screen fresco. In Asian art the folding screen has a rich history. And although the folding screen has played but a minor role in the history of Western art and, consequently, provides fewer documentary examples,⁶⁶ its elegant placement in modern architecture in Europe and America has inspired me in my creation of folding-screen fresco. What is more, after several years of research, including some careful experiments and a few failures, I am pleased to have resolved the problem of its weight, volume, and structural resilience, which threatened its portability and installation in exhibition spaces. It resolves the problem of how to present works in one space harmoniously, creating one that is both alternative and experimental. The folding-screen solution, in short, extends the spatial range of the fresco.

⁶⁶ The folding screen has long been considered a genre of decorative arts or design. The study was made mostly on the function and techniques rather than as an art medium. The screen's function in interior space is a device to divide space or to create intimate enclosed spaces. See *Decorative Folding Screens* by Janet Adams, The Viking Press, New York, 1982, p.8.

Description of Works in the Exhibition

V.2.1 *Reflections of Time*

My installation work with true fresco began with research into the ways in which fresco could express a meaningful and alternative aesthetic to that of existing installation work. The key, then, to developing an alternative fresco aesthetic was to take into account both a genre that has been a glory in art history and a modern sensibility that is appropriate for installation.

For most installation art, of prime importance is the spectacle. For fresco, however, more important than the spectacular is a complex relationship between site and continuity. Fresco's medium and technique, in which intensive craftsmanship plays a large part, result in works that can be relocated and adapted to a range of locations being both permanent and portable.



Fig. V-3 <Reflection of Time>
Installation with video projection on frescoed surface.
candle, water pond and cushions. 2003



The work *Reflections of Time* is a multimedia work of water, candles, reflection, and a cushion on which the spectator sits. The standing arch-like fresco panel serves as a counterpart to a wall projection of a video of a flickering candle. In front of the panel a real candle burns, creating, with the projected candle image, a kind of double *trompe-l'oeil*, as if the real candle was the video candle and vice versa. In front of these two candles is a shallow pool

of the same size and shape as the fresco panel. Both the real and the video candles' images are reflected on the surface of the water. The candle burns in space, a fusion of the two elements, fire and air. The reflection of the flickering candle fuses is absorbed into the third element, water, emphasising and drawing attention back to the wall and the fresco at the centre of the installation. In this way the physical reflection induces contemplative reflection.

In this instance the fresco creates the environment – it is an architectural space in which the real and related images of candlelight can be juxtaposed. In this work, several issues come face to face with each other, including the past and the present and the traditional and the electronic medium. Together they produce a representation that hints at a search into time and space.

The three different media are intended to be in complete harmony. The electronic medium beamed the image of candlelight onto the fresco, thus demonstrating the strength and importance of its own existence. By providing visual evidence of natural materials, it emphasises that this most persuasive product of the electronic age is actually an organic component of natural life. In comparison, the candle burns itself to brighten its surroundings, and revels in the fact that its breathtaking imagery of life is reproduced through the video camera.⁶⁷ In other words, the final image is that of the electronic and the natural media engaged in a narcissistic caress. For its part, fresco serves as a performance space for the two media in this visual representation.

⁶⁷ Video artist Nam-June Paik created *the Television Buddha*, in which the most beloved medium of the electronic age, the video camera, is starkly contrasted with Buddha, the symbol of Eastern wisdom. The work shows a video camera reflecting the image of Buddha, and the Buddha, a personification of Eastern knowledge and profundity, is mesmerised by his own image captured on the television screen. Yongwoo Lee, *The Origins of Video Art*, Doctoral Thesis at University of Oxford, 1998, p.38.

The left-hand side of the fresco panel seems to be cut off from the ensemble, which serves not to destabilise the arch but to add to the tension extending down the screen. Until now, the arch was the axis and culmination of the spatial composition. By abandoning the pretence of expressing itself as a weighty symbol of completion, it is now free not only to be incomplete, but also to express a dynamism free from symmetry.

Here, the projected halo is the cosmos; the candlelight is energy, or of all living things that exist in the universe. The video camera is the medium that serves as a tool to capture and reflect the life force. In other words, the implication is that the electronic medium is the means to a certain end, and, at the same time, it can be a supporting medium providing further depths to art. What I tried to convey was the premise that multi-media art should not be an art of manipulated images, but 'humanised art, art for participation by and enjoyment of all people'.⁶⁸

In this work, the frescoed panels take the role of a wall screen with very different media involved in the same space. On them, is installed a meditative video image of flickering candle flame and shimmering water projected to produce a dramatic atmosphere.

⁶⁸ Nam June Paik, *TV as a Creative Medium* leaflet, Howard Wise Gallery, 1969, prepared for the show. Paik cites the source of this quote as a paper by Nobert Weaner written in the early 60s.

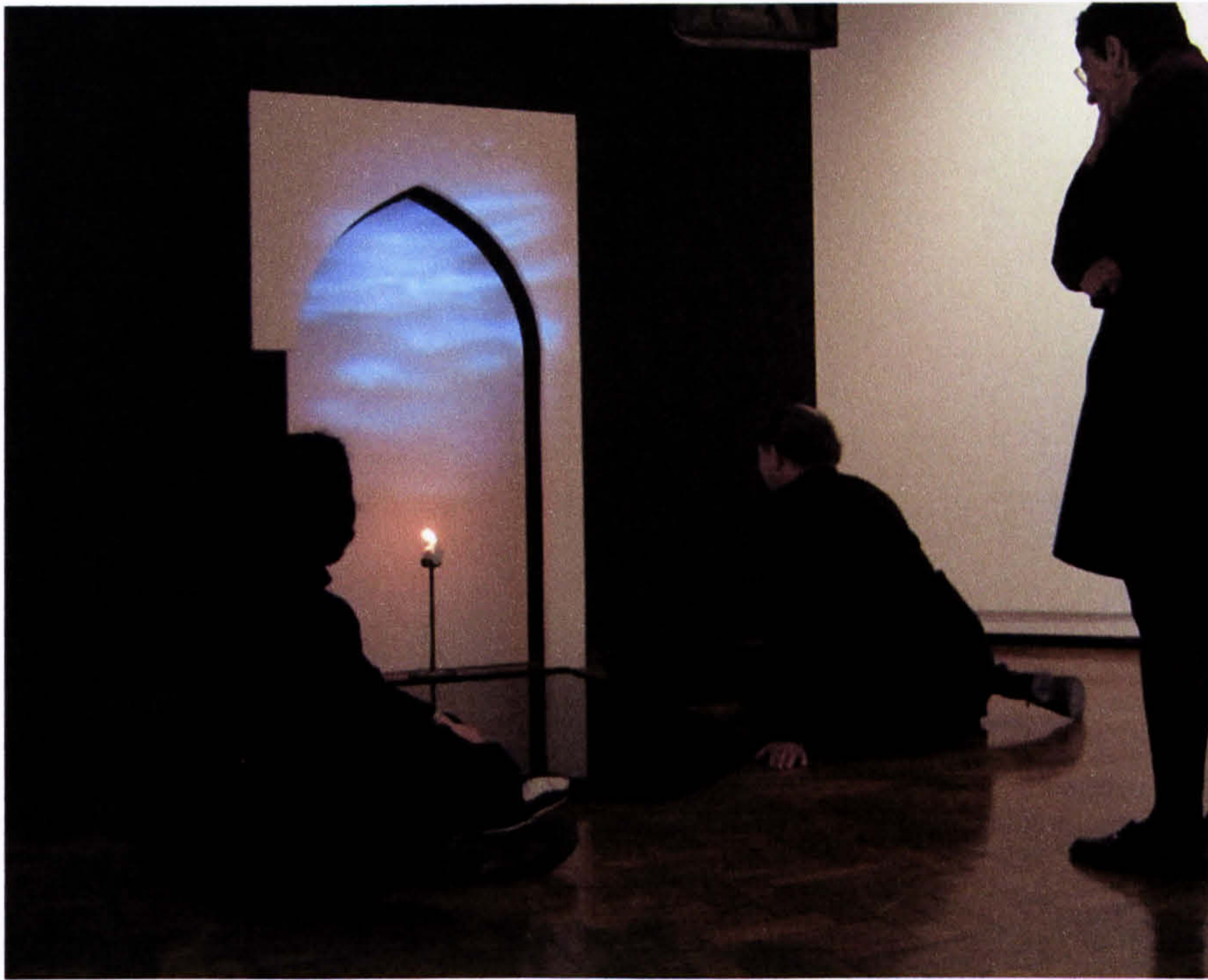


Fig. V-5 <Reflection of Time>
Installation with video projection on frescoed surface.
candle, water pond and cushions. 2003

At the initial stage of the gallery installation, two more sets of arches on both sides of the centrepiece were created. Through discussions with professional artists and colleagues, it was then suggested that three sets of arches might be conceived as a strong theatrical element being more ritualistic than contemplative. As a result, it was decided to minimize the surroundings by eliminating two panels. Only the centre arch was left standing; the piece was brought into dark space to highlight the presence of candle and its reflection, and, in so doing, creating a calmer, more meditative atmosphere.

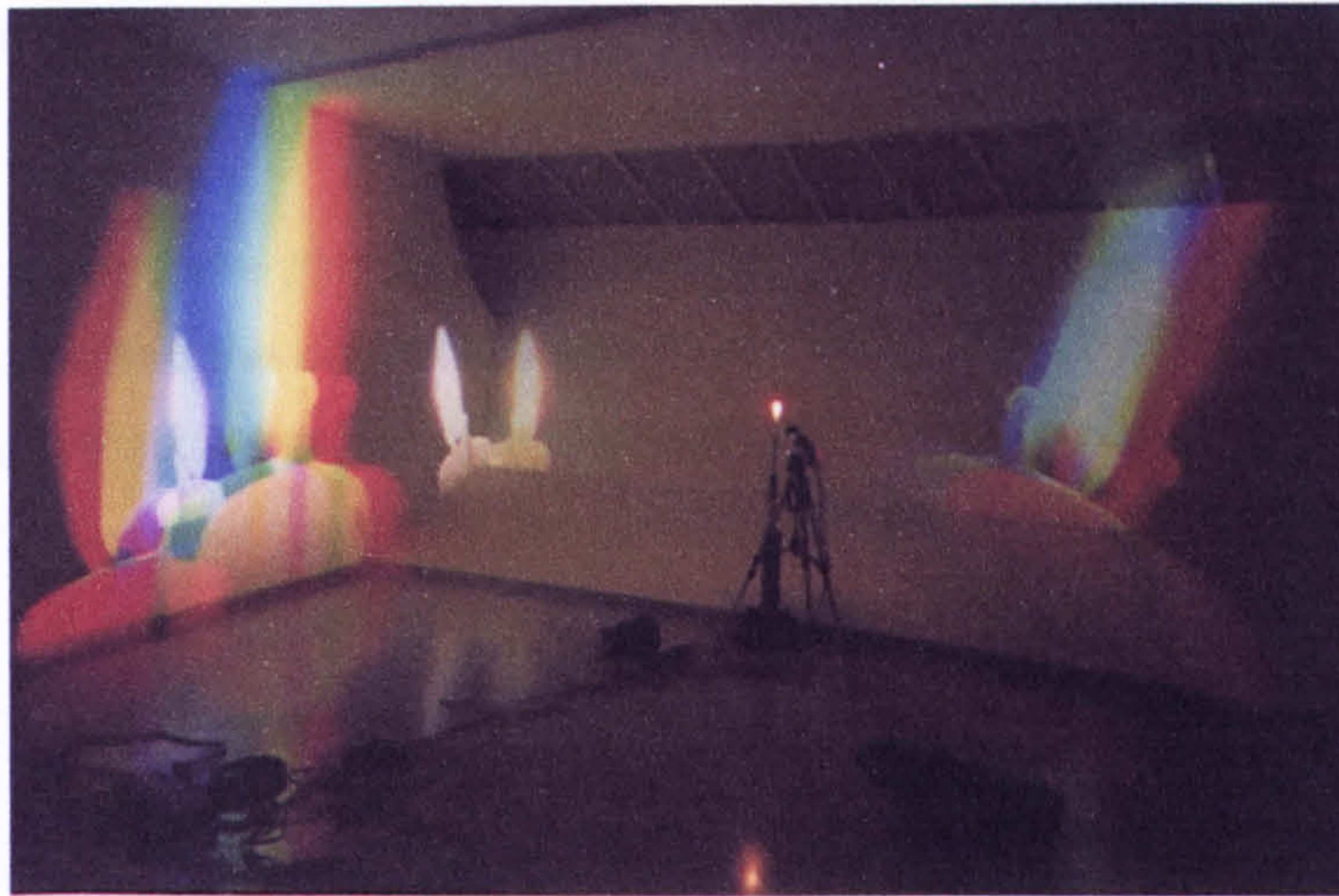


Fig. V-6 Nam June Paik <One Candle>
Whitney Museum of American Art, 2000

The collaborations with the video artist, Nam June Paik, in several projects led me to explore the symbol of traditional art to meet an icon of high technology in a space. Paik's *One Candle*⁶⁹, a video installation with candle and video projectors had the direct influence on this work. I agree with the art critic, Thalia Vrachopoulos, who defines the work as an installation of space composition and meditative nature:

Jin has redefined the use of fresco in *Reflection of Time*, 2003 with which she's once again broken new ground. The kernel of Jin's strategy began while in conversation with Nam June Paik when discussing using video in her work. The two artists had collaborated before on large public projects with Jin doing the fresco and Paik the video. *Reflection of Time* is the culmination of Jin's desire to combine an ancient ubiquitous art form such as fresco with video that she digitises into DVD format. *Reflection of Time* is a shrine-like environment with a Gothic lancet window form, another lancet of black Plexiglas on the floor

⁶⁹ <The One Candle> 1988 is very simple piece of work. The candle flame is captured by a video camera and projected in six different video projectors on the wall and ceiling. The colours are very delicate and beautiful.

containing water, a candle, and a projector that projects continuous loops of alternating images of reflective watery pools and a candle flame.

The dynamic interplay between the positive negative spaces, the solids and voids and the blacks and whites stands in stark contrast with the meditative quality of the spatial construction resulting in a multi-layered complex installation. While the candles and the watery surfaces are both real and projected the lancets are both solid and cut-out revealing interior and exterior.

The solid lancet on the left contains a cut-out window representative of the numinous and the Taoist void, which is simultaneously full. Even the interstices between the solids/voids, dark/lights and the flickering light reflections all combine in a work of extreme delicacy and splendour. The clean monochrome surfaces in their abstraction are further enriched with the viewer's perceptions while the play of surface textures due to the fresco/video media combination adds complexity. The artist reconfigures our sensibilities because it redefines fresco offering us a new perspective on a timeless art medium.⁷⁰

Folding Screens

The most successful thematic in the folding-screen genre is the landscape. The particular way that the folding-screen support is placed upright in a space brings out the mountains and rivers of a natural panorama. Throughout centuries, the theme has been expanded greatly. For example, in Japan, painters of folding screens have chosen themes as diverse as mulberry-paper fans, kimonos, and scenes taken from novels. Eventually, folding-screen painters in Asia composed their subjects with the intention of exporting them to the West.⁷¹ Traditionally,

⁷⁰ Thalia Vrachopoulos, 'Youngsun Jin: A New Discourse Between Fresco and New Media', *Berliner Kunst International* Edition Vol.2 no 6-8/*NYArts Magazine*, June, 2003

⁷¹ The basic function of early screens was to ward off unwelcome drafts, a fact that is

the folding screen is composed of an even number of panels, from two to as many as six, twelve, or more.

V.2.2 *In the Beginning . . . The Voice of Zero*

This work symbolises the first words of the Bible, 'In the beginning'. The Biblical beginning is the alpha and the omega, which is both the beginning and the end of the concept of time.

Time is composed of numbers representing mathematical concepts, yet, for most of the time, instead of reading time as a mathematical construct, we see it philosophically, as the history of existence. The nurturing of life occurs in time, but we find it difficult to believe that this nurturing is the evolution of numbers.

Time is the source of this evolution. Time is the subject of existence. It is written in the Bible: 'In the beginning God created the heavens and the earth'. Before the creation of the heavens and the earth, then, there was only God, and in the beginning the space between the existence of God and the creative act was zero. As with 'In the beginning', the beginning of time was God. Time, then, is with God. Thus, God and time are similar entities.

obvious from its Korean name, *byung-pung* (prevent wind), in French, *paravent*, and the Italian equivalent, *paravento*. See *Decorative Folding Screens* by Janet Adams, The Viking Press, New York, 1982, p.8.

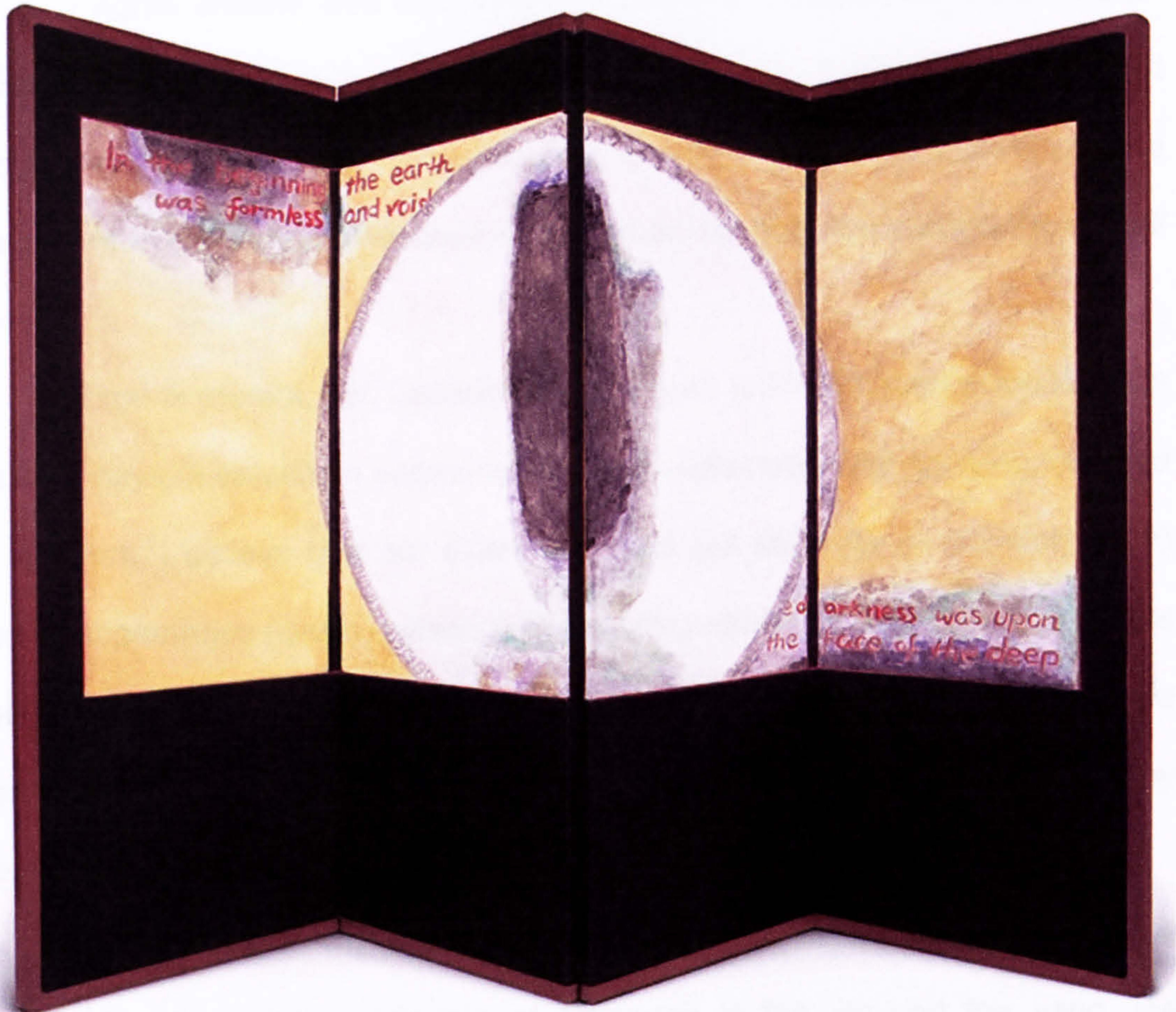


Fig. V-7 <In the Beginning> fresco folding screen, 160(H) x 220cm(W), 2002

In the Far East, instead of using the word *beginning* as a biblical absolute, the word used is *taegeuk*, which means the *yin* and the *yang*: *tae*, or the *yin*, means 'pea', and *geuk*, or the *yang*, means 'between the two'. When you peel off the skin of a pea, you see two halves. The beginning of the absolute is not one, but the union of the two halves of a pea seem to become one, which is diversely described as duality, rationality, or *logos*.

The Bible says: 'Let us make man in our image, after our likeness'. In this verse, God creates man, so God employs himself as the plural 'us' and 'our'. 'In the beginning' presents a world that is both like a gigantic pea and a union of numbers. It is like a space of life shaped like a globe or a sphere.

I agree entirely with what Stephen Hawking writes in his book, *A Brief History of Time*, that time is an existential existence. If time is existence, it should have a physical beginning and ending, like life itself, and it should have a movement that suggests the essence of existence, the place where time itself exists.

Time is eternal, yet, because it possesses unlimited compositional units such as days, it unfolds in segments that are explainable. By applying this idea to my work, I believe that our existence plays out eternally as creation (birth) and disappearance (death), which are segments similar to the cycle of darkness and light, night and day. These thoughts are derived from the teachings of a Korean thinker, Jin Jin Hwa, which have formed a very important impetus to my life and work.⁷²

Accordingly, in my work, the narrative and artistic form of time has a formula like the relative principle of existence in the *yin* and the *yang*, the subject and the object, and so on. My work presents the harmonious action of the *yin* and the *yang* as a suggestive beginning of time or the 'In the beginning' concept. In the circle, there is a process of beginning and end implying the union of two immense halves.

It is possible that the *yin* and the *yang* are too theoretical, that they are inappropriate to visual gesture. From the outset I have been preoccupied with this problem. I came to the conclusion that, if the allegory that time suggests is

⁷² The book addresses philosophical and scientific answers to various questions about Christianity and other religions. What most attracted me about this book is its unquestionable clarity and unbridled way of thinking. Based on rationality and reason, Jin provides a lucid interpretation of the Bible's different symbols and metaphors, while freely moving back and forth between Eastern and Western philosophies. Jin Jin Hwa, *Iryocknon*, Living Beings Dan-hoe, Seoul, 1989.

ambiguous, so too would be the essence of existence, which means that my research direction would also be ambiguous. Chapter One, Verse One of Genesis states: 'In the beginning the earth was formless and void; and the darkness was upon the face of the deep'. I sgraffitoed⁷³ those verses in the upper left-hand corner and the lower right-hand corner of the four-panel folding screen and accentuated them with cinnabar colour. To express the fire that opens the verse, 'In the beginning', a fire that is energy and the fourth element of the universe, I used backlit black ink. It underscores the burning image, while around the flame shadows are expressed in bright fractured colours.



Fig V-8, 9 <In the Beginning> fresco folding screen, detail

Here, the image of the real flame is the *yang*, while the shadows are the *yin*. The work is to be all harmony. All shocks are banished. The upper left of the 'In the Beginning' section emphasises the meaning by enlarging the base of the candle, while the lower right-hand corner of the section that I call 'Face of the Deep' focuses on the culminating tip of the candle flame.

⁷³ Refer the technique in Definition of Key Terms and Technical Notes, p.133.

All around the equator of the sphere I inscribed numbers beginning with zero and closing the circle with ninety-nine. Even the universe's dust is filled with numbers. Before their appearance, there was formlessness, the state in which the number did not exist. Formlessness is not disorder, but a state in



which the number one has not existed. Formlessness, then, is like zero. The slight cracks in the beehive shapes in the fresco in the centre of the inside of the sphere is similar to an egg whose chick is about to break out.

This work is a fresco in harmony with a folding screen. For me, it expresses intense yet suppressed feelings. Its yellow background represents the earth, the origin of all living things. By arranging essential signs such as earth and fire, the *yin* and the *yang*, circle and number, the essential character of the image expresses itself.

V.2.3 *Fresco Astromics: Map*

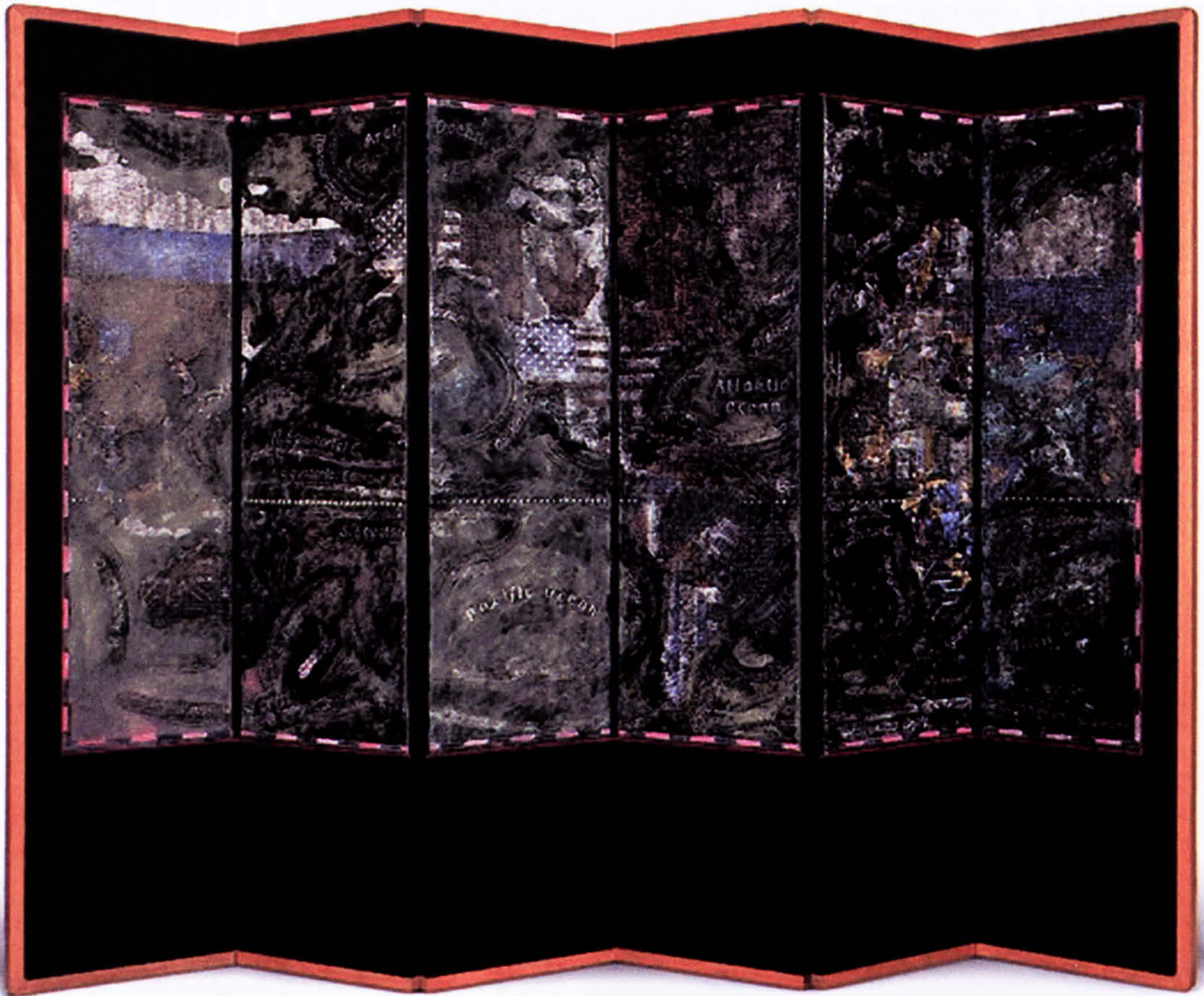


Fig. V-12 <Fresco Astronmics: Map>
6-panel folding screen, 220(H) x 360cm(W), 2002

On six folding-screen panels I composed a new map of the world by rearranging the traditional layout. In my redesigned map, I wanted to show oceans undivided so as to display currents and wind. Each time we look at a map, we place ourselves in the middle by first realising where we are and then determining the relationship to us of other parts of it. In my map, everyone is at the centre of the planet, which means that my vantage point is my own position. My position always has a meaning that excludes the other, so the expression of

identity is an exclusion from oneself. The word 'globalism' is also an exclusion, defined by blood, race, and geography.

The work's concept is not a map as the sense of a country, but as a flag in which the symbol of a country is implicit. By not defining the boundary of a country by its traditional demarcation lines, but describing the flags of each country, I have tried to mute the language of each nation, transform each one into an image, a conceptualised one.

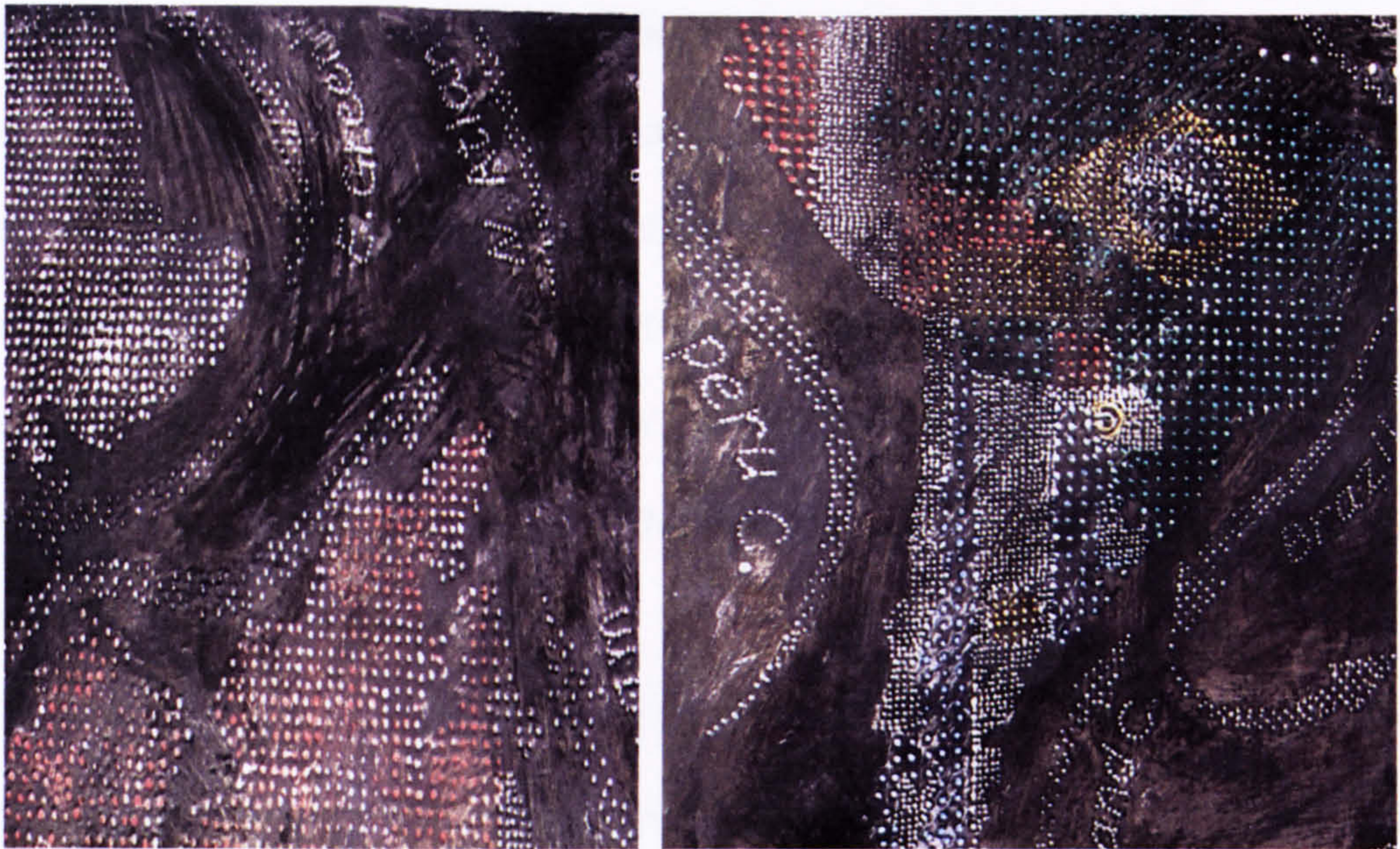


Fig. V-13, 14 <Fresco Astronomics: Map> 6-panel folding screen, 2002 detail.

I call this work, which has a communicative structure that describes dots, a 'dot communication' because the form and the colour are created by dots throughout the entire surface of the work. I eliminated common flag colours such as red, blue, yellow, and black, and as a rule maintained the same distance between dots. For instance, to represent white, I used an interval of three millimetres, between dots for red five millimeters, for green and blue

seven millimetres, and for black it is nine millimeters.

When the concept of frontiers between countries is demolished, the map seems to become more spacious. When useless ideology is eliminated, humankind's face would become warmer.

V.2.4 Voice of Zero: Voice of Time

In Ancient Greek philosophy, logic and geometry, the definition of zero, played a role in concepts such as 'to have not', 'nothingness', 'emptiness', 'disappearance' and 'negation'. Twentieth-century mathematics, however, destroyed the need to reflect on zero and discovered a negative parameter and a concept that generated numbers rather than their absence. This conceptual breakthrough influenced existentialist thought dramatically, transforming the concept of 'to have not' into 'to have', which allowed the meaning of zero to transcend mathematics and become the key that opened the door between the spiritual world and the visual world.

The visual zero did not need to be explicitly represented by paint or obliquely signalled by its absence. The artists of the Renaissance discovered the visual zero for themselves in the fifteenth century and it became the centrepiece of a new representation of the world that allowed an infinite number of manifestations.⁷⁴ *The Voice of Zero* is the title of a fresco in which the number zero is united with sound. The problem is to give meaning and feeling to a conceptual zero and to sound where, normally, there is none. In its dictionary sense, zero means 'no number'. Zero belongs to nothingness; it is the limit of

⁷⁴ John D. Barrow, *The Book of Nothing*, Pantheon Books, New York, 2000 p.6.

theoretical and conceptual knowledge. Today, however, zero is proven to be at the origin of numbers in both physics and mathematics. The number one comes from zero, and 10,000 is generated from a reunion of zeros. All numbers evolve from zero: it is not only the origin of all numbers but the origin of the visual and existential world.

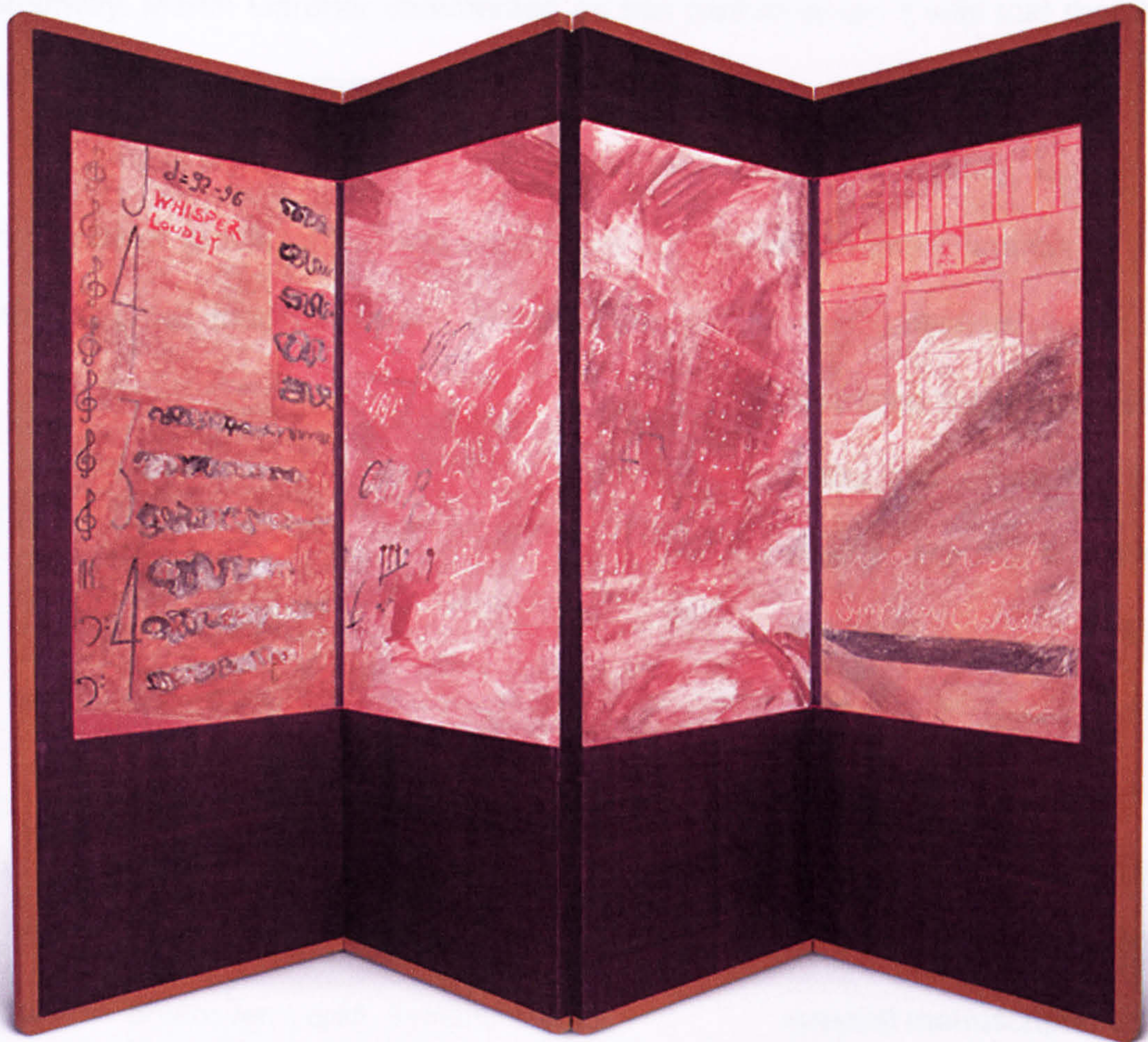


Fig. V-15 <Voice of Zero> 4-panel fresco folding screen, 220(H) x 280cm(W), 2002.

Sound is the voice and the communicative path of the number. If we could express the colours of our culture in a 'voice', tens of thousands of sounds would be heard. Theoretically, the word 'sound' is the same as the

number 'zero': they both approach nothingness. Musicians have searched for nothingness or silence. John Cage's musical composition 4'33" – enthusiastically encored in some concert halls – consists of 4 minutes and 33 seconds of unbroken silence, rendered by a skilled pianist wearing evening dress and seated motionless on the piano stool in front of an operational Steinway. Martin Gardner commented on this performance: 'I was told that it is John Cage's finest composition.'⁷⁵

In this work, in which an abstract subject becomes figurative, I combined the musical motifs of several composers to express nature's sounds in the musical notes that moved me. For example, I parodied composers' works by



Fig. V-16. Beethoven's draft, Symphony no.5.

changing them into visual noise resembling the first draft of Beethoven's Fifth Symphony, Dvořák's 'Sketch of the Eighth Symphony' with manuscripts of the old hymn and ancient Asian musical manuscripts.

In creating this folding screen, one discovery is the object's changing zigzag according to the way it is installed. Its changing shape creates different perspectives, each one with an unexpected aspect that recomposes the painting. In the third panel, the musical note disappears, and the flat surface

⁷⁵ M. Gardner, *Mathematical Magic Show*, Penguin, London (1999), p.264.

that returns at eye level in the fourth is a pleasure that the rules of the folding screen alone permit. One can expect a particular effect there, where one maintains a natural distance with nature.

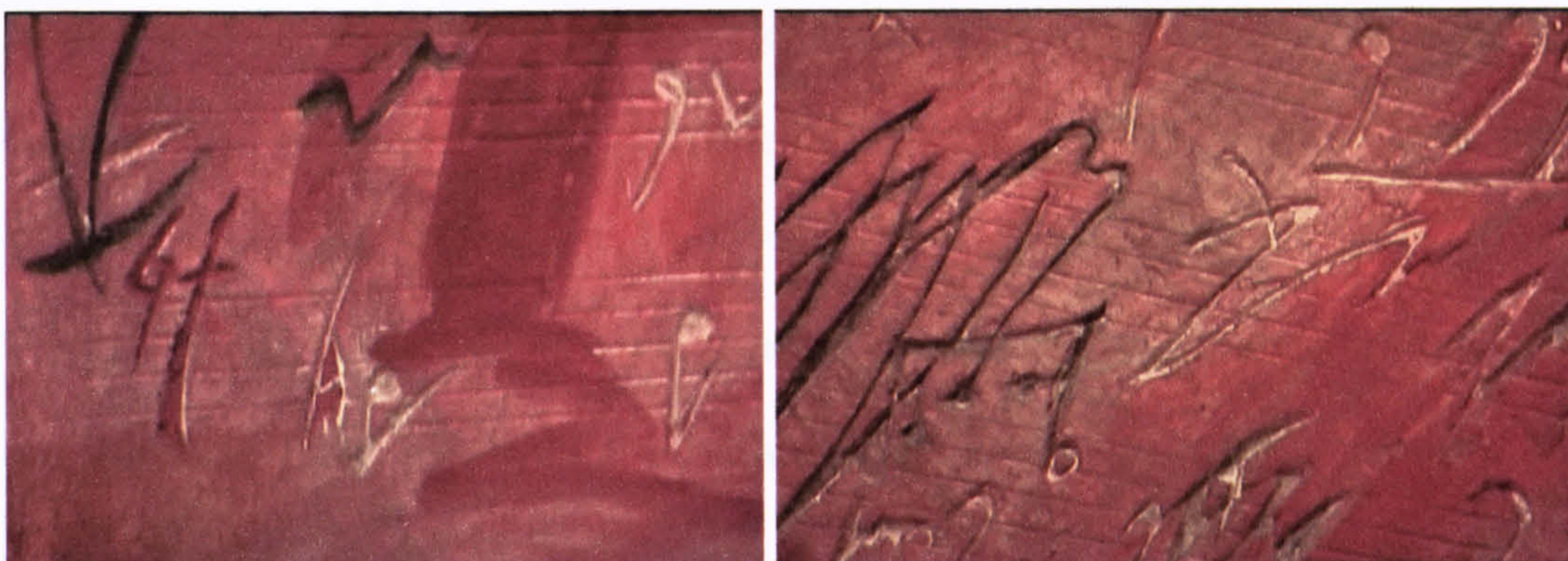


Fig. V-17, 18 <Voice of Zero> 4-panel fresco folding screen, 2002, detail.

The abstract brushstroke running along the work's entire surface is based on the landscape genre that I had been painting, with the ordered notes that evoke the sounds of nature appearing as an element of the landscape. The intention of having a landscape quality is to introduce a powerful rhythm into the work in calligraphic style. Garrit Henry, the art critic for *Art News*,⁷⁶ commented that the work is a 'big manic abstraction that made a gargantuan colour calligraphy of the gestural style..' and Andrea Mikotajuk wrote: 'Her work displays sensitivity in a personal calligraphy on screens. The delicate use of colour in energetic brush strokes is very sensual. The colours stream across the canvas in a lively, flowing style.'⁷⁷

These brushstrokes have been transformed into winds passing through

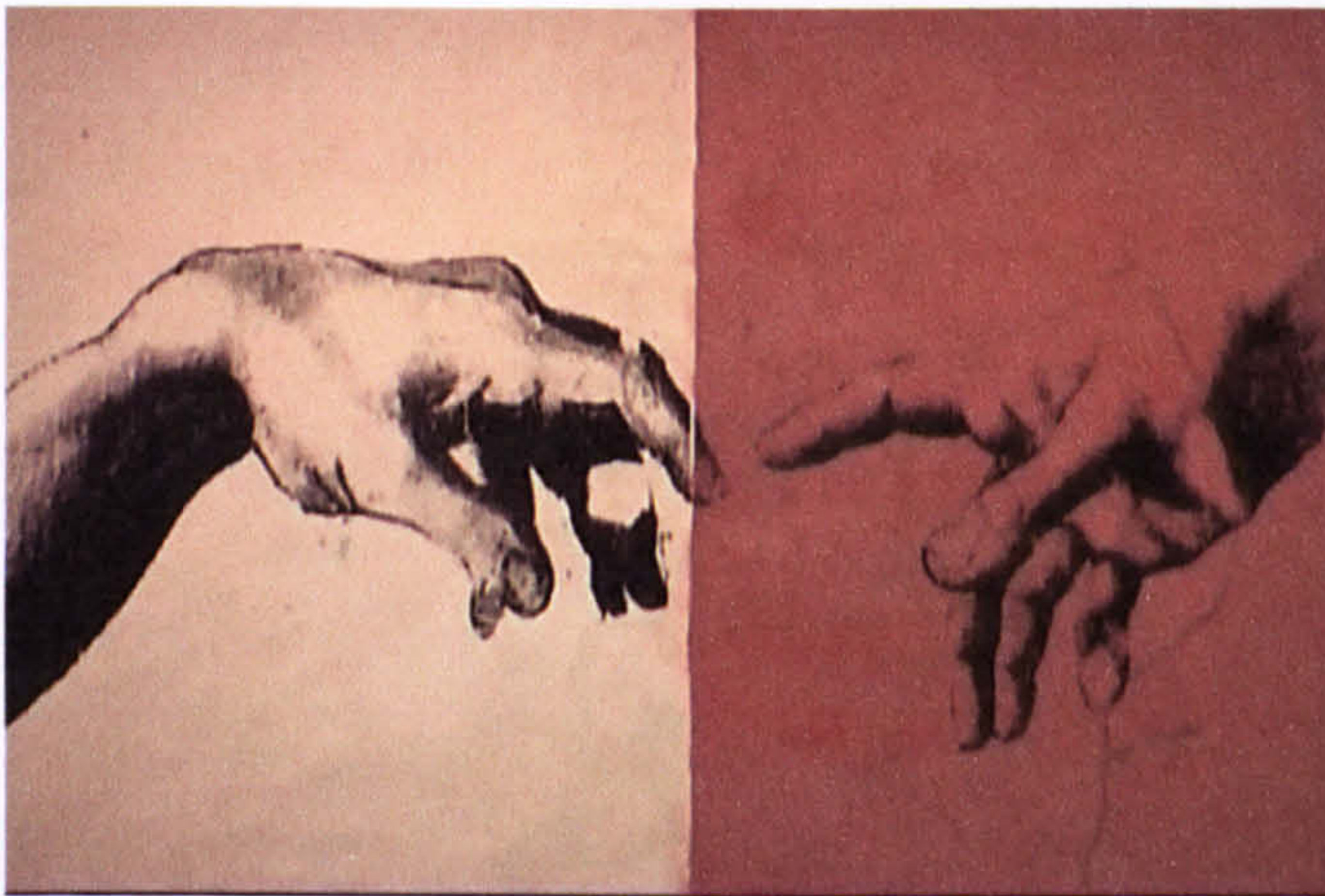
⁷⁶ Garrit Henry, *Art News*, Nov.1972, p.72.

⁷⁷ Andrea Mikotajuk, *Arts Magazine*, Nov.1972, p.84.

trees with foliage in abundance, creating a scene in which negative and positive space, while woven together, maintain their tension.

V.2.5 *Fresco History*

In this work, *Fresco History*, I wanted to symbolise the history of fresco and present it as an important art genre, one that is as spectacular as any other in the quality and quantity of works that have been conserved for centuries in both East and West. It is noteworthy that many art history documents, predating the twentieth century, deal with fresco and that discourses about contemporary fresco inevitably touch on its history.



The images I chose for *Fresco History* are either arbitrary or aimed at provoking a response from the spectator. In *Fresco History* there are thirty images -- most of them familiar -- that I have copied

Fig.V-19 <Fresco History> silkscreen on fresco, 180 x 120cm, 1998, detail

onto thirty fresco panels, six of which are shown in this exhibition: the famous detail of God's finger having just touched Adam's in Michelangelo's scene of the Creation on the Sistine Chapel ceiling; the close-up of Christ in Heaven in Michelangelo's *Last Judgment*, also in the Sistine Chapel; Masaccio's *Adam and Eve expelled from Paradise*; traditional Egyptian and Greek scenes; and a

detail from a sacred Byzantine painting; and so on.



Fig.IV-20 <Fresco History> silkscreen on fresco, 180 x 120cm, 1998.

A diverse range of controversies - not necessarily all artistic – surrounding Michelangelo's paintings became part of my own themes. For example, the topics of God as a human being, as a divine being, or as portrayed in literature, and the existential validity of all beings present within and in-between the different interpretations of God are linked to the subject matter of

many of my pieces. My interest has been in a mixture of religious, scientific, and philosophic issues in relation with art. My works, therefore, are a manifestation of these interests in the form of art, sometimes combined with the cosmic view based on Eastern philosophy, or sometimes merged with modifications of the mathematical system. These thoughts and artistic expressions of mine have progressed gradually through repetitions, and even subversions, because art has to express itself through a limited number of images.

In practising art, I do not intend to prove God's existence, or do I intend to spark any kind of controversy between humanism and the Divinity. I do not agree either with the classical notion that art is a mere historic record with imagination or with the modern belief that it is simply a representation of the artist's subjective interpretation. Rather, I wish to uphold the view that art is a discussion field for mutual communication between the artist (the producer) and the viewer (the consumer), and I believe that a certain degree of expressive diversity should be accepted in order to fulfill such an objective. This is why I accept the critique that my work is conceptual and symbolic, diverse enough to enhance fresco multiples. If one takes a wider perspective, the boundaries of media gradually disappear.⁷⁸

My intention was to speak in a language familiar to the spectator, to create a meaningful history of fresco through a mirror of my own. I wanted the

⁷⁸ In some critical essays on my work, the writers refer to me as a 'conceptual artist'. This term, however, is used in a completely different context from the term 'Conceptual Art' that appeared in the 1970s. See Yongwoo Lee's essay, *Jin YoungSun's Mathematical Inspiration*, Eleanor Heartney's *Circles of Time in the Work of Jin YoungSun*, and Kim Bokyoung's 'Sign and Symbol, A Perspective of Life' in *FRESCO: That Beautiful Rediscovery*, Ellen Kim Murphy Gallery in Santa Monica, California and Seoul, 1999.

spectator to express more interest in familiar images than in contemporary art and to express a confused interest in masterpieces whose dimensions have been dramatically reduced and deformed by their presentation in an exhibition of contemporary fresco.

V.2.6 Site of Time

Like the sheltered, fertile valley,
the meditative mind is still,
yet retains its energy.

Since both energy and stillness,
of themselves, do not have form,
it is not through the senses
that they may be found,
nor understood by intellect alone,
although, in nature, both abound.

In the meditative state,
the mind ceases to differentiate
between existences,
and that which may or may not be.
It leaves them well alone,
for they exist,
not differentiated, but as one,
within the meditative mind.⁷⁹

Place proves the existence of time. Conversely, time proves the presence of place. Visually, this definition of place and time inspired me to make a globe of the planet where life itself exists, from all appearances, the most vital.

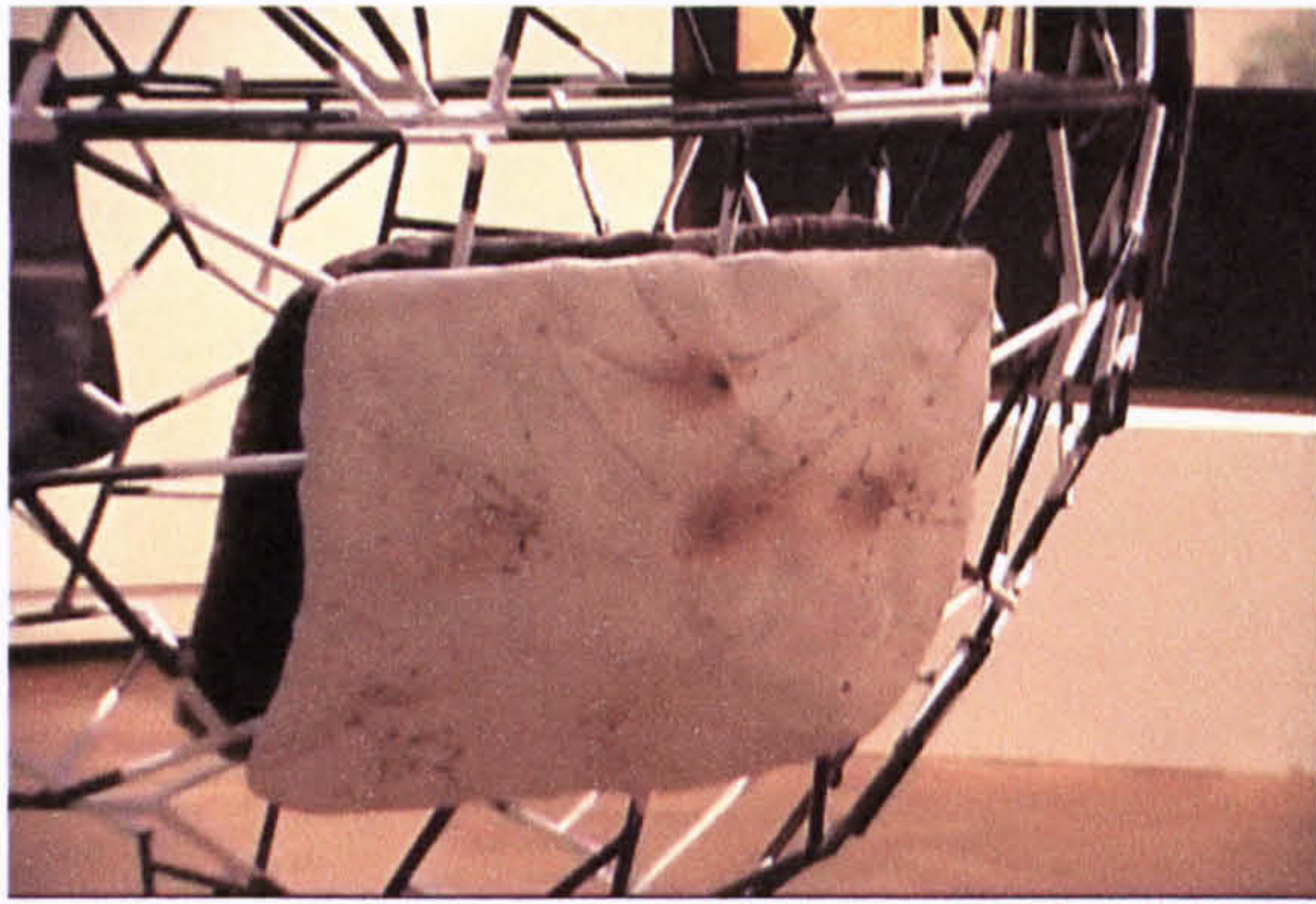
⁷⁹ Tao Te Ching, *COMPLETION*, website <Chinese Philosophy>



Fig. V-21 <Site of Time> frescoed panels on iron-welded sphere, Ø160cm, 1997

Since the mid-nineties I have been working with big and small spheres made of iron bars that support fresco panels. *Site of Time* is based on a simple process. Firstly, I created a sphere out of an iron structure, and then I fixed the fresco panels onto it. The execution of the work is delicate because fresco is usually executed on a flat surface, and any divergence from this presents certain dangers.

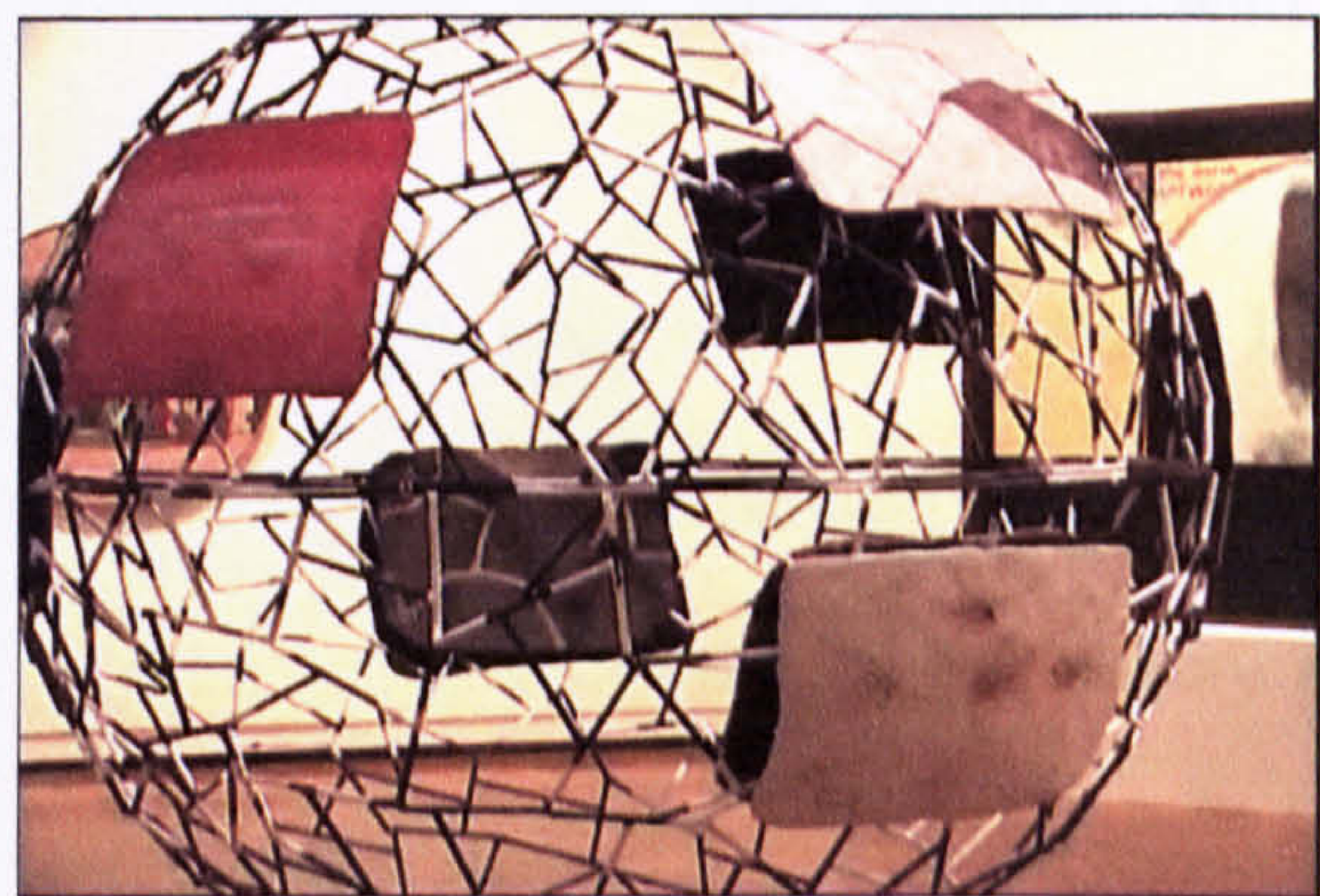
Instead of presenting a planet where life at its most vital expresses itself in the interaction of time and space, where the *yin* and the *yang* confront one another



in concrete signs, I began to express abstractions that extend the distance between spaces. I also chose to paint on fresco panels attached to large-scale globes that resemble the earth.

I built a circle with iron rods welded together, and attached a number of fresco panels on the surface. Some panels were welded to represent fire in its natural light, while some remained bare to emphasise their natural colours with natural pigments only. A companion fresco of exactly the same size was constructed, the result being a twin piece that shows a cosmos whose circular planets are made up of male (yang) and female (yin) beings, both of whom are needed to complete the universe.

My exploration of the sense of time started a long time ago and one of the mostly frequently found motifs in my work is numbers. My keen interest in numerology derives from *Iryocknon*⁸⁰ and *Voice of Zero*⁸¹,



books written by a Korean ideologue, Jin Jin Hwa. These books proffer a

⁸⁰ Jin Jin Hwa, *Iryockron*, Living Beings Dan-hoe, Seoul, 1989.

⁸¹ Jin Jin Hwa, *Voice of Zero*, 'Economise Your Times', Nanam Publication, Seoul, 1989, p.79. In this book, the author explains that time is a mere symbolic representation of numbers, and that the concept of time in this vast universe has been adjusted to suit the circumstances of each who needs such definition of time. He concludes that the true master of time is the natural law, or the universal principle.

mathematical solution to prove the existence of all things, a standpoint that can be likened to a macro view of the world that attempts to explain the provenance of all that exists.

In contrast, *Iryock* expounds on the essence of O, and emphasises the fact that numbers cannot move even a step forward without the evolution of O. For instance, 10 does not consist only of 1 - it needs both 1 and 0; 100 million can be formed only with the combination of 1 and eight O's. This is to say that O is the mother of all numbers and the necessary and fulfilling condition for the formation of numbers. Here, O is the symbolic number of all beings and the root of all things. O is not a non-entity but an actual existence, the one source that makes the presence of all other numbers possible. The origin of all numbers, O is shaped after a circle. The significance of its form can be found in the fact that the earth is round, the sun is round, all the planets in the universe are round, and that even cells are round. In Jin's book, O is identified with an absolute number and the absolute being: God.

It suggests that the traces of this, long lost in history, have been recovered and are now restored on earth. The once lost and now restored traces of time apparently have mathematical connotations. Time, history and images do no more than represent the meeting of the past and present.

I try to arrange and channel past and present in a mathematical sequence, which further elaborates on the theme of time and *yin* and *yang*. One is a frescoed plaster panel dotted with marks from welded iron pieced together in an open latticework. The iron rods are black and white, making reference again to the merging of opposites. Taken together, the sphere amplifies this

statement. The frescoed panels are solid and closed on the hollow and open sphere rods. On this work, Thomas Kass remarked that:

Upon viewing the works there is the feeling that these works are fragments preserved from another age. These fragments allude to an unknown architecture, and civilization that remains mostly hidden. Perhaps the most intriguing aspect of these works is the potential the viewer has to make conjectures; to fill in the missing pieces of the puzzle. One can build a place, with the fragments at hand, here a quiet and humane ambience can still be perceived.⁸²

The initial response by experts was curiosity at the fact that frescoes were created not on fixtures such as walls but on portable media. Discussions ensued about whether fresco's media and methods can enter the realm of contemporary art. Heartney commented in her essay: 'Jin has succeeded in making the unique characteristics of fresco material into her own in the space of modern art.'⁸³

V.2.7 *Fresco TV: Between Heaven and Earth*

When one thinks about God's creation from the perspective of physics and astronomy, though, heaven designates planets among planets and earth designates the surface of each planet. The meaning, then, of the romantic notion of heaven in literature and landscape depicting mountains and streams is a rhetorical mistake. For centuries we have considered heaven and earth more

⁸² Thomas Kass, 'Scenes from An Idyllic World: The Paintings of Jin YoungSun' in *FRESCO that beautiful rediscovery*, Ellen Kim Murphy Gallery, Seoul and Santa Monica, Ca. USA, 1999, p.83.

⁸³ Eleanor Heartney, 'Circles of Time in the Work of Jin YoungSun', *Fresco That Beautiful Rediscovery*, Ellen Kim Murphy Gallery, Santa Monica and Seoul, 1999, p. 8-13.

from a literary standpoint than from a scientific. When our feet leave the ground but one inch, our existence exists in the air of the heavens. What we aspire to, however, is heaven high above the earth, not in the air, not reachable. Humankind aspires to what it cannot touch; it desires information that floats above the air it breathes.

We are in the midst of an information and technology revolution, where information floats between heaven and earth. Although the information highway is invisible, we all see the screen where information comes and goes. The primary mechanisms for producing information are the media that create images with television at its centre. Television, according to the media theoretician, Hans Magnus Enzensberger, 'intoxicates the public with its information',⁸⁴ and is, according to the television producer, Michael Shamberg, who was active in the nineteen-seventies, 'an ecological tool, at the frontier of what is healthy and unhealthy'⁸⁵ that, more than any other medium, makes the public feel its power.

I wanted to approach this medium and the problem of the omnipotence of information that exists between heaven and earth through fresco. One of fresco's particularities is that it is a powerful medium for different groups of people. Television, as a symbol of information offered up by fresco is not really

⁸⁴ Hans Magnus Enzensberger, 'Constituents of a Theory of the Media', *New Left Review*, No 64, 1970, pp.13-36. For the first time in history the media makes possible mass participation in a productive process at once social and socialised, a participation whose practical means are in the hands of the masses themselves.

⁸⁵ Michael Shamberg, *Media America: Guerrilla Television*, Holt Reinhart and Winston, New York, 1971. p.32. 'Technologies which are not biologically sound, threaten our survival as a species. Information Technologies, because they condition the way we receive and respond to stimulus, are particularly crucial. You can't expect a culture to function with ecological sanity unless its information structures reflect that bias.'

television. It is more like a painting and a de-painting, an information medium and a concept of information in which image and word are not clear.

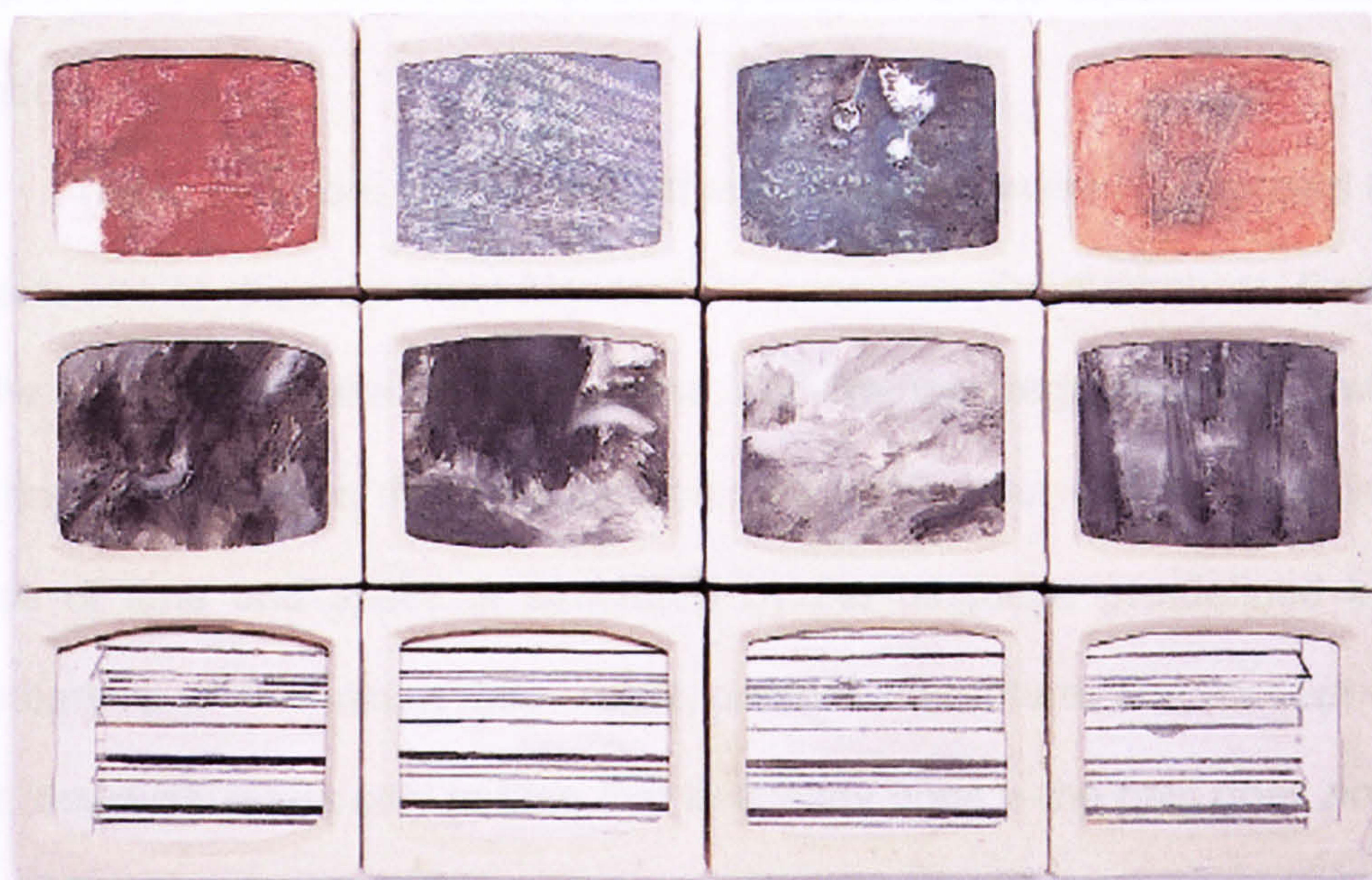


Fig. V-24 <Light and Time: Between Heaven and Earth>
12 TV-shape frescoes, each 60 x 45 cm, 1998.

Eastern ideas about time are interesting as they provide the engine to overturn the concept of history as we know it. There is the widely known statement in the first verse of Chapter One of Genesis: 'God created the heaven and earth.' What is less well known is the fact that this biblical background is similarly implied in Chinese characters. According to *The Thousand Chinese Characters*⁸⁶, these start in sequential order: the sky, the land, and the colours black, and yellow. In other words, this order of the creation of the world is similar to that stated in the Bible. 'And God creates heavens and earth, earth is dark

⁸⁶ There are over 80,000 Chinese characters but most of them are seldom used today. For basic reading and writing, *The Thousand Characters* is the beginner's fundamental text, which covers about 90% of the usage of the Chinese language.

and empty...' is an old philosophical ideological cliché used to describe spoken and written words in the East. Moreover, heaven and earth are a part of the physical view of the world and of the explanation of the essence of time and numbers.

The above work is entitled *Light and Time – between Heaven and Earth*. My aim was to raise the most fundamental questions about numbers, time, and all the beings that make up the universe. For example, regarding time, I wanted to bring out questions that touched upon the basics: our concept of time. Our sense of time and space is structured by the language pre-defined by our membership of the human race - past, present, and future. The concept of the past, however, refers only to time that is already gone – the past does not now exist. The past has already evolved into the present, and the present is the only actuality.

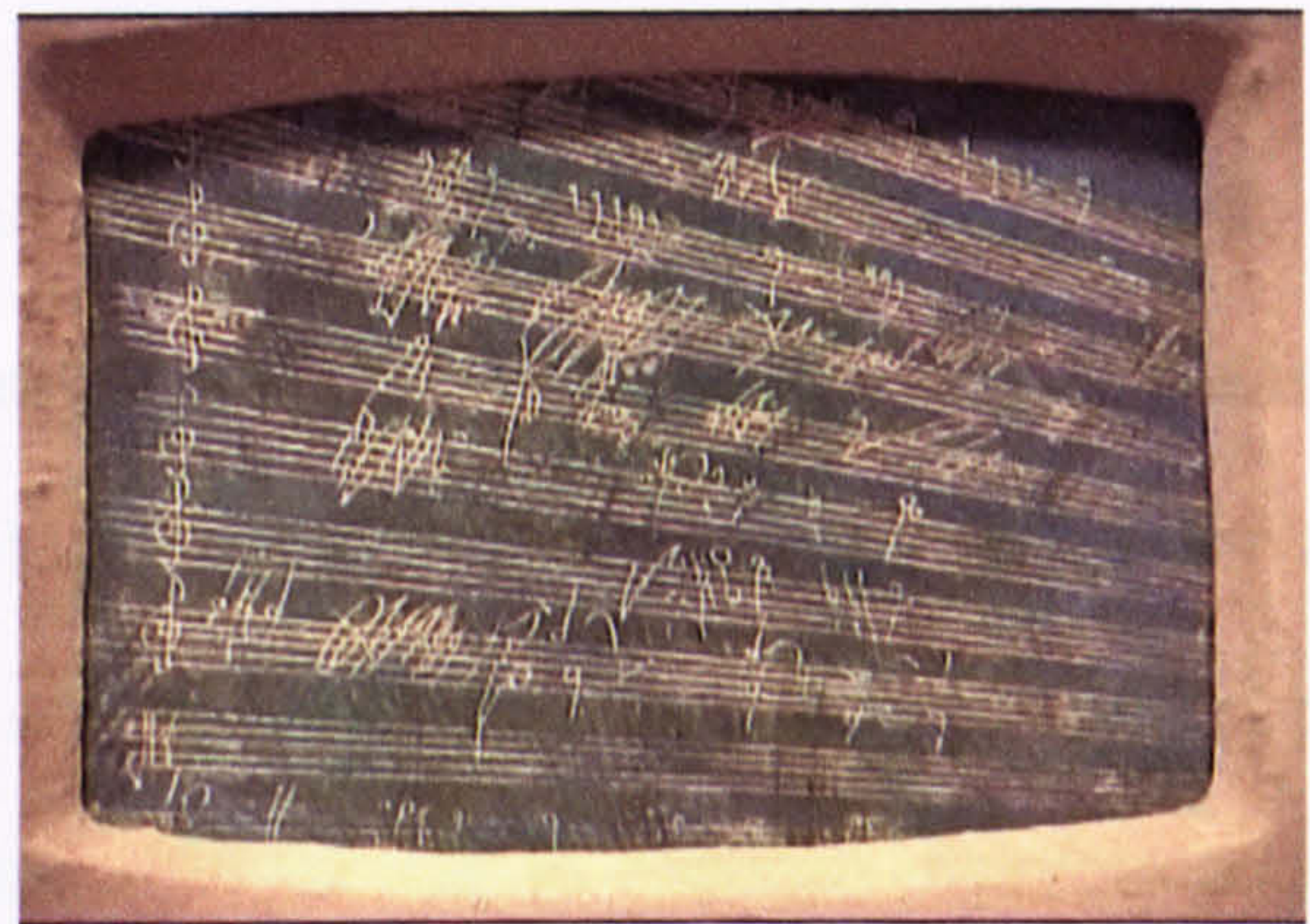


Fig. V-25, 26 <Light and Time: Between Heaven and Earth>
12 TV-shape frescoes, each 60 x 45 cm, 1998. detail

The same holds for the future. The future is only a name for the time and space that will come to us. No 'future' exists in a strict sense of the word – there is only a continuation of the present. Does this mean that the present exists? What we call "the present" is only the time that is relatively close to us

now – the moment that we call it the present, it is already gone. This leads to the conclusion that the only valid concept of time is that it exists – the concept of time divided up into the past, present, and future is problematic to say the least.

I created twelve sculptural blocks shaped like televisions in three rows, four blocks to a row, one row hung on top of the other. In the top row, the first monitor presents a map of the world, the second and third musical notes, the fourth the conductor Myung-whun Chung. In the middle row, the four monitors are an abstract landscape in black and white. In the bottom row, I painted lines in different thickness. My intention was to express, in three parts, negative and positive elements in the function of television, especially the changes it has brought about as a global communications system, the reversal of the concept of nations, situations that have contributed greatly to the changes in the visual arts.

Between Heaven and Earth accentuates or divides television's role as a representation of the symmetry and power of a nation and people, the organiser and the organised, the producer and the consumer. Television transmits numerous messages, many of which are seductive and announce the period of media dictatorship predicted by George Orwell, not to mention disinformation and advertising. To believe Nam June Paik, television saves the lives of eight million people a year by defusing information that often inhibits dictators of underdeveloped countries from assassinating their enemies with total impunity. Between heaven and earth life goes on. Earth is a background for a heaven where one breathes and venerates. Between heaven and earth there is

information of paramount value and information that is worthless. Fresco is a medium that may open a discourse on this idea.

V.2.8 *Fresco Circle*

Until now, my work has primarily been concerned with the multiple changes in fresco as a medium and a genre. *Fresco Circle* is the first work that presents fresco with an object. The addition of an object to a fresco creates tension. Because we are used to seeing fresco as a traditional medium and we become anxious about the contact of the object and the pigment of the very particular fresco surface. By placing an alien object against the fresco itself could construe as a confrontation.

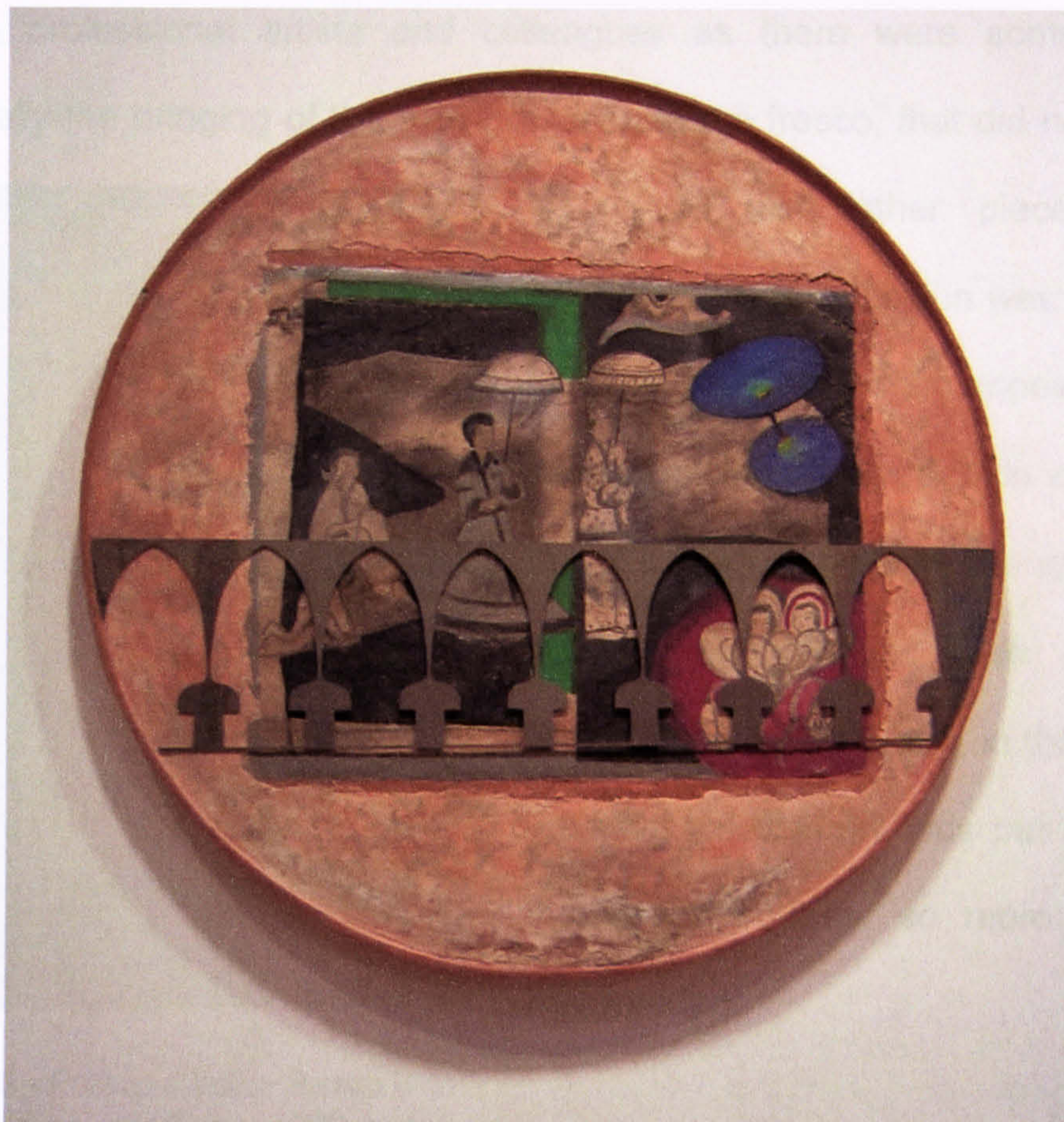


Fig. V-27 <Fresco Circle> fresco with iron ornament, Ø120cm, 1997

Fresco Circle is a circular work in which the object of a Korean mural painting from the fifth-century Koguryo Dynasty meets modern physics and the industrial society. In the work the two figures appearing in this composition of time and space are high-society individuals strolling under a parasol of the fifth century. And in this sixteen-hundred-year-old scene I have painted physics notations for the white holes and black holes postulated by Stephen Hawking. The object is an everyday zinc panel in the shape of an arch resembling those found in Western classical architecture. By combining it with the paintings, I have tried to evoke a balcony and bring the fifth century into contact with the present.

It has to be noted that there was a long discussion about the piece among professional artists and colleagues as there were some aspects, especially the bringing of the metal object into the fresco, that did not seem to



Fig. V-28 <Fresco Circle> fresco with iron ornament, Ø120cm, 1997, detail

work well with other pieces at the exhibition. The discussion was: the object was too arbitrary and the appearance was somewhat confusing; and in considering fresco's relationship with the architecture, fresco has always been done on architectural surface and, in this work, an architectural element was put in front on the fresco surface, so more statement was needed.

My argument was that fresco could be effectively coupled with an object by renewing the *trompe-l'oeil* technique that appeared often in architectural space and illusionism in Roman antiquity in applying metal pieces found in Greek icon paintings to highlight the halos. and by utilising the found objects that Pop Artist applied. Furthermore, it can also change the anachronistic perception that fresco is the traditional form of painting and enable it to become an art form of diverse media, employing a diverse range of new materials. As Howard Caygill mentioned in *art's break away from traditional imperatives*:⁸⁷ 'It is an effort to confront the concept of a traditional image through a reflection of aesthetically convincing art making.'

V.2.9 Mathematics of Time: Pyramid

I am beset by the profound religious and philosophical concerns, which, throughout my life, I have struggled to translate into visual form. These age-old shapes symbolise timeless stability and one of these speaks of our unfulfilled spiritual yearnings of a quest for the infinite and universal as it did thousands of years ago. It consists of a square base plate beneath a four-sided pyramid. The tip of the pyramid is fifty-three degrees from each corner, a measurement borrowed from that appertaining to the Egyptian pyramids, the form which has long fascinated me.

My experiments with fresco as a contemporary art have led me to create two different kinds of pyramids. One floats on water; the other is intended for

⁸⁷ Howard Caygill, *Aesthetics and the Obligation of Art, Thinking Art: Beyond Traditional Aesthetics*, eds. Andrew Benjamin and Peter Osborne, Institute of Contemporary Art, London, 1991, p.17.

indoor exhibition spaces. I conceived the floating pyramid to demonstrate that fresco can be a lightweight medium suited to installations in an outdoor body of water. The indoor pyramid's aim is to open a discussion on different subjects such as astronomy, religion, mythology, as well as its aura as a symbol of power. Although the motifs etched into each of the two kinds of fresco seem similar, their distinct environments, more than their visual similarities, determine the very different ways that they affect the spectator. And although the spectator may not be immediately interested in the etched motifs when the pyramid is floating on water, he or she, nevertheless, will be invited to take notice of its mathematical symbols, Arabic numbers, Chinese characters, and Sumerian and Egyptian hieroglyphics.



Fig. V-29 <Mathematics of Time: Pyramid>
fresco 240(H) x 180cm, 2003

This attitude is an essential transformation from the way in which the spectator looks at traditional fresco painted on the ceilings and walls of buildings. It deconstructs the idea that fresco is successful only as an element of an architectural environment. It supports my desire not only to consider indoor and outdoor environments but also to touch upon the painting aspect of fresco, not to mention the aura of the pyramid as a symbol of power.

It is, as Wendy Staebler pointed out, a 'virtually limitless range of decorative wall treatment, aided and abetted by technological advances which increase the diversity and quality control of medium products',⁸⁸ and experiments towards quality control.

I presented a four-sided pyramid as a sculpture for an interior exhibition space at the Lethaby Gallery. From base to pinnacle, each face is divided into four sections. The top two sections represent the movement of the stars found in mural paintings in the burial mounds of the fifth-century Koguryo Dynasty. The stars in the concave are sgraffitoed and the precious natural colours, Malachite, Rinman's Green, Cerulean Blue, and Lapislazuli are applied. The astronomical painting in the concave is sgraffitoed following the map created during the early Josun Dynasty (1392-1910); this is based on the original astronomical mural of the Koguryo period yet it maintains the stylistic aspect of a Josun sky. The original is considered the oldest painting in the world that maps the stars.

⁸⁸ Wendy Staebler, 'Something About A Wall', *Interiors*, Sept 1985, p.204.

In the bottom two sections I etched the numbers 4336, 4, and 14, in both ancient Egyptian and Sumerian. When translated into numbers of the Christian calendar, they become April 14, 2003, which I also etched into the work to symbolise when the pyramid, an object essentially and powerfully anchored in the earth, took to the air and travelled by plane to the exhibition space. As the Egyptians and Sumerians had not discovered zero, their number systems were too onerous to be used in the Gregorian calendar. Instead, I use them to



represent the Ancient Josun, this being the essential period in the foundation of Korea more than 2333 years earlier than the construction of the Gregorian Calendar, and why the year 2003 becomes April 14, 4336.

Fig. V-30 <Mathematics of Time: Pyramid>
fresco 240(H) x 180cm, 2003, detail

The pyramid conveys a very different aesthetic emotion according to its environment. It is at once objectively massive and symbolically religious, astronomical, and mathematical. My pyramids, however, are much smaller in scale and communicate a completely different sentiment. I was anxious to discover how the pyramid would be reborn when the aura of my fresco pyramid was crossed with that of the historical pyramid. For me, it was a chance to probe the aesthetic populism of contemporary art. By borrowing generously

from the pop imagery of entertainment and kitsch, and from the post-pop art that begins in the late nineteen-eighties, my work offers familiar images that convince the spectator of the contemporary force of fresco.

V.3 Summary of the Outcome of the exhibition

Liberating fresco from the confines of religious ceremonies, tombs and caves, which were its unquestioned domain in prehistoric and more recent times, and moving it into spaces desired by the viewing public and artists was one of the main purposes of my work. The attempt was based on my belief that fresco can be a living and breathing vehicle of communication in the modern era instead of a dead archaeological artifact excavated from a grave. In my preparation for the exhibition, I established some caveats. Firstly, portable frescoes were not to be miniaturized versions of walled ones, with their reduced weight and volume as the only differences; rather, they had to offer their own artistic significance and aesthetic value. Secondly, while respecting existing techniques, new materials and methods would have to be discovered to open up new possibilities for contemporary fresco. Thirdly, to ensure fresco's harmony with other forms of art, a new formative language had to be invented that could connect it with them in terms of style and representation.

Fresco has always met with acclaim in art history and it has always been well ensconced in prestigious architecture. For fresco to change into a modern art whose particularity is its freedom of expression, a revolution was necessary, one in which the originality of a complex medium is reborn and the conscience of the spectator, the artist, and the sponsor transformed.

I prepared this exhibition at the Lethaby Gallery while seeking to help the spectator understand modern fresco. I would like the spectator to use it as a window onto the complex tendencies of contemporary art. My single-minded goal comes from my desire to challenge the traditions of fresco, to take it off the wall, to free it and help it to stand on its own. During this process, I discovered a way to diminish its weight, to take away its material handicap. The result was the folding screen that, by folding and unfolding, liberated its way of being viewed.

Many problems remain to be solved: the problem of fresco's creative space; fresco's difficult technique; its limited number of usable pigments; and so on. Another problem is how to further enlighten the art world and the spectator about fresco's modernity as fresco still continues to shine brighter in its traditional architectural environment.

It is true that viewers are usually more interested in the content of a fresco piece than the characteristics of its medium. Whether the work is executed with traditional or modern materials, overwhelming importance is given not to these materials but to the actual artistic expression achieved with them. This tends to lighten the psychological burden on contemporary fresco artists.

I would like to conclude that fresco has no problem dealing with other aesthetic discourses. In my own work I have chosen to use it for the development of a graphic pictorial discourse. Others may choose to use it for abstract and decorative surface treatment, making new spatial and formal possibilities; that is the core argument and outcome of the research inquiry.

Taking fresco off the wall has not only freed fresco from its traditional limits, but has freed my own work from its expressive boundaries. It is not the use of recent popular iconography that places fresco within a new cultural framework but that its increased environmental and formal possibilities appear to give it a greater range of treatments.

CHAPTER VI

CONCLUSION

This thesis has concentrated on the practical applications of modern and contemporary fresco, presenting research on such practices and aesthetic elements as visual interpretations, fresco's logical negotiation with space, and the extent of fresco's diverse applications. This thesis has also attached considerable importance to the artistic legitimacy of modern fresco as well as to its formal development and potential to become a rich and demanding art genre, which, at the same time, would be both diverse and creatively suggestive. In this light, the research should be considered as partial and ongoing.

It is remarkable that, in the advent of so-called aesthetic pluralism, including the pluralisation and subversion of the subject, the recuperation of form, the return to tradition with the arrival of introspection, and the self-awareness of modern art, fresco began, little by little, to adapt itself to modernity. The critic Nicolas Bourriaud, in discussing difference and the modernist period, uses the expression 'post-production' to describe this complete change in the visual arts.¹ According to Bourriaud, post-production means that art changes suddenly into a movement that suggests multiple meanings of art for many people, a tradition that advances towards a certain ideology or is the responsibility of a certain producer.

¹ Bourriaud's book *Post-Production* focuses on how art re-programmes visual elements and social consciousness into what he calls 'formal collectivism'. New York, Lukas & Sternberg, 2000, pp. 29-32.

One could say then, that fresco, assured of a certain logic for its complex changes, advanced an active reinterpretation of space and of a variety of forms, and that it had been prepared for the onset of these changes. At the end of the twentieth century, the few artists experimenting with fresco were creating transportable works. These variations encouraged fresco to find its own voice, to de-muralise it, to encourage individual research, and to distance it from large architectural projects and religious tradition. This is the experimental research into new forms of contemporary art with regard to artists working in fresco that was studied in Chapter Four.

The second chapter focused on the historical context of wall fresco and asked what fresco meant in contemporary art, comparing it to traditional fresco, both in the West and in the East. It tried, through concrete examples, to counter the notion that fresco prospered for a moment in art history, only to disappear. The appearance of oil painting, its creative flexibility, the relative ease with which it could be created, moved, and exhibited confronted and questioned the monumental projects with which fresco was necessarily associated. The research tried to maintain that the eventual extension of fresco's flexibility could change the way the public – whose role was essential to its vitality – perceived it, allowing it to embrace new functions while retaining its traditional matt appearance and oneness as part of the architecture. This chapter became the key in linking the past with the present. Most of all, it showed that fresco was more than just an artistic technique for artisans; it was an art form that had been built on a foundation of human science.

Although my observations are not entirely new, I felt that, since existing academic research linking past and present fresco is sparse and tentative, a re-statement was necessary to establish basic guidelines. Therefore, I thought it was essential to clarify fresco's historical context, including the definition of true fresco and the originality of its creative method and materials. Its painstaking technique – the application of colour to a wall of wet plaster, the absence of a solvent to mix with pigments, the careful drying period, the fact that the colour is part of the wall itself – all explain fresco's difficult liberation and conversion to a modern art. This also explains why fresco has always been viewed in the same context, yet how it has transcended its times, its artistic method, and its materials. In this research, I have proposed an explanation and a demonstration of how contemporary fresco can fuse with its traditional counterpart.

In Chapter Four, the discussion is on the context of fresco in modern and contemporary art practices. The fresco mural movement in Mexico at the beginning of the twentieth century (its 'second wind'), in the USA during the New Deal, and at the *Milano Triennale* was dealt with briefly in presenting fresco's difficult encounters with modernity.

At the end of the twentieth century, contemporary experimental fresco has demonstrated that it is possible to change the way we consider it, from a traditional medium to a modern one. Recent fresco projects have also demonstrated that the genre is no longer immutable or always dependent on architectural space.

The styles and contents of true fresco adopted by artists of the late-twentieth century differ considerably, making it difficult to organise them into

categories. Within the discussion of extending the boundaries of fresco, a study has been made in three different categories:

- 1) *Fresco murals for site-specific projects* – David Novros, who produced renderings of abstractions in vivid colours on murals, Pericoli with his big wall figures, and Enzo Cucchi, who, with architect Mario Botta, adorned a modern chapel in the Alps;
- 2) *Portable fresco and fresco installation* concentrates on the following artists – Sandro Chia and Koji Kinutani, who executed classical realistic work using frescoes, and Francesco Clemente, who works in fresco on a series of panels in his distinctive style;
- 3) *Fresco sculptures and fresco in mixed media* includes my approaches in parodying images and mixing a diversity of techniques – fresco graphics, prints, and mixing with digital media.

In Chapter Five, I analysed my own work in the exhibition at the Lethaby Gallery in an effort to link it to a variety of contemporary fresco experiments. My objective has been to touch on the vast and diverse experimental media that constitute much of contemporary art, trying to appropriate some of it into modern fresco, or else simply bringing them together to test their aesthetic limits. My work has set out to prove that, in spite of its own vital and brilliant context and expressiveness, fresco can share many common points of purpose and use with contemporary art.

It is true that fresco as painting is limited by its technique. Yet in some areas of contemporary public art, fresco is considered the appropriate medium, a fact borne out by my projects at the National Museum of Korea, the Royal Kiln Museum, the Haein Temple Museum, and in the fresco mural in the East West Centre in Hawaii. But when it comes to education, fresco is a genre that, compared to other artistic media, is undervalued. This problem is the result not only of fresco's difficult technique but also of contemporary art's vast media possibilities among which fresco's appeal seems relatively small. While the problem, then, of exploiting fresco painting in a modern way and of embracing its aesthetic is unresolved, the problem of broadening its appeal remains as a major stumbling block.

This thesis has confirmed that, in its quest for autonomy as a form and language, fresco installation and sculpture, despite the weight, volume, and technique involved, presents fewer problems than fresco painting. Specifically, the obstacles of weight and volume are not unique to fresco. What is an obstacle is the problem of concept and expressiveness. Fresco seems especially to inspire nostalgia and a variety of awakenings through its aesthetic analysis of itself as a traditional medium.

If the study of fresco was to be confined to traditional materials and technique, the possibility of fresco being in harmony with visual art in the present era of science and technology could not be predicted, and such harmonisation would not be deemed necessary. However, I have made several attempts to bring together fresco and visual art, based on the refinement and beauty of fresco and leading to the unexpected and interesting results shown in

the work *Reflection of Time*. This can provide a partial answer to the discourses that criticise visual image-oriented works of the scientific and technological era as non-organic art forms.

My research into twentieth-century fresco installation and sculpture was limited by the simple fact that, whether it be in America or in Europe, it was difficult to find three-dimensional fresco works. This led me to a conclusion that, for contemporary artists, an understanding of fresco is still affected by its traditional attachment to painting.

As for my own work, I encountered few problems creating sculpture and installation with fresco. As for its spectators and critics, they can see and appreciate the broad extension of expressiveness and sculptural qualities that transcend traditional fresco.² This encouragement does not, of course, mask the problem of the aesthetic legitimisation of fresco sculpture and installation. Instead, it is the confirmation of this particular fresco as a transcendent alternative. It can be said that my research succeeds in presenting viable solutions to the problem of weight in fresco sculpture and installation as seen in the works, *Mathematics of Time* and *Site of Time*.

One new format, the folding screen, demonstrates, that as an experimental medium for fresco sculpture and installation, it is possible to enlarge a volume in an almost unlimited fashion while reducing its weight. This, to me, is an important finding in my research, for it works with another medium in creating a volume instead of remaining inside the traditional two dimensions.

² Thalia Vrachopoulos, 'Youngsun Jin: A New Discourse Between Fresco and New Media' *Berliner Kunst International* Edition Vol.2 no 6-8/*NYArts Magazine*: June, 2003

Three works in the form of folding screens, *In the Beginning*, *Fresco Astronomics*, and *Voice of Zero* were presented at the Lethaby Gallery Exhibition in 2003. Especially important to me was my experiment with installation at the Lethaby Gallery: *Reflection of Time*, a video installation work with water and a candle, is a project that I will continue to elaborate upon.

Now, the exhibition pieces, *Fresco Astronomics* and *Fresco TV* are in the collection of the Central Saint Martins College of Art and Design, and *Site of Time* is at Oxford University on indefinite loan. *Voice of Zero* will enter into the collection of the British Museum in the later part of 2004. The recognition of these important institutions for these projects can only encourage me to continue to extend the possibilities of three-dimensional fresco.

In the final analysis, through this research and the exhibition, I believe that I have been successful in freeing traditional fresco from its dependence on edifice, and enabling it to make a new pact with modern architecture. The challenge has been to strike a balance between a particular medium and the special values it needs to preserve.

DEFINITION OF KEY TERMS AND TECHNICAL NOTES

***Arriccio* (brown coat)**

The preliminary layer of roughcast plaster or rendering applied directly to a wall to create a uniform surface on which to apply the subsequent and finer coat of plaster called the *intonaco*. The *arriccio* is left rough so that the final top layer, *intonaco*, might more easily adhere to it.

Bianco San Giovanni

This is the term for aged lime formed into cakes and set in the sun, where it becomes whiter owing to the sun's bleaching properties. After they have dried, these cakes are crushed with a hammer, pulverised into a mortar with a pestle, and finally ground in the same manner as other pigments. The resulting white lime is virtually a mix of the pigments that provide a luminescent quality and also act as a binding agent.

Binding Medium

The natural or synthetic film-forming substances that hold together pigment particles in paint and fix them onto a support; besides having a binding medium and pigments, a paint also contains solvents (or thinners), for workability.

Buon Fresco normally requires no special binding medium. The pigments are merely made into a paste with distilled water or, if necessary, ground in it, and sometimes thinned with limewater. Milk of lime as a painting medium is used only when painting opaquely. This is made by strongly diluting slaked lime with water.

Cartoon

Cartoon (*cartone* in Italian), is a term frequently used in relation to mural painting to describe a drawing of all or part of a composition. It is executed full-size and intended either to be reproduced freely on the wall (generally with the aid of squares) or to be transferred exactly by tracing with a point or by means

of a pounced (see below) drawing.

The fresco painter of antiquity and of the Middle Ages worked without a cartoon. As a rough guide for the painter, the design was painted a *fresco* with a brush directly on the coat of plaster immediately below the *intonaco*. This provisional drawing was usually carried out with *sinopia*. The final coat of plaster

was applied in small sections, and on it the drawing was repeated in more polished form and with more detail. The origins of the cartoon date back to when papermaking was introduced into Europe in the twelfth century and painters began to make full-scale outline drawings on paper by enlarging their original sketches.

Cement

This usually denotes Portland Cement, an artificial hydraulic binder produced by the calcinations of limestone and clay at 1300-1500°C invented in 1811. Portland Cement is not suitable for fresco painting because of its excessive strength, its high thermal expansion coefficient, its low porosity and the high content of soluble salts (mainly sodium salts) generated by additives such as gypsum and fuel ash. Certain low-alkali white cements are more suitable.

Dye

An organic colouring material (natural or synthetic) that dissolves in the binding medium (grain size: < 1/1000 mm). Dyes are used as a stain or to create coloured, transparent coatings (glazes), and most of them fade rapidly when exposed to ultraviolet radiation (sunlight).

Encaustic

A painting technique invented in ancient Greece involving hot wax colours (pigments mixed with molten beeswax and resin) burnt into a wall surface after application by radiant heat (with a lamp or brazier, for example) until the individual brush or spatula marks fuse into a uniform film. Encaustic wax has many of the properties of oil paint: it can give a very brilliant and attractive effect

and offers great scope for elegant and expressive brushwork.

Fresco (*buon fresco*)

Known as the 'true fresco' (*buon fresco, fresco buono*), it is painting with water-based pigments on freshly laid plaster, usually on wall surfaces. This technique was most popular from the late-thirteenth to the mid-sixteenth centuries. The colours, which are made by grinding dry-powder pigments in distilled water, are fixed by the carbonatisation of the lime (calcium hydroxide) in the plaster to become a permanent part of the wall. A minimum of three coats of plaster on the support is necessary: The first is the mortar, 'rough coat', the second is the 'brown coat' or *sinopia* and the final 'paint coat' is called *intonacco* and is applied area by area, usually one day's work, called *giornata*. As the plaster and paint dry, they become completely integrated.

While this coat is still fresh and damp, the drawing on paper is held against it and incised with sharp points over the outlines, the *cartoon* is made. After the painting is done with natural pigments diluted only with water, water starts to evaporate until the wall is dry to the touch, and the carbonation begins. The surface calcium hydrate, Ca(OH)_2 , slowly combines with carbon dioxide, which is always present in the air, to form calcium carbonate: $\text{Ca(OH)}_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$

Giornata

The patch of *intonaco* to be painted as part of a regular, sequential –'daily' – task, though not necessarily in one day. The artist decides in advance the size of the surface he intends to paint and lays on top of the *arriccio* only the amount of fresh *intonaco* needed for his work. The joinings are usually discernible on a close examination of the painted surface, and they disclose the order in which the patches are painted, each successive patch slightly overlapping the preceding one.

Glaze

A dark transparent or semi-transparent colour applied to a lighter coloured

surface so as to achieve a special chromatic effect.

Grinding

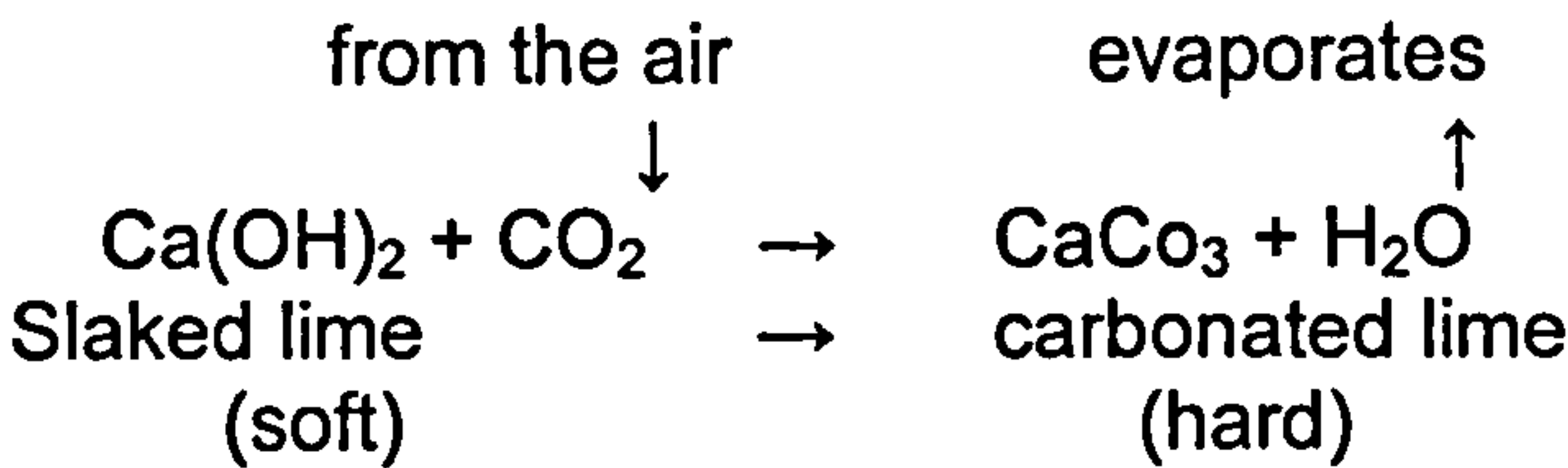
The grinding of pigments is a rather laborious task, yet extremely important to the overall success of the fresco. About one cup of dry pigments is piled on the quartzite-grinding slab and mixed with distilled water. With a quartzite muller, the pigment is ground with a round motion, gathered up and ground again. This process is repeated until the pigment can be brushed onto a piece of paper and the resulting brush stroke is free of any solid particles.

Gypsum

It was used in Egypt both as a mortar between blocks of stone (pyramids) and as a plaster already at the beginning of the third millennium B.C. Gypsum plasters or mortars are prepared by heating gypsum minerals or selenite rocks (both are composed of hydrated calcium sulphate) at moderate temperatures.

Hardening

Hardening of slaked lime takes place by reaction with carbon dioxide (from the air) and evaporation of water.



Hardening therefore requires contact with air and progressive drying. The loss of water causes a contraction in volume. Slaked lime is never used alone, but always with filler in order to avoid cracks.

Incision

The method of a line drawing of the actual size on paper (the cartoon) and transferred to the wall by tracing over the main lines with a smooth pointed instrument leaving a low relief in the wet plaster. Such incised lines can be

observed clearly on the Michelangelo's Sistine Chapel frescoes. One can always recognise a true fresco by them.

Direct Incision

Incision made with a pointed instrument directly onto the soft plaster surface, frequently on the basis of a previous preparatory drawing or sketch. Direct incisions can be recognised by their sharp edges.

Indirect incision

Incision made with a pointed instrument through a cartoon. Indirect incisions can be recognised by their rounded edges.

Intonachino

A thin finishing layer of very fine plaster frequently found in fourteenth to sixteenth century Italian frescoes.

***Intonaco* (paint coat)**

The final, smooth layer of fresh lime plaster for the finished painting. It is made from lime and sandstone dust and laid in sections. A correctly prepared *intonaco* will hold its moisture for many hours. When the painter dilutes his colours with water and applies them to the plaster with brushstrokes, the colours are imbibed into the surface, and, as the wall dries and sets, the pigment particles become bound or cemented along with the lime and sand particles.

Lake (*lacca* in Italian)

Pigment made by fixing an organic dye in an inorganic, semi-transparent, finely divided, solid substrate, such as barite, aluminum hydrate or calcium sulphate.

Lime

The use of lime in the Neolithic period is demonstrated by occasional finds of lime washes. In the historic period, lime plasters appear in the Mycenaean and

Minoan civilization (Knossos palace 1700 B.C.) and use of lime in Egypt starts quite late (Ptolemaic period, 300 B.C.) Some earlier mortars contained both calcium carbonate and gypsum and were made starting from mixed minerals that could yield either lime or gypsum mortars. Lime is made by heating limestone, which composed essentially of calcium carbonate (CaCO_3). Lime, quicklime, burnt lime, or caustic lime is calcium oxide (CaO).

Quick lime [CaO] is calcium oxide formed by the firing of limestone (calcium carbonate) in kilns at a temperature of $800 - 1400^\circ\text{C}$

Slaked Lime [Ca(OH)_2] is calcium hydroxide formed by the hydration of quick lime (strong exothermic reaction). Good slaked lime should not contain more than five percent of impurities. Technically there are two types of it: hydrated lime in powder and lime putty.

Hydrated lime [Ca(OH)_2] is slaked lime in powder form. During the slaking process only the quantity of water sufficient to transform the quick lime completely is added.

Hydraulic lime is generally obtained from limestone and contains a considerable quantity of clayey matter. In the building industry, the common standard for hydraulic limes (natural or synthetic) corresponds to hydraulic binders with less than thirty percent hydraulicity.

Lime pit

Lime to be aged for more than a year is better stored in a pit. A square hole is dug in the ground and the bottom filled to a depth of three or four inches with sand or gravel upon which the flooring is laid. A similar space is also left around the sides and filled in with gravel. This will act as drainage and help to keep the pit dry on the outside.

Lime mortar

Sand is the typical filler for lime. Sand must be washed clean to remove salts (which cause efflorescence), clay or organic materials (which slow the hardening process). Some typical formulations are the following:

by volume: 1 part of slaked lime + 2-3 parts of sand

by weight: 15 part of slaked lime + 100 parts of sand

(water as required to make a paste)

Lime mortars show good workability if water is rather generously added. Conversely, the mechanical properties of the hardened mortars are improved if the amount of water is reduced.

Lime putty [Ca(OH)_2] is slaked lime in plastic form. It comprises quick lime slaked with an excess of water and kept covered (with water) in a pit for at least two months.

Lime wash (white wash) is slaked lime diluted with water, used as house paint for exteriors and interiors or as a preparatory layer for fresco paintings. Sometimes it contains protein additives (e.g. milk, casein) to improve mechanical strength (formation of calcium caseinate).

Lime water

The clear liquid that forms in lime pits or buckets once the white lime has settled down. It contains a small but significant amount of calcium hydroxide in solution, which helps to bind the pigment particles. Fresco painters sometimes make limewater the day before they start work by stirring up a little slaked lime in a pail of water and letting it clear overnight. The thin, translucent skin that soon appears on the surface is calcium carbonate, formed when calcium hydroxide is exposed to carbon dioxide in the air.

Marouflage

Is a procedure for attaching a painted canvas permanently to a wall or ceiling by using an adhesive such as a resin/wax cement or simply white lead in oil. In the past, paintings have occasionally been transferred from wood to canvas by a variant of the treatments. The process of attaching a painting on canvas to a stable rigid support is still done for number of reasons.

Mezzo fresco

Painting on partially dry plaster. The pigment penetrates the plaster less deeply than with the 'true' fresco method, and the carbonation is less extensive. *Mezzo fresco* was popular procedure in the sixteenth and later centuries.

Mortar

Building material prepared by mixing one or more inorganic binders (lime, clay, gypsum, cement) with inorganic and/or organic fillers (inerts, hydraulic fillers, fibrous materials). The term is used to describe the ready-mix before setting occurs; sometimes organic substances (milk or siccative oil, for example) are added to improve mechanical strength. In masonry the term is used to describe the bonding material of stones and bricks.

Air-setting mortar usually refers to lime mortar which hardens only in the presence of air due to carbonatation (reaction with CO₂)

Pigment (Fresco pigment)

Many of the pigments used today for fresco painting have been used for thousands of years. They are finely ground, solid colouring materials, which do not dissolve in the binding medium but forms dispersion. The grain size is usually between 2/1000 mm and 4/1000 mm, and pigments are divided into inorganic or organic (lakes) or natural or synthetic.

Lime is highly alkaline, and the fresco painter must restrict the range of the pigments to those fast to lime. Any pigment not fast to alkalis must be excluded. Prussian blue discolours in a few minutes, chrome yellow within a few hours. Colours have an entirely different effect on walls, as compared with that achieved by the techniques of easel painting, and this difference is particularly striking in fresco painting. The brilliance of all colours is enhanced, which means that earth colours, natural as well as artificial, become especially important.

Native iron oxides are used for the reds and yellows. The blue pigments used in fresco have changed over the centuries. Cobalt blue was introduced in the 1820s and cerulean in the 1870s. During the Italian Renaissance, *lapis lazuli* was ground to produce ultramarine – then the costliest

of pigments – which was applied to fresco in a binder when it was dry. Copper-based greens, green earth, are traditional to fresco. Viridian was introduced as a pigment in the 1850s and chromium oxide green in the 1860s. Fresco painting needs surprisingly few pigments. Zinc white and titanium white are unnecessary, because pure slaked lime is used as white.

Plaster

The surface material of a wall or building which has been applied as a plastic mass (mortar) and has set by drying, carbonatation or hydration. It is a term used to refer to internal coating for architectural surfaces. Classification is made by referring to the main binding material - lime-plaster, clay-plaster, mud-plaster, gypsum-plaster, or cement-plaster.

Plaster of Paris [$\text{CaSO}_4 \frac{1}{2} \text{H}_2\text{O}$]

Inorganic binder (hemihydrated calcium sulphate) obtained from the dehydration of gypsum (hydrated calcium sulphate) when mixed with water reverts (hydration) to the initial state. It was in use in ancient Egypt because of the relatively low temperature required for production (130°C-160°C)

Pontata

This is *intonaco* spread in wide bands that correspond to successively lower stages of the scaffold. The painter frequently laid some preparatory colours on these large surfaces as they were drying, but he usually spread his final colours after the *intonaco* had dried. This is largely, then, a *secco* technique.

Pouncing

The method of transferring a design to a wall. Small dots are pierced along lines of the cartoon and the drawing then held against the wall while the perforations are dabbed over with a porous bag containing pounce powder (powdered charcoal, for example). On penetrating the holes, the powder leaves a record on the surface of the plaster.

Pozzolana

The name pozzolana was derived from the city of Puteoli (modern Pozzuoli), near Naples, where there is still extensive bed of pozzolana earth. Roman engineers used two parts by weight of pozzolana mixed with one part of slaked lime to give strength to mortar and concrete in bridges and other masonry and brickwork. Natural pozzolana is composed mainly of a fine, chocolate-red volcanic earth. An artificial pozzolana has been developed that combines a fly ash and water-quenched boiler slag. Artificial pozzolanic materials were used in the classical age, in particular iron slag and crushed terracotta bricks or pots are added and it is still used in modern technology.

Outside Italy, materials of similar composition and with similar properties are found: in Greece (earth of Santorini), Germany (trass), Romania, the Crimea and elsewhere.

Render

A form of exterior plaster, generally referring to a rough finish or a protective coat. For external decorative finishes the term plaster would generally be used.

Rinzaffo

The first layer of rough plaster in contact with the wall, applied to smooth the irregularities of the mural support.

Roman Concrete

Roman cement is produced by firing a special argillaceous (clay-rich) limestone called *septaria* at a temperature around 800°C. The use of hydraulic compounds permitted the execution of water works in the Roman period and the adoption of concrete casting in wooden moulds. Roman concrete was made by mixing lime, pozzolana and broken bricks or tiles. Lightweight concrete could be produced by using a pumice aggregate instead of the terracotta fragments; a very good example is the dome of the Pantheon in Rome.

Schamotte

Pure, fluxing grounded firebrick fragment made of refractory clay, burned in the furnace, temperature 1300-1400°, crushed up to 3mm grain size

Refractory clay is from fireproof, often yellowish-white bricks or furnace tiles, those for the lining of many industrial furnaces of the rough and fine ceramics, which is good filler with lime putty. The usual refractory clay contains on the average about 42-45% aluminum and 50-54% SiO₂.

Secco (literally, 'dry')

Under the term of a secco technique are grouped all the forms of painting executed on dry plaster or whitewash, where the pigments are fixed by a medium with which they are mixed before their application.

In the case of painting on plaster that has already dried, the colours are mixed with an adhesive or binder to attach them to the surface. The binding medium may be made from various substances, such as tempera. Tempera (the addition of egg yolk or white to pigments) was commonly used to complete a composition already painted in fresco. Because the pigment and the dry wall surface do not become thoroughly united, as they do in *buon fresco*, secco mural paintings tend to deteriorate and flake off the walls more rapidly.

Sgraffito

The term sgraffito is derived from the Italian *sgraffire*: to scratch. As developed in Renaissance Italy, this was originally a linear incision technique working with scrapers and wire loops, and since one can also produce a kind of low relief even without using colours.

The plaster is prepared as for fresco painting, except that pigment is added to the mortar of equalising coat. Lines or areas are cut out of the soft, fresh surface plaster, exposing the coloured equalising plaster. One can apply several coats of coloured plaster on top of each other and cut to the depth of the required colour. The surface plaster can, of course, be pigmented also, or be tinted with a glaze *a fresco*.

Numerous variants are possible, and the artist has ample scope for his creative as well as his technical ingenuity. For the sake of clarity, one may

distinguish the following methods:

- 1) Contour sgraffito
- 2) Sgraffito using areas of different colours
- 3) Painterly sgraffito, a combination of the two above
- 4) Monochrome sgraffito
- 5) Sgraffito combined with other techniques
- 6) Dry sgraffito

Graffiti (plural of *graffito*), any casual writing, rude drawing, or marking on the walls of buildings is derived from sgraffito.

Sinopia

Originally a red ochre named after *Sinope*, a town on the Black Sea that was well known for its red pigments. It is a full-scale preparatory drawing for mural painting, in some detail, executed normally on the *arriccio*, but when the wall is sufficiently smooth, sometimes directly on the wall. The drawing is generally, but not always,

carried out in red ochre; it may be in yellow ochre or even in black. The proper function of sinopia is to serve as a guide for the subsequent execution of the painting on the *intonaco*.

Slaking

It is the reaction of quicklime with water. The reaction develops heat and must be carried out with great attention to obtain a good product. If the right amount of water is used, a powder of calcium hydroxide is obtained (hydrated lime powder). If some excess of water is used a soft, greasy mass is obtained (lime paste).

Lime was once slaked in lime pits, where it was kept for several months or even years. Prolonged slaking favours the growth of platelike hydrated lime crystals (Portlandite) and improves plasticity of the lime putty.

Spirit Fresco

A technique invented by Thomas Gambier Parry in 1859. Developed from

encaustic procedures, it used dry plaster; the pigment was bound in a medium of the gum, elemi, resin, to which wax, oil of spike lavender, copal varnish, and turpentine were added. Because the same medium was also used to prime the plaster, a bonding was achieved between paint and the wall surface which was felt to mimic that which occurred in *buon fresco*. Parry demonstrated the technique at Highnam Church, Gloucestershire and it was taken up by Lord Leighton at Lyndhurst parish church (1862) and the South Kensington Museum (1880s).

Spolvero

This was an early method (see *cartoon*) of transferring the artist's drawing onto the *intonaco*. After drawings as large as the frescoes were made on paper, their outlines were pricked, and the paper was cut into pieces the size of each day's work. After the day's patch of *intonaco* was laid, the corresponding drawing was placed over it and 'dusted' with a cloth sack filled with charcoal powder, which passed through the tiny punctured holes to mark the design on the wall. This method was very popular in the second half of the fifteenth century.

Strappo

This is a method of removing a mural painting from a wall by detaching only the paint layer. Italian terminology, as in the case of *stacco* (detaching the painting with its *intonaco* or painting ground) and *stacco a massello* (detaching it together with the *arriccio* and as much of the natural supporting wall as may be necessary for the successful completion of the operation) is in universal usage. After certain frescoes are removed by the means of *strappo*, a coloured imprint may still be seen on the plaster remaining on the wall. This is evidence of the depth to which the pigment has penetrated the plaster.

Support

It carries the picture and the term is applied to natural or dressed rock, or to a wall (natural or artificial) on which the painting has been executed, either directly or on a previously applied rendering or ground.

Tempera

This is painting executed with pigment ground in a water-miscible medium. It is distinguished from fresco painting, the colours for which contain no binder. Eventually, after the rise of oil painting, the word gained its present meaning. The standard tempera vehicle is a natural emulsion, egg yolk, thinned with water. Thin, transparent layers of paint produce a clear, luminous effect, and the colour tones of successive brushstrokes blend optically.

Transferring the Cartoon

The artist's final drawing on paper or cloth of the main lines of the composition is sometimes, but not always, equal in size to the wall area to be painted. (Several cartoons might be used to create one large image.) The cartoon is laid against the wall over the final, freshly laid plaster. Its outlines are incised on the plaster by pressure from a stylus. This procedure was common in the sixteenth century. The pouncing (*spolvero*) technique was commonly used as well.

Water-glass, Keim's process, and variants

Also known as stereochromy, water-glass technique was invented about 1825 and further developed in Germany by Dr. Johann N. von Fuchs, whose account of it was translated into English by order of Prince Albert for use at Buckingham Palace (and principally, by Maclise in the Royal Gallery in the 1850s and 1860s). It involves painting on dry plaster, with the same pigments as in fresco, mixed with distilled water; a hot solution of water-glass (a form of soluble glass) is applied in a fine spray afterwards to seal in the pigments. The method was further elaborated by Professor Adolf Keim of Munich in the 1880s to create Keim's process.

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In the catalogue of the exhibition, Luca Marenzi wrote:

Specific to Naples, SIMM'NERVUSI are the representations of the mountains and the letter. The omnipresent mountain in *S. Uno* is Vesuvius, the defining landmark of the Bay of Naples. The letter is perhaps a sign of life from a soldier to his sweetheart, longing for home. It is a record of another moment in another place, the evocation of which is so closely linked to Cucchi's art that rendering of a special moment, of something simultaneously commonplace and extraordinary.⁵⁸



Fig IV-27
Francesco
Clemente
< Ora > 1980,
fresco



Fig. IV-28
Francesco
Clemente, < Interior
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⁵⁸ Luca Marenzi, *Enzo Cucchi SIMM'NERVUSI* Tony Shafrazi Gallery, New York, 1997

APPENDIX I

INNOVATIONS IN PROCESSES AND MATERIALS

AI.1 *Technical Findings*

The term fresco means 'fresh' in Italian. True fresco is part and parcel of the wall. The painter, working with pure pigment and using no binder and nothing but water as a medium, paints directly on a fresh plaster coating as it dries. One must time this painting carefully. If the wall is still too wet it will not accept the pigment from the brush. If it is too dry the pigment will not enter the wall and will power off later on. The painter must complete the work during the few hours when the surface is just dry enough to suck the pigment in and just wet enough to combine its own moisture with the water containing the pigment. During few hours the plaster is willing to absorb the pigment a fraction of an inch below its surface and hold it there.

AI.2. *Material for fresco*

Lime

Lime, quicklime, burnt lime, or caustic lime is calcium oxide (CaO). It has been made for thousands of years by burning native calcium carbonate (CaCO₃) together with wood in specially constructed simple kilns, the calcium carbonate occurring in various degrees of purity in the forms of limestone, chalk, marble, and oyster shells. This was used as a plaster and mortar in practically every primitive civilisation except that of Egypt, where, due to the perfectly dry climate, plasters made of Nile mud and gypsum sufficed until lime was introduced by the Romans.

The best lime for it is wood-burned (quick lime) and slaked in water (lime putty) for at least six months to one year. The longer period of slaking time renders better quality of lime.



Sand

Only siliceous sand from a quarry or river is used and never sea sand. The grains must not be rounded but should have rough surfaces so that they increase the friction between them and consequently, the strength in the mortar after setting.

Marble Powder

The 'rough' grades #16 and #18 is used in first coat, medium grain for 'brown' coat and fine grade for 'paint' coat.



Different grades of marble powder from Carrara, Rome, Japan, and Korea

Schamotte

Pure, fluxing grounded firebrick fragment. Good mix with lime putty. Classified by particle size, 'coarse' 'medium' and 'fine'.



Pozzolana

Rocks of volcanic origins. These natural minerals can be mixed with calcium hydrate to produce mortars which are dense and very resistant to the action of water. In fact, lime mortar with a filling of pozzolana and water behave like a hydraulic cement.



Hair

Coconut fiber, goats' hair or hemp thread. It shall be disentangled in lime-

water the day before use, and shall not be mixed with the mortar until commencement of work.

Brick Powder



Water

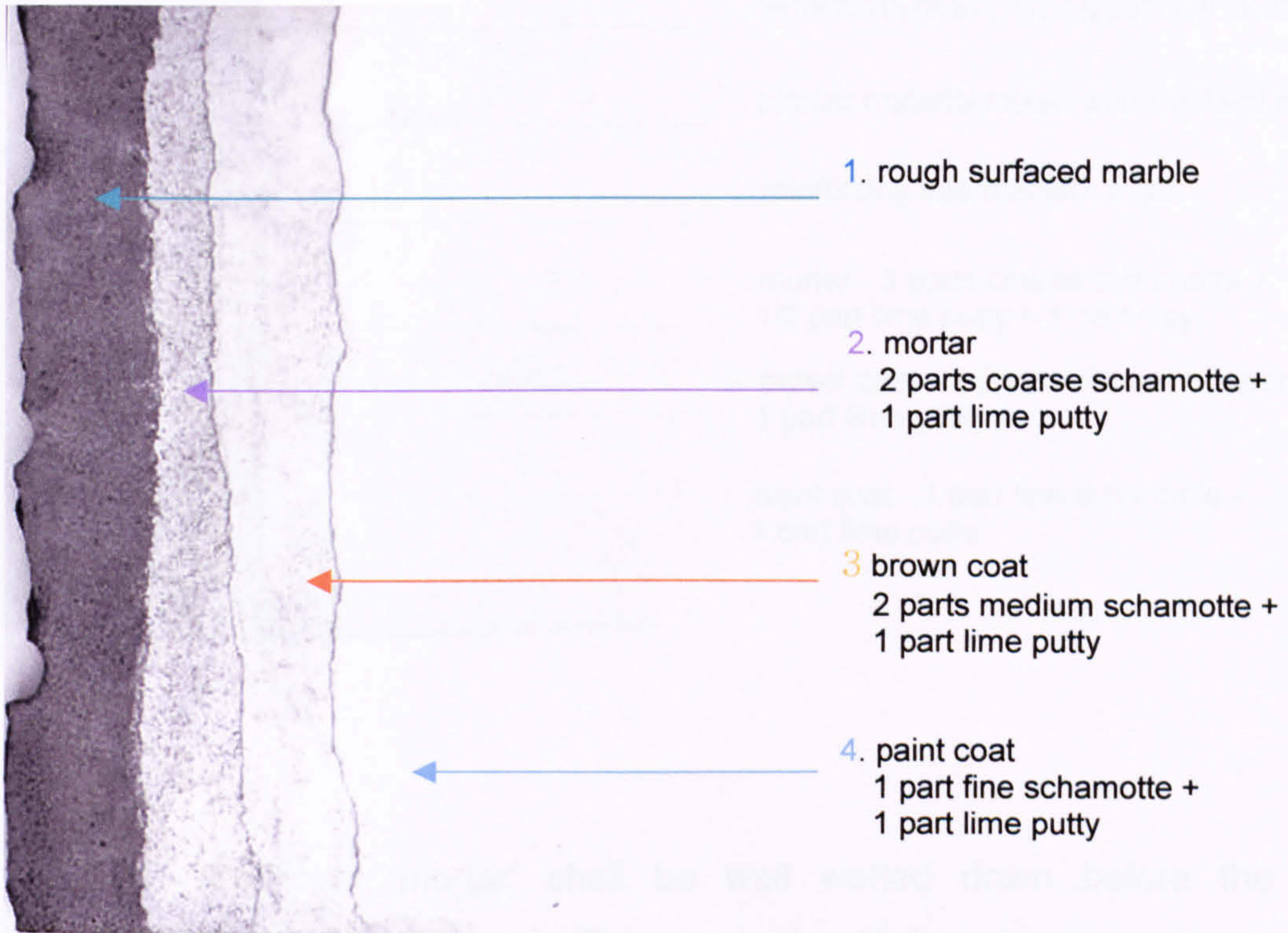
The water used in preparing mortar is clear freshwater, free from organic impurities. For mixing pigments, distilled water is used.

AI.3 *Preparations for Plastering*

Everyone is familiar with the beauty of a freshly plastered wall -- luminously white, with an eggshell surface that is neither glossy nor dull. The texture and the soft luminosity of this surface are produced by a next-to-microscopic crystalline film that forms as the plaster dries. This film is in effect the binder in fresco. The pigment is bound into the wall; it is the wall; it and the wall are the same.

Preparation of the portable fresco

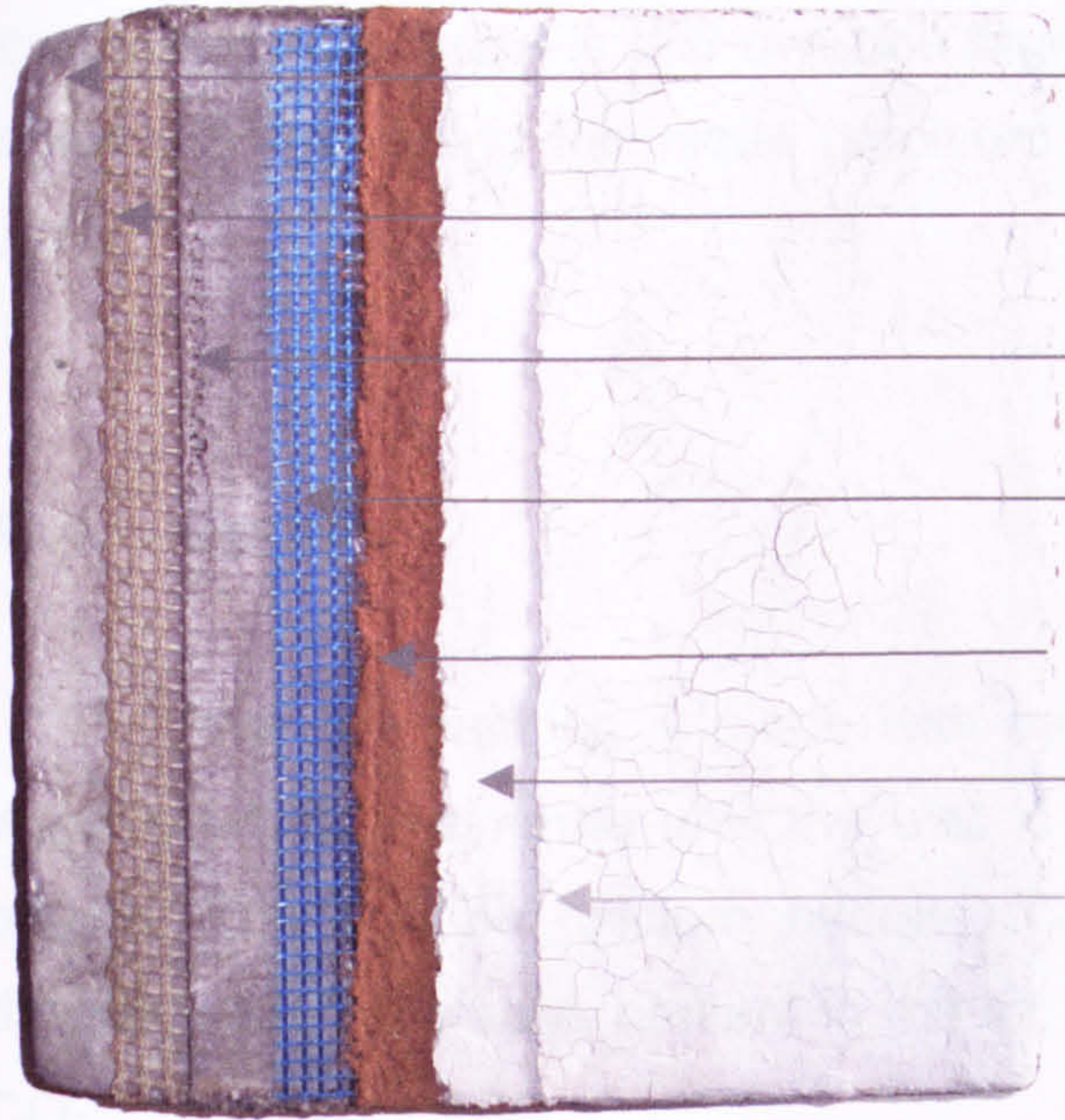
Preparation #1 on marble panel



Plastering

A minimum of three coats of plaster on the support is necessary: The first is the mortar, 'scratch coat', the second is the 'brown coat,' or *intonaco* and the final 'paint coat' is called *arriccio*. For wall plastering it is applied area by area, usually one day's work, *giornata*.

Preparation #2 on styrofoam panel



1. styrofoam board
2. reinforcing heavy-duty glassfiber mash
3. plaster material mixed with Portland cement
4. reinforcing intermediate mash
5. mortar - 3 parts coarse schamotte +
1/2 part lime putty + 1 part clay
6. brown coat - 2 parts medium schamotte +
1 part lime putty
7. paint coat - 1 part fine schamotte +
1 part lime putty

The first coat 'mortar' shall be well wetted down before the application of the 'brown coat'. This coat should be about the same thickness as the first coat and should be applied with as much pressure as the furring will allow. It shall be brought to a level, plane, surface with the use of the floating rule. Particular attention is to be given to corners. Regularly scratched or wood floated for rough texture which will help the *intonaco* to adhere.

The brown coat *arriccio* shall be wetted down thoroughly before the application of the paint coat *intonaco*. It is put on quickly, gently but firmly, and troweled smooth with no floating and the thickness of approximately 3/16" is preferred.

While this coat is still fresh and damp, the drawing on paper is held against it and incised with sharp points over the outlines.

On this coat, place over the sketch on equal size tracing paper which is called 'cartoon'. The cartoon is laid over the final, freshly laid plaster pressuring from a stylus. The pouncing technique (spolvero – see definition of key terms) can be used.

Al.4. Colours

After the painting is made with natural pigments diluted only with water, water starts to evaporate until the wall is dry to the touch, and the carbonation begins. The surface calcium hydrate, $\text{Ca}(\text{OH})_2$, slowly combines with carbon dioxide, which is always present in the air, to form calcium carbonate: $\text{Ca}(\text{OH})_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$

Colours used for fresco mural by YoungSun Jin










Yellow, Orange, Red









Blue, Green

Brown

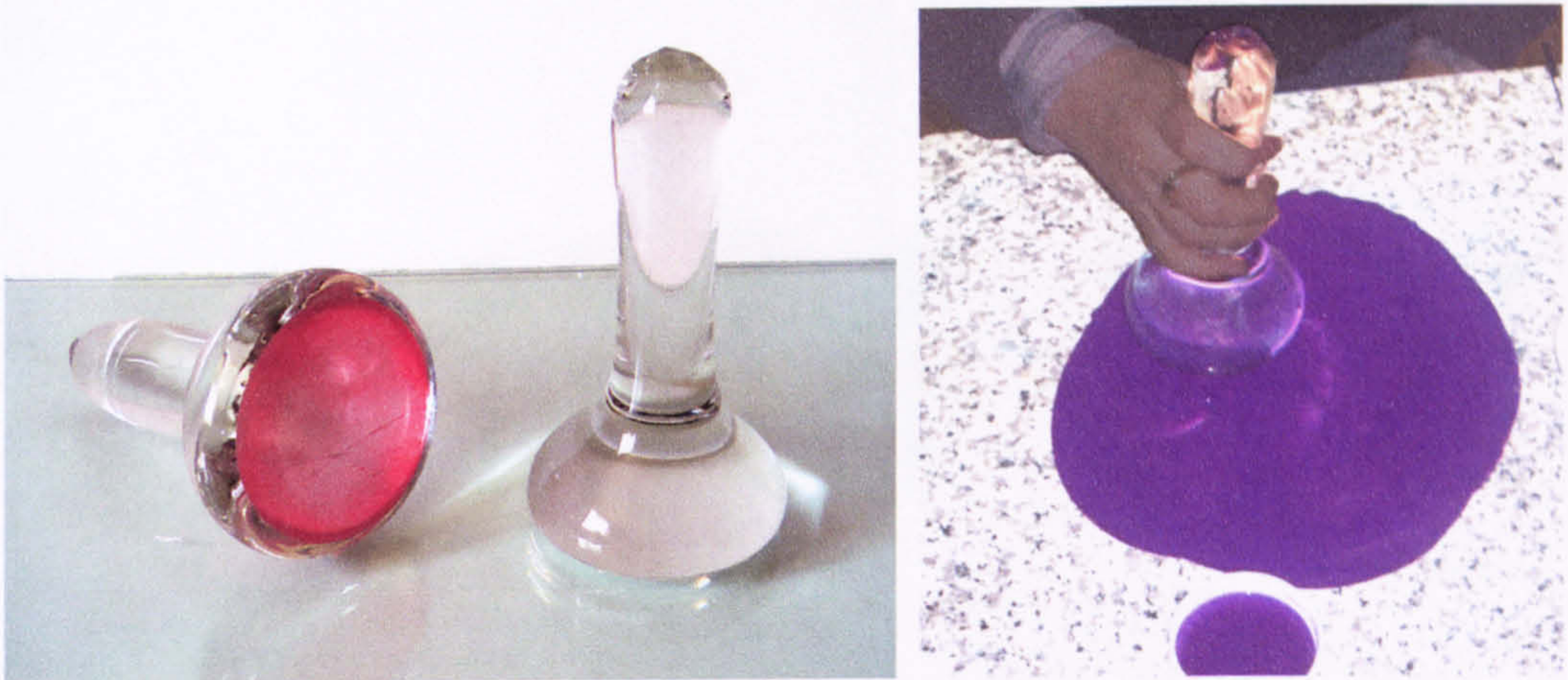
 <p>YELLOW OCHER</p>	 <p>TERRA SIENNA</p>
 <p>SOFOROUGE FRENCH OCHRE</p>	 <p>RAW SIENNA</p>
 <p>JALS FRENCH OCHRE</p>	 <p>BURNT SIENNA</p>
 <p>GOLD OCHRE</p>	 <p>TERRE POZZUOLI</p>
 <p>RTFLES FRENCH OCHRE</p>	 <p>TERRE ERCOLANO</p>
 <p>BROWN OCHRE</p>	 <p>OCHRE AVANA</p>
 <p>VENETIAN RED</p>	 <p>BURNT UMBER LIGHT</p>
 <p>ITALIAN BURNT SIENNA MIXED ORANGE</p>	 <p>BURNT UMBER</p>

Violet, Black

 <p>CINQUASIA VIOLET</p>	 <p>IVORY BLACK</p>
 <p>COBALT VIOLET</p>	 <p>FRESCO BLACK</p>
 <p>VIOLET DARK</p>	 <p>VINE BLACK</p>

Colour Grinding

On the clean plate glass a heaping tablespoon of dry fresco pigment is mixed with some distilled water to form a paste, using a palette knife. The grinding muller is placed over the colour and with a circular movement, is slid over the moist colour with pressure. It is ground for about half an hour so that every molecule of colour is suspended in a droplet of water.



Al.5 Tools

Trowels and Floats



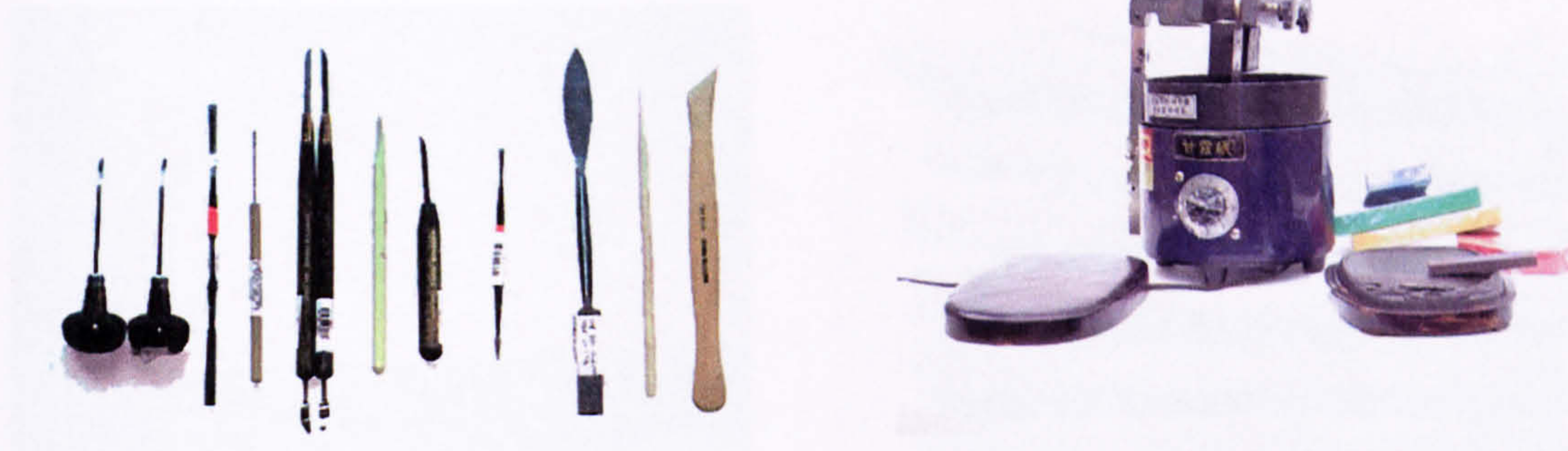
Brushes and Tools for fresco painting

Fig. 1. Different types of brushes and tools used in the fresco technique



Fan brushes

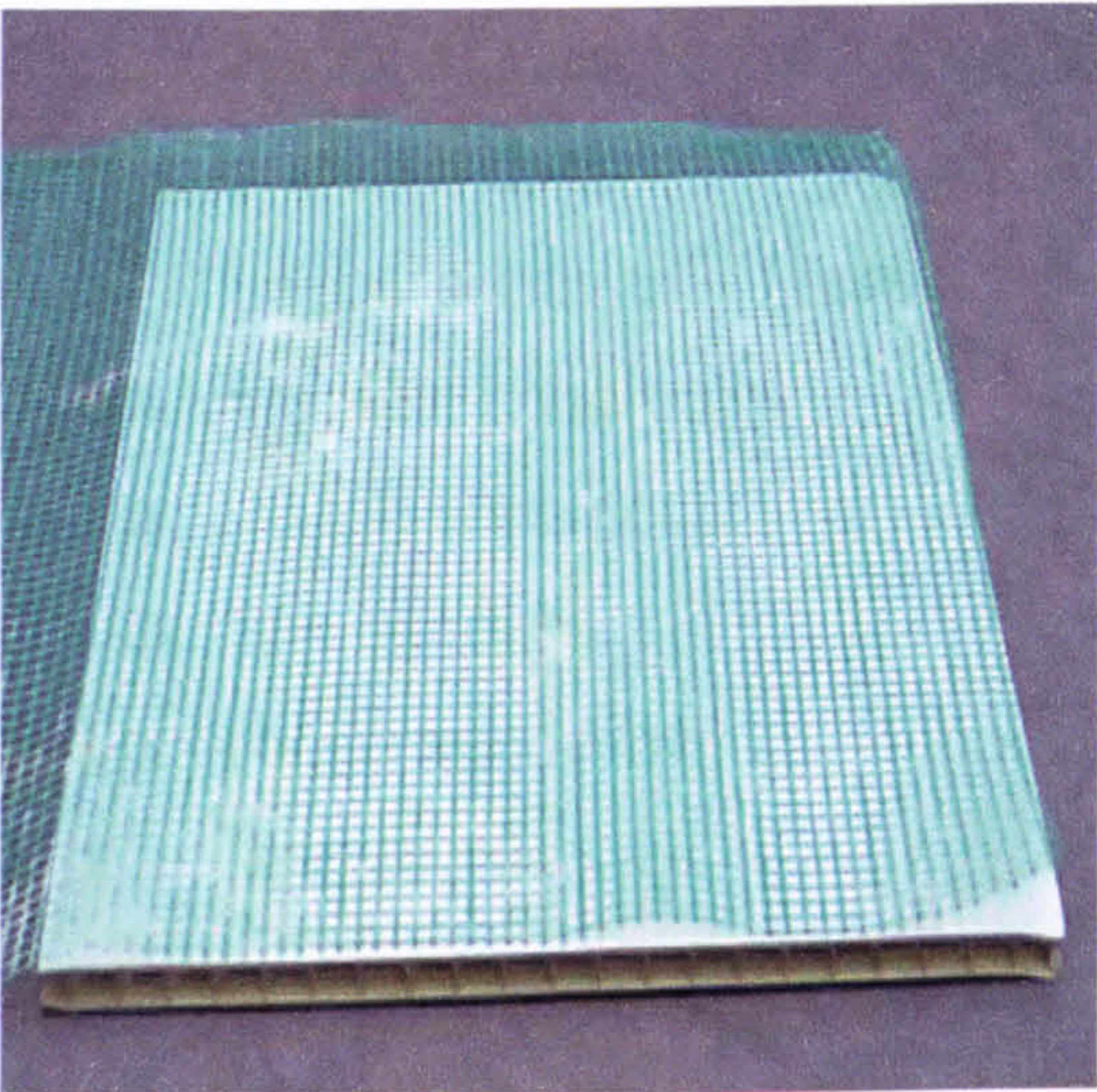
Agatha Stone



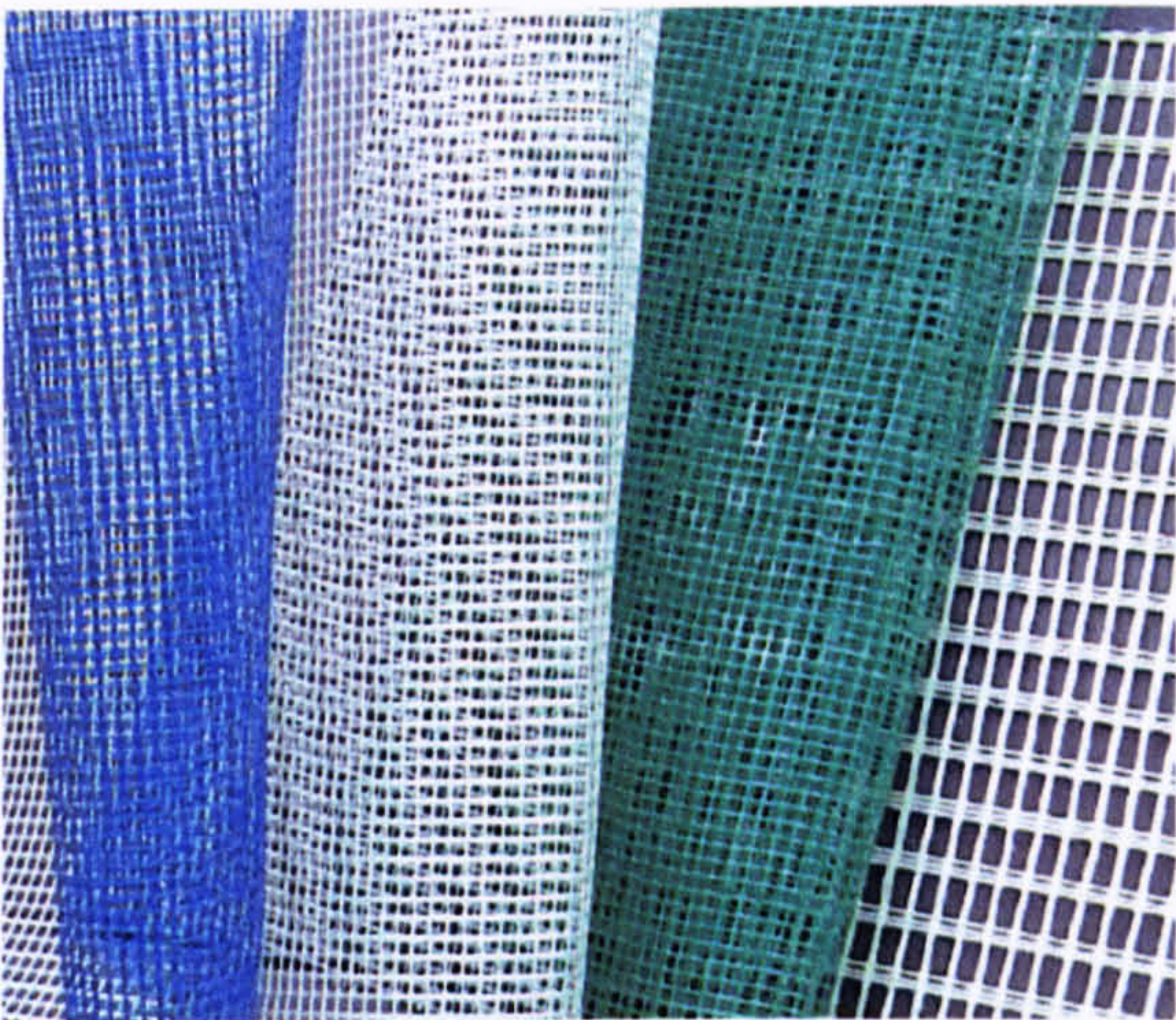
carving tools

Ink Stone and Ink Sticks

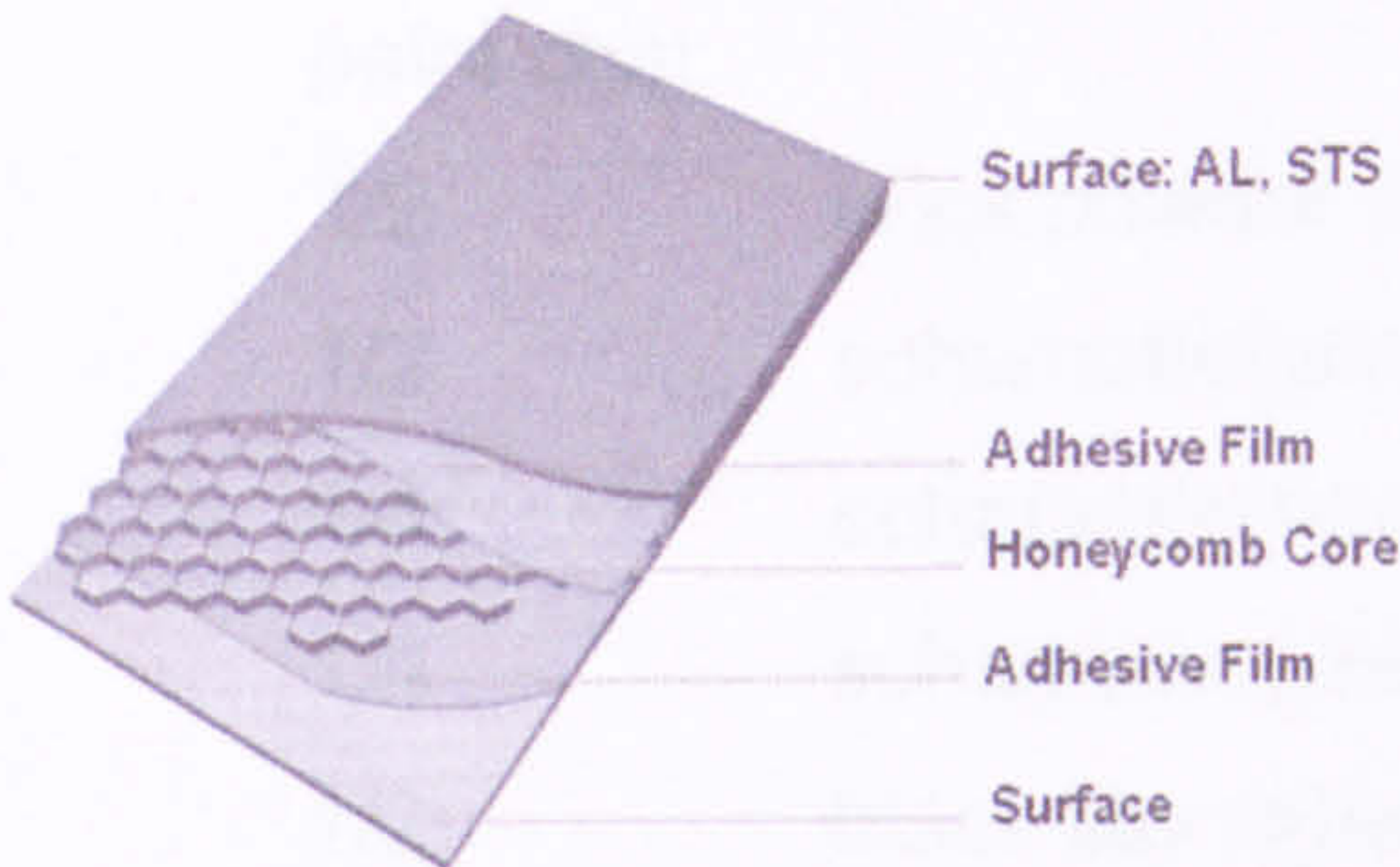
AI.6. Different types of Boards and Panels for Portable Frescoes



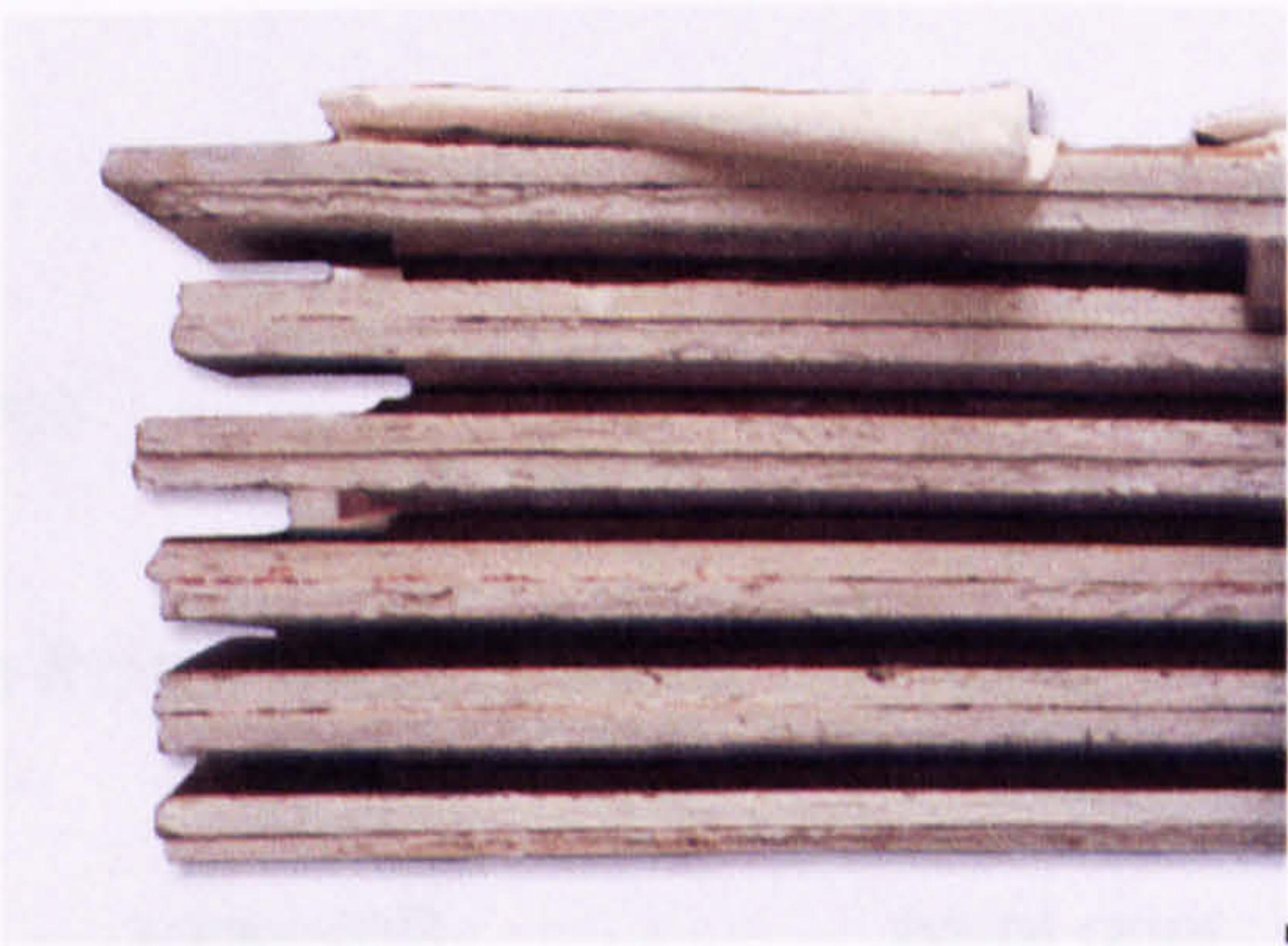
Honeycomb Panel with glassfiber mash



glassfiber mash



tactum board



plastered tactum board

Al.7. Examples of mixing mortar

1) National Museum of Korea, 1996 by YoungSun Jin

brown coat

4 p. yellow schamotte (passoir)

1/2 p. first fine schamotte

1/2 p. rough schamotte

2 1/2 . fine sand

1/2 p. rough sand(lava)

3 p. marble dust

1 p. brick powder

4 p. lime putty



paint coat

1/2 brick powder (fine and gros)

1/2 schamotte(gros)

1/4 schamotte(fine) brick powder(fine)

1/4 schamotte (medium)

1/2 black stone(medium)

1/2 fine sand

1 lime putty

2) Miami Court House by David Novros

US Red Top(single hydrated) Lime from dolomitic stone was used

wall preparation

brown coat

1p. rough sand

1p. lime

scratch A

1p. med sand

1p. lime

scratch B

1p. fine sand

2p. lime

paint coat

1p fine sand

3p. lime

3) New Workers School, New York by Diego Rivera

First or 'scratch' coat (Cement Coat)	
White Atlas Cement	33%
Marble dust No.16 or 18 . .	33%
Lime	33%
Goat hair	1%
Rough or 'brown' coat	
Marble dust, No.16 or 18. . .	2 parts
Lime.	1 part
Finish Paint Coat	
Marble dust, Fine	1 part
Lime	1 part

4) Rockefeller Center, N.Y. & Detroit Institute of Art by Diego Rivera

- First Coat(on metal lath)
- Wire lath or expanded metal lath
- 3 rough coats
- Finish coat

5) Faculty of Medicine, Mexico City by Diego Rivera

- Stone Wall, cleaned & picked to form boarding key
- First coat on stone wall
- 3 rough coats
- Finish coat

Clean sand is sometimes used instead of marble dust. Proportions are by volume. In Mexico coconut fiber is used in place of goat's hair. Lime hydrate is sometimes used in place of lime putty.

AI.8. *Fresco Studios in the Educational Institutions*



Atelier de Fresque, Ecole Nationale Supérieure des Beaux Art, Paris



Students' works at Mural Painting Class, The National University of Mexico, Mexico City



Fresco Studio, Tokyo University of the Arts, Tokyo

APPENDIX II.1

Historical Reception and Documentation of Fresco Painting: The Mural Painting of Jangchun Tomb in the National Museum of Korea

II.1.1. Jangchun Mural Replica: Process and Practical Relevance

Jangchun is a city lying on the right bank of the Yelu River which runs through Ji'an district of Manzhou. Located at the centre of a hillock, the first Jangchun tumulus is one of the two biggest mound tombs discovered in the Manchurian city. When the mound crumbled and the entrance to the tumulus was exposed in June 1970, it was excavated and cleaned up by the Jilin Province Museum for maintenance and preservation.⁹¹

It is especially renowned for its beautiful wall paintings telling stories that brim with liveliness and exceptional forms. The paintings depict more than one hundred characters in various scenes of life during the Koguryo Dynasty such as Buddhist rites, hunting, music and dance. With its vivid portrayal of everyday life, it is as an invaluable piece of historical and scientific significance in addition to being an outstanding work of art. A little-known fact that I discovered is that the three portions of the painting representing Buddhist rites, music and dance are illustrated in a way similar to today's animation techniques.

I came to this conclusion in 1996 while enacting a life-size wall painting like that at Jangchun in the royal wing of the exhibition hall in the National Museum of

⁹¹ Jilinsheng Archaeological Relics Task Force, Jianxian Relic Preservation Office: *Jian Changchun No.1 Mural Tumulus, Excavation Report: Jian Koguryo Jangchun No.1*, translated by Jeon, Ho-tae.

Korea in Seoul. With more active research into the Jangchun tumulus and as a result of reports from various perspectives testifying as to its academic value, a more specific identification of Koguryo's wall-painting materials became all the more important. Replication of a painting requires a complex process involving more than just artistic interpretation and stylistic analysis – the environment



Fig. A-1 Entrance of Jangchun Tumulus Mural,
National Museum of Korea

surrounding the production as well as the psychological background of the artists must also be taken into account. As a fresco artist, who has spent the last twenty years re-enacting frescoes and applying traditional fresco materials to

contemporary art, I was put under a great deal of pressure in knowing that this was going to be more than just a reproduction – it was to be a second creation.(Fig.A-1)

There are obvious differences in one's role and observation regarding a wall painting which depends on whether one is a disinterested viewer or an artist who intends to recreate it into an organic life-form called art. For the re-enactment project, I spent nearly two years studying each of the more than one hundred characters and the subtle situations created by their organic interactions. Such in-depth study was more than warranted. Stories depicted by the images of the tumulus the owner, his wife, gatekeepers, strong men, military bands, hunting, masques, five-stringed harps, dancing, jugglers and cart pullers, traditional wrestling, the four gods of the four sides, Buddha, all kinds of animals, court servants, the lotus flower, and the hosts of heaven (sun, moon, and stars) all invoked intricate emotions and left indescribable impressions that could not even start to be captured without approaching the context intended by the artist.

The artist most likely had been a professional painter like myself. The materials and techniques were quite deftly handled and the brushstrokes are confident and smooth, though the painting technique may seem crude compared to the sophisticated drawing and detailed depiction of today. With no perspective used at all, distance cannot be estimated. But overall, the painting exudes a strong sense of reality that more than fulfills the artist's intentions. In particular, images of dancers (moving to the tune of a five-stringed harp) and jugglers seem intended, albeit with a little sophistication, to express the sublime, hinting at self-absorption, which has been thought exclusive to contemporary art.



Fig. A-2 Southern Wall of Janchun Tumulus, <Royal Feast with Music and Dance> National Museum of Korea. The original mural was painted in early 5C

On the southern wall, a drawing of a 'Royal Feast with Music and Dance', depicts the tomb owner and his wife appreciating the singing of male and female performers accompanied by a group dance. The drawing of the mixed choir of ten and the dance troupe below them shares the same layout with the Muyongchong Tomb. Having been subjected to severe wear and tear, the images in the damaged parts were replicated as closely as possible. Then, based on my reference photographs, the parts deteriorated and no longer in existence were taken away the next day.



Fig. A-3 Northern Wall of Jangchun Tumulus <Hunting and Picnic Scene>

The northern wall is filled with plays, entertainers and music on the upper part of it and hunting scenes on the lower. On the right-hand corner is a big red tree with an abundance of fruit; to its left unfolds a variety of plays and other entertainments. Raindrops from flowers, a combination of lotus buds and water drops, fill all unpainted space. The image of the tomb owner standing to the left of the tree was severely damaged, but among those of the male and female servants behind him there is a rare sight. The figure of a male servant wearing a hat called a *julpoong* and holding a parasol is unique. Unfolding at the end of a stick as long as the servant's height, the half-moon-shaped parasol is of such exquisite style and artistry that it seems to be a version of one of the designs popular in Italy at the time. (Fig. A-3)

The painting on the ceiling of the burial chamber is a rectangle diagonally divided into four equally-sized triangles. The east side is painted with three-legged birds, representing the sun, and the north side a toad and a white rabbit symbolise the moon. The constellation, Ursa Major, is depicted on the upper and lower sides of the painting.



Fig. A-4 Eastern Wall of Jangchun Tumulus <Worship Before the Image of Buddha>

Between the sun and the moon, four shiny red Chinese characters meaning Ursa Major ("北斗七青") are written in the square and ornamental style of Chinese writing. (Fig. A-6). During the re-enactment project, the ceiling paintings in the antechamber and the burial chamber were rendered on a panel of the same size and placed on the ceiling with enough space between it and the edge of a stair-like pile of propping stones to allow for heating and cooling (Fig. A-7). I discovered that some parts of the painting produced animation effects with a series of sequential actions. Such parts are described below.

Five-stringed Harp Music and Dance



Occupying the top centre, this portion of the painting shows a total of five characters. Of them, a man and a woman are actually the same person, and they create an animation-like situation. It seems to tell a story. The man, holding a lotus bud, says to the

woman, 'Please play the music, for I shall dance.' The woman immediately instructs the musician to her right to bring her a five-stringed harp. The scene, which unfolds below is of the musician busy at her instrument and the man dancing exuberantly to the music (Fig. A-5).

Hawk Chasing a Pheasant

A boy with a hunting hawk resting on his arm is passing under a big tree when he discovers a pheasant. He promptly lets loose the hawk. The scared pheasant runs away from the hawk whose neck



has stiffened aggressively. The hawk appears twice in this part, first on the boy's arm and next flying after the pheasant (Fig. A-6).

Worship to Buddha



Fig. A-7

This image of Buddhist prayer is painted on top of a passageway in the middle of the eastern wall, and it tells of two followers who go out for a walk only to run into rain (depicted as flower drops) and come back home with a parasol. In the centre sits Buddha on his customary seat with his legs crossed. To his right are the tomb owner and his wife who appear to be the same people as shown on the left on their knees in prayer. A representational distinction is that their bodies are shown on their side while their faces are shown upfront. It seems that, having returned from their outing, the husband has taken off his hat and the wife has changed her clothes for prayer (Fig. A-7).

Horse-riders and an Old Man

This scene is actually too damaged to decipher the drawing, but its animation effect is assumed from the excavation report: 'An old man of a different ethnicity is on the ground behind large white horses. He is looking back with a startled expression to the horses running in his direction. Behind him are riders on two horses running up, and his startled look suggests that the two images are sequential.'

2. Materials and Techniques used for Jangchun Tumulus No. 1

A variety of literature was studied in preparation for the re-enactment project, but information on the materials and techniques of Koguryo murals was extremely scarce. Photographs in a limited number of publications were the only available source. They were studied meticulously but there was no way of knowing how close my assumptions were to the real thing. I tried visiting the site, but the decision had already been made to close the Jangchun Tumulus No.1 to the public to prevent potential diplomatic, political, and historical conflicts between China and Korea. I had no choice but to undertake the re-enactment project with the disadvantage of not being able to see the original paintings.

According to the Jilin Province Institute of Archeological Relics, Jangchun Tumulus Number One had been broken into in late 1995, the result of which left the mural partially destroyed (discovered in August 1996 it was formally announced in early 1997). Then, in 2000, the mural was destroyed beyond recognition by burglars who made off with the painting after cutting it into pieces with chainsaws.⁹² I started collecting information on the mural in 1995, and entered into the project in

⁹² Regarding the break-in, Kim Tae-ik of the daily newspaper, *Chosun Ilbo*, urged in his article of 29 March 1997: 'Koguryo Mural Likely Stolen by Professionals, Protection of Cultural Relics in China Urgently Needed.' Again in *Chosun Ilbo* (Oct. 4, 2001), Sihm Hyung-jun wrote an article entitled, 'Stolen Mural: Scenes from the Jian City Koguryo Tumulus, Mural Cut into Pieces with Chainsaws.' He laments that the mural of Jangchun Tumulus No.1, which boasts the highest quality among all discovered Koguryo murals giving an overview of the 5th century life and religious practices, has been lost in its entirety through two burglaries. The following day, *Chosun Ilbo* carried another piece on the subject written by Lee Kun-moo (now the Director of the National Museum of Korea). Lee deplored: 'I couldn't help but feel numb for a long time after hearing that the Koguryo murals in Samsilchong ("the three-chambered-tomb") and Jangchun Tumulus No.1 located in Jian City have been brutally torn away by burglars wielding electric saws. How could something so ghastly have happened? Tumulus burglaries are born of materialism and blind worship of the old; it is a cultural tragedy and the most heinous crime. It is not only a crime against individuals and society, but against the entire human race and our history.....The stolen mural was rendered around the 5th century, a masterpiece of the highest achievement that was always referred to when talking about Koguryo murals. For this, my disappointment is made all the more profound.'

the Koguryo Hall of the National Museum in June 1996. In other words, when the project was underway in Seoul, the original painting had already been considerably damaged.

Going into the project, I collected as much information as possible and put the pieces together to get an overall layout. Using the study production of an isometric drawing⁹³ as the foundation, the layout and detailed diagrams were drawn of the tomb from its entrance to the ceiling and four walls of the antechamber and of the ceiling and three walls of the burial chamber. No information at all regarding the burial chamber's western wall could be found. But because the entire burial chamber was decorated with lotus flowers, a so-called 'association creation' was tried by painting lotus flowers all the way from the northern and southern walls. Around this time, I luckily came upon a videotape⁹⁴ showing a detailed look of the interior of the Jangchun Tumulus Number One which helped me to modify the western wall of the burial chamber's entrance.

Photographs of Koguryo murals were obtained from the vivid and colourful pages of *Special Collection of Koguryo Tumulus Murals* published in 1994 by the Korean Broadcasting System (KBS) as well as *Jian Koguryo Tumulus Murals* published by the daily *Chosun Ilbo* in 1993. But acquiring information on the techniques and materials used was practically impossible, so I decided to put together my experience, statistical information, as well as the general sensation of the overall painting to determine the mixing proportions.

⁹³ Created by Yoon Jae-won who oversaw the Jangchun Tumulus No.1 project.

⁹⁴ A 1996 video of the Muyongchong Tomb and Jangchun Tumulus No.1 and 5 where Koguryo murals are housed - a part of the 6-series documentary produced across 2 years by the Seoul Broadcasting Station, titled 'Secrets of the Royal Capital' narrated by the novelist Choi In-ho.

According to R. Luján⁹⁵, the tombs were built with granite or limestone slabs bounded by clay with a repainting made by a mortar of clay, lime and sand with a render of lime, crushed limestone, sand and chopped rice-straw and dust. He found that in the area he studied: 'It was most common to paint directly onto the polished granite and limestone slab or onto a very thin preparatory layer over a stone slab.'⁹⁶

However, he has found one example where the painting was applied onto a lime render. This example of painting onto a lime render corresponds to the Dokhung tomb (408 BC) and is described as follows: 'The two chambers have a smooth, well compressed and polished render of lime, sand, white clay and chopped straw (of which we can see the impression).'97

The other source founded on Koguryo mural paintings was the Mora and Philippot⁹⁸ description of the seventh-century paintings of the tumulus of Takamatsuzuka near Nara, Japan. These paintings 'were executed on a very white and carefully smoothed lime-based rendering centimeters thick. The pigments are fixed by carbonation of the rendering'.⁹⁹

Mora and Philippot associated the Nara paintings with the Koguryo period mural paintings and, considering the possibility that the technique of execution is that of true fresco, advised that a detailed study should be conducted.

⁹⁵ R. Luján L. ICCROM Mission Report. *Conservation of Mural Paintings Dokhung and King Dongmyong Tombs*. D.P.R. of Korea, September 1990, ICCROM Library, Mission Corée 1989.

⁹⁶ Ibid. P.4

⁹⁷ R. Luján, op. cit. p.4.

⁹⁸ Mora Laura and Paolo, Philippot Paul, *Conservation of Wall Paintings*, London, 1984.

⁹⁹ Ibid. p. 101.

3. Technique of execution of the mural paintings of the Jangchun tomb:

There are two fragments of early fifth-century wall painting in the collection of National Museum of Korea which we examined for the project.

Fragment 1 (from an unknown place of origin, Manchuria).

This fragment was as well examined by naked eye and it shows the following stratigraphy:

- 1) *Arriccio*. Stronger than the fragments from the Ssangyong tomb. It consists on a white render of lime and sand with some pinkish inclusions that could be crushed brick. The whole *arriccio* seems to have been applied in three layers, the second of which looks brownish due to the inert charge used. Thickness about 3-4 centimetres.
- 2) *Intonaco*: More than an *intonaco* and could be called *intonachino*. It consists of a very white thin layer with no evidence of inert charge. The components of this *intonachino* are impossible to describe by naked eye but could be lime, white clay or even gypsum. Thickness about 2 centimetres.

The fragments examined are very similar to the description of the Dokhung tomb by R. Luján L. from North Korea and to the description of the Nara paintings by Mora and Philippot. However, no analogy with the Jangchun tomb can be made at the present state of investigation, since very little is known from the technique employed in the paintings at the tomb. The book on Koguryo mural paintings¹⁰⁰ published on the occasion of the exhibition at the National Museum of Contemporary Art contains no information about materials or technique of

¹⁰⁰ *Mural of Koguryo Tumulus*. Chip-an Koguryo Tomb Painting Exhibition, National Museum of Contemporary Art, 1994, Publisher Chosun-Ilbo, Hanrim Gallery, Korea.

execution. The reproduction of the paintings shows a variety of hues and colours but does not allow for an exact conclusion of the exact appearance of the original paintings. What is clear is that a research programme, analysing techniques and materials used throughout the Koguryo period, must be undertaken.

As the tomb was completely closed, nobody was allowed access to it. However, it was possible to have access to a non-professional video, taken inside it, which has added a little information. When the work was almost finished, it was possible to contact the journalist who had visited the tomb and made this video. Because he was a journalist, he could offer no reliable information about the technique used in the paintings. However, he remembered that the paintings had a slightly lighter and smoother render than the one applied for the replica at the museum.

Fragment 2

The National Museum of Korea has some fragments from tombs of the Koguryo period which it was possible to examine with the naked eye. From oral information provided by the museum staff, it appears that the tomb was built during the fourth and fifth centuries. After examination by the naked eye, one can conclude that the stratigraphy and technique of execution is as follows:

1. *Arriccio*. A pinkish mortar that appears to have been made of clay and straw. Thickness about 5 centimetres.
2. *Intonaco*. Very smooth lime-based render with an unidentified charge (sand or white clay or both mixed). Very rich in lime and seems to contain some fibres. Thickness about 0.5-1 centimetre.

Between these two layers one can see two other intermediate layers. These are

irregular and tend to disappear in parts of the fragment. These layers are similar to the arriccio and intonaco but in reverse order. As for a paint layer, there is no trace of any technique of transfer of the printing. The fragment is a very careful drawing in black ink with a few traces of other colours. However, the flesh colour of the faces is well preserved. The fragment was restored by the personnel of the conservation department of the museum in 1985; it was not possible to look at any report or analysis of the fragment.

The Re-enactment

The wall structure was built with the porous kalcon, which was cut into stone panel size and constructed to create two chambers of a tomb. Kalcon is a new material made of a combination of silicic and lime elements to which aluminum powder is added. It is light and porous and makes for easy sculpturing. But used as a wall for painting, its absorption and drying are excessively fast, causing many difficulties in spreading the adhesive mortar. To maintain an optimum level of humidity for the wall, an automatic device sprayed water on it every hour. The first batch of mortar was mixed with enough big particles and painted thickly in two layers to make up for the quick evaporation of water.

The first background colour was mixed with black ink and yellowish brown paint to capture the current worn-down hue of the mural. The most important basic material, lime, came from my lime pit which I created ten years ago by adding water to lime and burying it underground. Panels for the draft and the actual paintings were prepared using the *buon fresco* technique based on the mixture devised by the muralists Diego Rivera and David Novros.

With the drawing clearly in place, it has to be wiped the following day with a

wet sponge, rough brush or some other device to produce an effect of 1,500 years of natural wear. The destroyed parts would then have to be hammered off with a special device in close compliance with the appearance of the original painting. This is where it becomes visibly different from the copied drawing. The drawing includes even the destroyed and recovered parts, making it difficult to generate a realistic feeling or a sense of the materials. Besides, putting a planar drawing on the wall does not allow for a multi-dimensional environment where the wall itself has to be a painting. Typically in a re-enactment project, the same materials as the original are used. Likewise for the Koguryo mural, it is important to use fresco, the best medium employing lime and stone particles, to create a unique and realistic sense of space that cannot be captured by another medium.

The Re-enactment Site

Rendering a mural usually goes in step with the interior construction of the building, and must be finished by a specific deadline. With the National Museum of Korea relocated to the temporary royal museum, replicating an actual-sized Jangchun mural in its Koguryo hall had to be undertaken in a highly unfavourable environment. For lighting, for example, only construction light bulbs were provided; and, for electricity, lines had to be connected to the sockets in the common hall, giving rise to a permanent struggle with people working in other exhibition halls to get to the sockets first. Colouring and painting tasks especially require bright lighting to allow for an accurate viewing of colours, and it is important that a production lamp is installed specifically for this purpose. It was middle of August, at the height of hot and humid summer, when the cooling system was not yet working correctly, that, as I worked at the top of a ladder, my hands and arms looked as if

wrapped in a glass pipe, so completely coated were they in sweat. It reminded me of the lament by Michelangelo as he worked on Genesis in the Vatican Chapel when he compared himself to a 'Lombardia cat plunged into sewage water'.

Conclusion

To enable more specific studies on Koguryo murals to be undertaken, the focus should not remain on a few detailed studies on just a handful of murals. Efforts should be diversified to include on-site research, dissemination of information through education, and actual practice. A more urgent challenge would be to expand studies into the techniques and media of fresco, the representative medium of murals, and enable more comprehensive teaching of contemporary fresco. This will help to overcome the perceived limitations of murals connected to the notion that it is an anachronistic medium. Replication and re-enactment projects would also stimulate better understanding.

Studies into Koguryo murals have put much emphasis on their historic importance and content, as well as their aesthetic value. But for all their artistic significance, it has been rarely observed that there is important value in continuing their legacy in the modern era. With more focus on such realistic issues, this article aimed to let the value of the old encounter that of today. As an active artist who deals in materials and techniques, I believe this is a particularly urgent area. The article also intends to point out that, in some other countries, fresco remains under continuous attention, and there is much emphasis on incorporating both the past and present. For a development like this to transpire in Korea, diversification is necessary for mural projects (like all public art) that bring together sponsors, artists, and viewers.

As stated earlier, *fresco secco*, and other similar painting media offered techniques and materials that were enthusiastically welcomed by the world of art and are widely familiar to both the audience and the sponsors. Always protected by the sturdiness of buildings, fresco more than fulfilled its role as an illustrative part of a specific location. But as to why fresco has started to decline when art media are being used with greater freedom, nobody has an answer. The fact that fresco may have lost its evolutionary capacity to adapt to the modern tendencies of quickness and convenience should be diagnosed with reinforced vigour. It should also be recognized that the actual practice of fresco came to be ignored when practitioners were timid in accepting changes or transformations.

This article concludes that deeper studies into the reality, adaptability, and circumstantial relevance of the Koguryo murals must take place before the murals - that so effectively portrayed the identity of the people at the time - and their associated methods, can be firmly established in the world of art. Therefore, in addition to 'seminar studies' where the significance of modernising fresco is discussed, it would also be highly relevant to create opportunities as soon as possible where contemporary variations and the adaptability of Koguryo murals are tested and practised. If it does happen, it will be a total revolution, one that requires perceptual changes on the part of sponsors, artists and the audience, and the rebirth of a complexity of elements characteristic to the medium of wall painting.

APPENDIX II.2

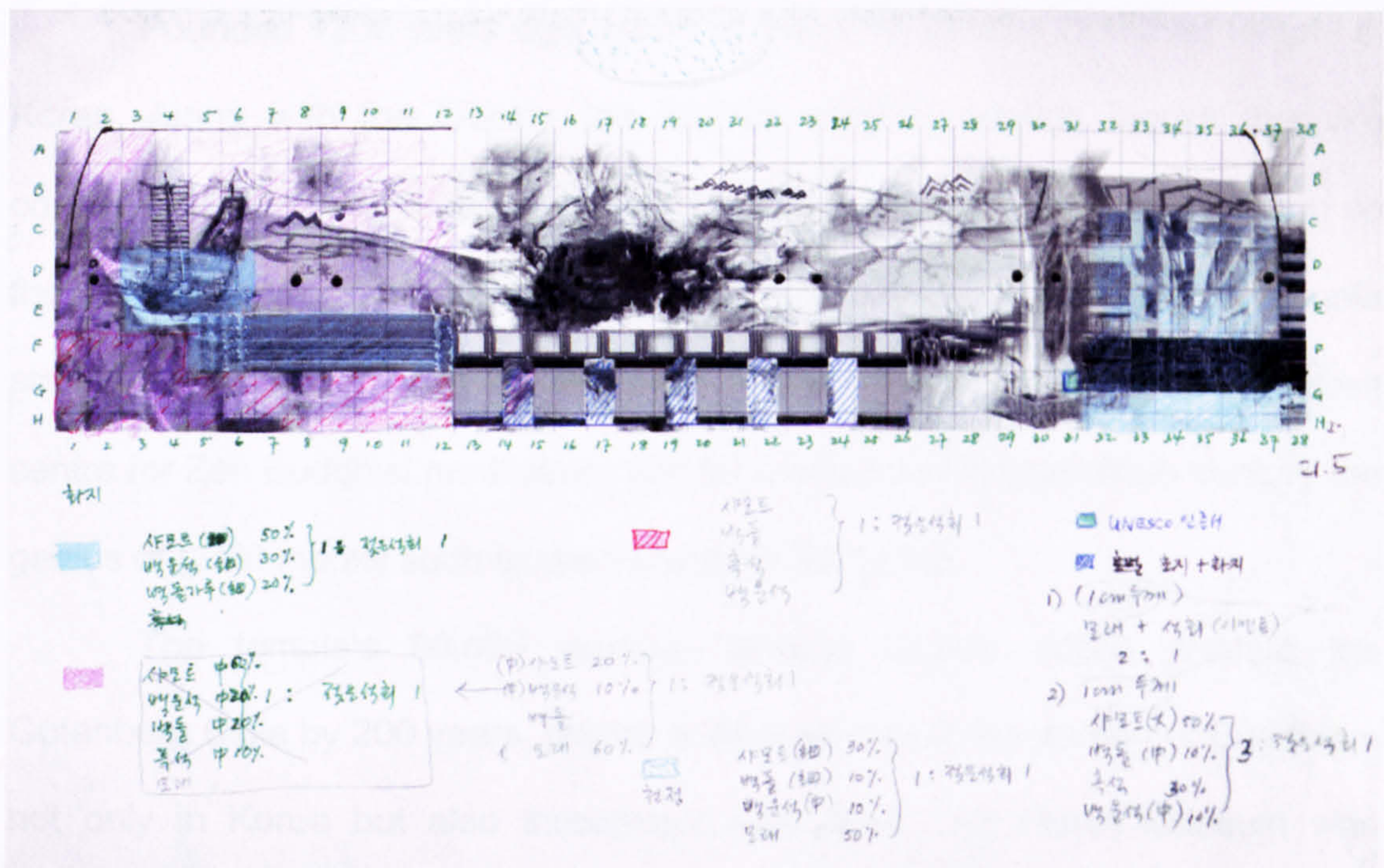
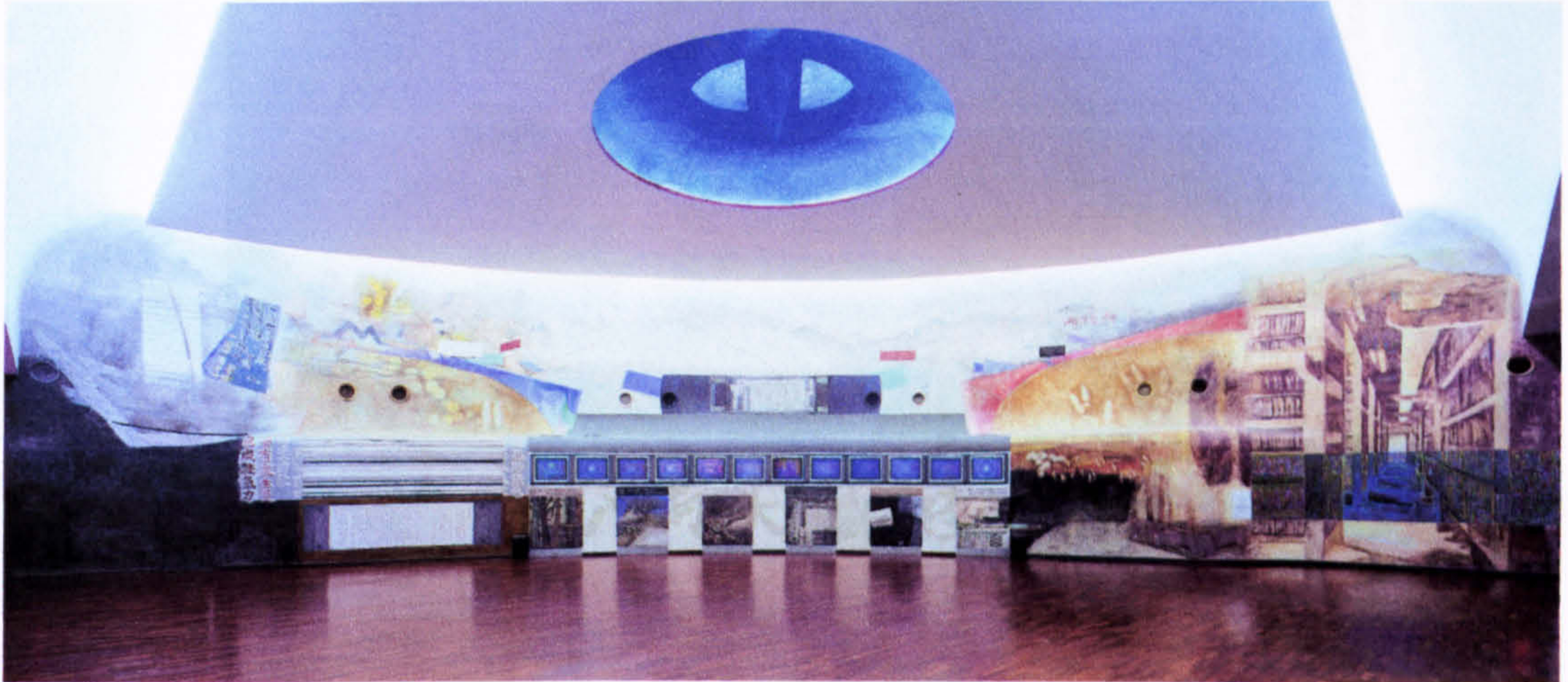
HAEIN TEMPLE MUSEUM AND JOSEON ROYAL KILN MUSEUM

The public art projects in which I have been involved during the last fifteen years have been, for most part, monumental wall frescoes destined to remain in museums or landmark educational buildings. Elsewhere, projects commemorate important occasions such as the new millennium. Because the monumental scale and the permanence of the wall fresco (between seven and thirty metres long) make it impossible to move them, I presented their scale and my artistic intention through photos and other documentations at the Lethaby Gallery exhibition in 2003.

It is worth noting that the sponsors of public art projects are not the churches or governments which have been the traditional sponsors of fresco, but museums, universities, and television broadcasting, all places that teem with people. This extension of sponsorship from church and state to museums, universities, and mass media demonstrates that, besides its traditional sponsors, fresco can now count on new sources of support that continue to multiply. It is especially worth noting that when the fresco artist has the chance to leave the studio and create a public art project, he or she encounters sponsors that take their roles as seriously as curators, employ superior conservation techniques, and appreciate the originality of fresco as a medium.

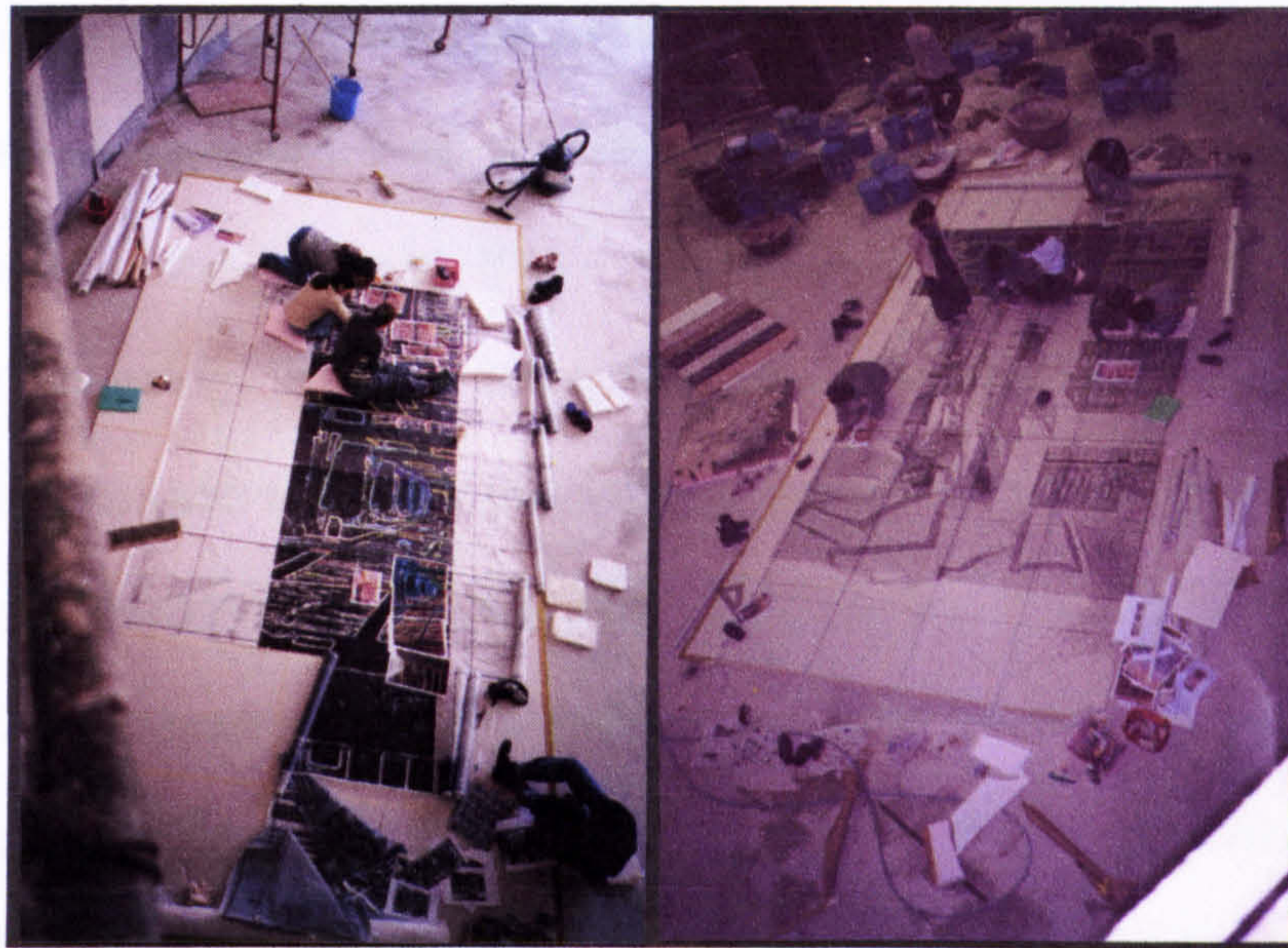
II.2.1 HAEIN TEMPLE MUSEUM

Fresco Mural <Enlightenment – Light and Time> 1998-1999. Collaborative work with Nam June Paik's <Haeinsa Fantasy>(11 channel video) mural: 7.5M(H) x 30M(L), ceiling: 6M in diameter.



The fresco project for Haein Temple Museum was conceived as part of a master plan that also saw the construction of the museum itself. As such, it maintains

the traditional relationship between an architect and a fresco artist who develop together the concept of architectural space, much like the hardware developer and the software developer in the computer industry.



Founded 1200 years ago, Haein is the most famous Buddhist temple in Korea. Along with the Library, the 80,000 wooden printing blocks that are conserved in the temple library are both a national treasure and an inclusion on the UNESCO World Heritage List. Haein, the quintessential Buddhist temple steeped in tradition and a brilliant past, is also known as the most important centre for Zen Buddhist meditation, and for fostering in the twentieth century the genius of great monks such as the venerable Sungchul.

The temple's 80,000 wooden printing blocks, which predate the Gutenberg Bible by 200 years, played a decisive role in the spread of Buddhism not only in Korea but also throughout east Asia. The Haein Museum was conceived to house the wooden print blocks and make them accessible to the general public. The temple is a place of pilgrimage and Nam June Paik and I were chosen to create a video and fresco mural as a permanent feature in the

museum.

Many wall frescoes can be found in ancient royal burial mounds in Korea. Few, however, are found in Buddhist temples and centres. Frescoes and Buddhist culture, it would seem, do not usually mix. It is remarkable that fresco and the video of Nam June Paik, who, incidentally, is the father of video art, are shown together in this museum, that a symbol of traditional art should meet an icon of high technology in space dedicated to Buddhist meditation.

In this collaboration, my job was to paint the domed ceiling and the seven and a half metre high by thirty metre long second-floor winding wall of the museum. Paik's job was to integrate twelve monitors into the centre of the wall fresco. There were no particular preconditions as to a convergence between my fresco painting and the technological art of Nam June Paik. However, because very different media are involved in the same space, it is evident that our eventual success was the result of our intense shared curiosity for a very special experience.



Paik and I had several meetings discussing the initial concept and the key images. From the outset I studied the subject matter of Paik's work and thought about how mine could encounter and complement his. Paik's installation was to be an eleven-channel video on the profound mandala and

Zen Buddhism, meditation, the atmospheric candle ritual, and the images from Haein's historical wooden printing blocks. My ceiling fresco on the second floor of the museum was to represent the universe in images of stars that evoked astronomical charts and the wall fresco would represent not only the depiction of symbolic wooden blocks and the interior of the impressive library that housed them, but also, more importantly, the concepts of the light and time that are the primary subjects of my work.

I set aside all consideration of how the outside world would perceive my work and concentrated instead on the stature and unique character of the museum as a universal site for Buddhist meditation for the Buddhist monks themselves. I also concentrated on the composition of the spatial environment of the project, on the collaboration with Paik and the installation of his work, and on the *rendez-vous* between tradition and modernity. Instead of working with religious ritual, I chose the secular and the neutral, a subject that expressed meditation or that inspired reflection on absolute truth through the concept of an infinite universe. In the end, I composed two contemporary frescoes, one wall fresco and one ceiling fresco, representing positions of stars in the universe.

During the several months that I worked on the project, I was engaged in heated discussions with architects, video artists, civil engineers, lime experts, and museum curators. These discussions were mostly about the direction of my work. They pointed out the nature of the building, a museum located within a Buddhist temple, emphasising its geographical characteristics that it was built within a mountain. Some also brought up the significance of fresco and Buddhist art in the context of art's long history. However, I stood firmly by my

position. If the project was to be executed around a certain subject matter, I maintained, it was likely to become a traditional Buddhist painting instead of an independent work of modern fresco that would leave its viewers with a sense of distance and disinterest. In the end, it was agreed that I should make my own decisions about my work.

It is true that viewers are usually more interested in the content of a fresco piece than the characteristics of its medium. That is to say, whether the work is executed with traditional or modern materials, overwhelming importance is given not to these materials but to the actual artistic expression achieved with them. This tends to lighten the psychological burden on contemporary fresco artists. Viewers' curiosity is piqued by images and symbols first, and only when they wish to fulfill such curiosity and probe deeper into the nature of the artwork are they gripped with questions regarding the medium. Such an attitude on the part of the viewing public deepens and widens the artist's responsibility for the total quality of his or her work.

I gave the work the title *Enlightenment – light and time*. Its intention was to inspire the most important questions on existence, the universe, numbers, and time. Our concept of space and time is determined by our language, which designates the past, the present, and the future. The concept of the past signifies that which, in reality, does not exist in the present. The past evolved toward the present and only the present is real. This also holds true for the future, which designates space and time to come. In this sense, the reality of the future does not exist, only a continuation of the present. If this is true, though, does the future really exist? A meaningful theory that names the

present as we know it, does not mean that it is near to present time. The moment we call it the present it recedes into the past. In an exact sense, then, only being exists in the concept of time, and conceptual thinking as time becomes problematic.



I have always been fascinated by the concept of time. Oriental thinking on time speculates on entire changes in the historical concept of man in the past and the present. For instance, the opening words of the Bible are: 'In the beginning, God created heaven and the earth'. It is a little known fact that this biblical prologue is similar to the first book of Chinese characters. The order in which the universe was created in this book is the same as in the Bible: the sky, the earth, the darkness, and the yellow. 'In the beginning God created the heavens and the earth; and the earth was without form and empty. . .' has been a philosophical and ideological truism in Asia for a long time. It explains

language and writing, the heavens and the earth, an essential explanation of numbers and time, and a concept of the physical world that posits the universe.

Life is divided by time, that we believe is laid out in a mathematical space that leaves no room for error. Time exists at the frontier of the past, the present, and the future, divisions that we have created for practical reasons. But after studying some ideas on the revolution in mathematical thought and man's conceptual view of time, my thinking has taken on a different purpose. In this universal space, which is but a conceptual construct, there is no past or present. Not to have a past means that there was a time that passed, for this time can only exist enlarged as the present and can never stay in the past. A time capsule that returns to the past is indeed hopeless. This is also true for the future. The eternal continuation of the present is only stipulated in the future, for it does not exist anywhere in the time designated as the future.

The logic that there is only one eternal being establishes from the outset the falsity of the concept of nothingness. This explains that 'to have' comes from 'to be' and is not created from nothing. Two comes from one, and one is generated from zero. Until now zero has designated nothingness, the subconscious number, and the idea that when the identity of zero is clearly revealed the concept of nothingness will more or less disappear. This has become the mathematical motif that has defined my work.

I think that my conceptual approach to the Haein Temple project was inspired by the aura of the temple's history rather than the artistic satisfaction. The project taught me one or two things: that a public art project whose foundation is heavily reinforced with history diminishes the structure of the

present; that, in the case of Haein Museum, which requested artwork of a historical and biographical character, the discourse between artist and sponsor becomes tense and contentious.

Haein Temple is where Sungchul, the most celebrated Buddhist monk, lived. At his death, his body was cremated, and his ashes revealed the largest number of reliquary bones that anyone could remember. In life, Sungchul had been a teacher at Haein Temple. One day, discoursing on the theory of relativity, the Karmic law of retribution, and cause and effect, he recited these verses:

Since there is this, there is that

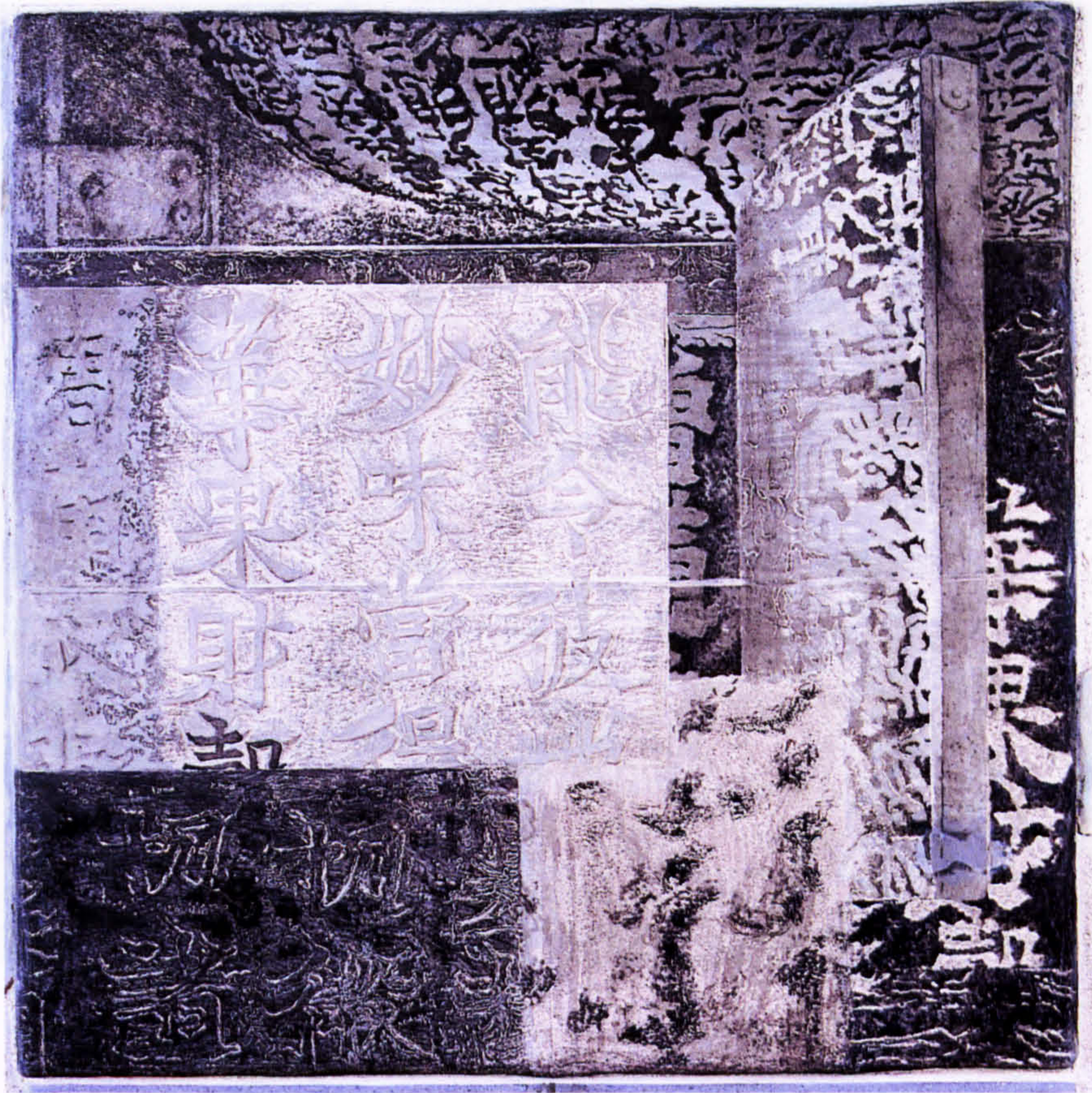
And since this happens, that happens.

Since there is no this, there is no that

And since this dies, that dies.¹⁰¹

Throughout my own work, it seemed like the great monk's mind was echoing inside my own.

¹⁰¹ Song Chul, (trans. Brian Barry) 'Since there is this, there is that', *Echoes from Mt. Gaya*, Janggyunggak, 1987, p96.

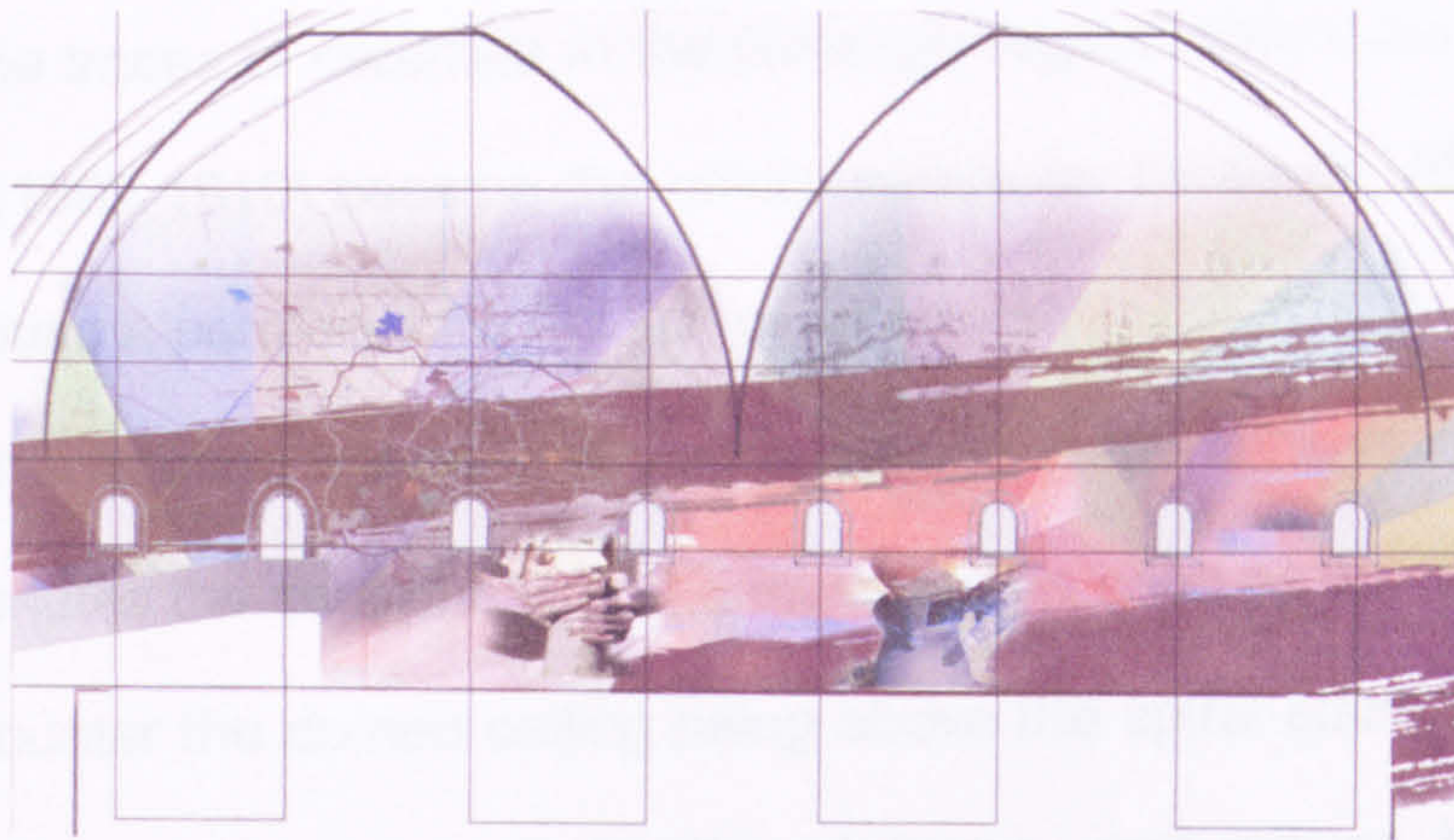




For many reasons, the meeting of video art and fresco at the Haein Temple Museum attracted much public attention. The press, represented by the *JoongAng Ilbo*, reported the project in the context of a Buddhist museum, a symbol of tradition. It also reported that it was struck by how video work overcame technology's traditional cold image to create a powerful presence in the museum space. As a result of this

II.2.2 THE ROYAL KILN MUSEUM

<Into Time + Channelling Time> fresco mural, Dome: 15M in diameter, Mural: 4M(H) x 40M(L) of winding wall, 2000-2001



For many reasons, the meeting of video art and fresco at the Haein Temple Museum attracted much public attention. The press, impressed by the fusing of modern technology and traditional fresco, reported the project in the context of a Buddhist museum, a symbol of meditation. It also reported that it was struck by how Paik's video work overcame technology's somewhat cold image to create a powerful presence in the museum space. As a result of this

successful collaboration, this time the Royal Kiln Museum invited us to collaborate.

When the Korean government inaugurated the World Ceramic Expo 2001 in Gwangju, situated in the outskirts of Seoul, it also built on the same site the Joseon Royal Kiln Museum for a collection of ceramics, the first of its kind in Korea, located in the city where the traditional art of ceramics was born. The organising association of the World Ceramic Expo commissioned Nam June Paik to create a video installation whose subject was ceramics in the museum's first-floor entrance hall and myself to create a fresco symbolising the history of ceramics on the ceiling of the dome and the walls of a rotunda that rises thirty metres above ground level. The museum's mission was to be like a great bowl holding the traces of ceramics in the Gwangju region, which, during the Joseon Dynasty (1392-1910) became the official centre for ceramics. After the Expo, it was to house a permanent collection of ceramics.

The rotunda space is a wall enclosing a monumental spiral staircase that dominates the central hall of the museum. As soon as the spectators enter, they encounter the domed ceiling rising above the spiral staircase whose walls carry the fresco. As one climbs the staircase, one follows the fresco. The winding wall is four metres high and forty metres long.

My approach to this work was to compose a pictorial scenario based on a visual reconstruction of how Joseon-Dynasty ceramicists created their work, a panorama or volumetric painting reflecting how the clay, the kiln, and the fire at the root of ceramics harmonise with the enamel and give birth to an extreme art. Taking into account the building's function as a repository for ceramics, I created

motifs that reproduced a path on which the building and the spectator who looks at the art museum and the art of ceramics breathe together.

The project can be divided into three parts: the creative process, the kiln, and the mapping of the evolution of ceramics. The first part, the creative process, involves incorporating the element of time into the creation of ceramics, from the digging up and modelling of clay to the addition of enamel and the firing in the kiln. This process allowed me to work spatially and to emphasise the hands of the ceramicist as a decisive intermediary.

The second part, the kiln, plays the central compositional role in the painting, to symbolise the ceramic arts and provide a link to the white porcelain that has traditionally been created in Gwangju. I tried to depict the harmony of three elements, water, earth, and fire, especially fire with red-wire structured porcelain being fired in the kiln.

The third part is the unified, taught atmosphere created by the speed of the calligraphic-style brushstrokes that I used to paint the entire dome with iron-like colours and red pigment. Taking into account Nam June Paik's laser video that would be projected onto the central part of ceiling, I used colours that suggest soft light and remain discreet. Paik's laser project was shown together with a video sculpture in the shape of a ceramic bowl. In order to create a harmonic structure with the sixteen windows of the dome, I used light colours accented with soft colours that evoke the space and light of the architectural structure.

