ISTITUTO ITALIANO PER L'AFRICA E L'ORIENTE
CENTRO PER LA CONSERVAZIONE E GLI STUDI DI ARCHITETTURA

EUGENIO GALDIERI

NEPAL

WALL PAINTINGS IN THE KATHMANDU VALLEY

1

TYPOLOGY, TECHNICAL ASPECTS,
CONSERVATION WORK

with contributions by
R.M. Cimino, M. Catalano, R. Boenni

IsIAO – ROME 1997

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RESTORATIONS

Founded by GIUSEPPE TUCCI
Director: GHERARDO GNOLI

SERIES MINOR

VOLUME I

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Visvarupa (Bhaktapur, palace of the 55 windows).

Interior wiews of the Pujari Math (Bhaktapur).

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FOREWORD

The present volume by Eugenio Galdieri is intended by the Institute as a tribute both to Nepalese culture and the memory of Giuseppe Tucci. It is the outcome of what is by no means a secondary part of the agreement entitled 'Nepal-Italian Archaeological Sites and Monuments Excavations and Restoration Project' signed by the Nepalese Minister of Culture and myself on 29th November 1983. For the completion of this part of the project the Institute is extremely grateful to the Nepalese authorities, for their friendly and willing collaboration, to the scientific director and coordinator of the project — the author of the present report — and to the chief restorer Raimondo Boenni, who carried out his difficult task with great skill. I also wish, of course, to thank the Italian National Research Council (CNR) for its financial support over the years.

The initiative of restoring the wall paintings in the Kathmandu Valley is to a certain extent a natural continuation of similar restoration activities, conservation action and studies carried out by the Institute, particularly in Iran, under the guidance of Giuseppe Tucci and thanks to the widely acknowledged competence of Eugenio Galdieri. However, it is not only for this reason that I consider our efforts in the field of conservation and study of the Nepalese artistic heritage as a tribute to the memory of Professor Tucci, but also because the work attested to in this volume was instrumental in our resumption of research activity in Nepal, an area that our Honorary President, a peerless connoisseur of the Himalayan region, regarded with increasing interest and hope from the late 'eighties on.

The aspects of the work of interest to the study of the history of art and culture of Nepal are thoroughly documented in the following pages of Eugenio Galdieri's text and accompanying contributions. The Institute wishes to express its warm gratitude to the authors.

Gherardo Gnoli
President of IsIAO

1. RESEARCH ON WALL PAINTINGS IN THE VALLEY

1.1 Origin and Background of the Research Programme

The idea of a study on the typological, philological and iconological aspects of the wall paintings in the Kathmandu Valley was first mooted in 1981 in connection with a formal request submitted by the Department of Archaeology of the Nepalese Government for a project to be undertaken by IsMEO experts in the field of conservational restoration. This project was in turn seen as a step towards agreement on a large-scale programme of archaeological research extending not only throughout the Valley but also into the area of Terai so as to fulfil a long-standing wish expressed by Giuseppe Tucci, or rather one of his well-known and precious intuitions.

The idea of a project for the conservation of monumental architecture was immediately dismissed as excessively demanding in logistic terms and financially onerous, above all in view of the fact that many foreign missions ([1]) were already operating in Nepal in the field of architectural and urban restoration and therefore already possessed good local experience as well as sufficient equipment and financial resources. Most of them were also operating under the direct control of their respective governments, whereas the Italian Government (General Directorate of Cooperation for Development) has never included Nepal in the official list of countries to benefit from Italian cooperation.

The technical experts sent by IsMEO to carry out an on-site examination of possible developments were therefore led — and practically forced — to direct their attention towards the different and comparatively unexplored field of wall paintings, in which IsMEO had already acquired long and positive experience in Iran from 1965 to 1978 ([2]).

In accordance with suggestions put forward by the Nepalese Department of Archaeology, attention was focused on the large and important but very poorly preserved cycle of paintings located in a room of the former royal palace of Bhaktapur, recently transformed into a national museum (see § 4.3).

A preliminary project formulated during the initial survey of February 1981 was submitted to the Nepalese authorities in May 1983 and approved by them in the following October. The specific conservation project was thus included in the agreement entitled 'Nepal-Italian Archaeological Sites and Monuments Excavations and Restoration

([1]) A German Mission had been operating in Bhaktapur since 1972 on behalf of the German Agency for Technical Cooperation and as a representative of the German Federal Republic within the context of a joint project (the Bhaktapur Development Project) with the Nepalese Government for an overall total of 38 million Nepalese rupees (cf. H. Busch et al., *Bhaktapur, Sanierung, Urban Renewal and Development*, Darmstadt 1973; G. Auer, N. Gutschow, *Bhaktapur*, Darmstadt 1974). Having long since completed its planned activities — the most socially important of which being the installation of a sewerage system and the paving of most of the city roads in brick — the German Mission undertook the transformation of the Kuthu Math into its own headquarters and guest-quarters, the transformation of the Pujari Math into a museum of wood carvings (cf. N. Gutschow, *Restaurierung des Pujhari Math etc.*, Deutsche Kat.u.Denkmalpflege 1972), and finally the reconstruction *ex nihilo* of the small Dharmashala in front of the royal palace (Durbar Square). This small temple had in fact collapsed in 1934 as a result of the earthquake.

The second place as regards salvage and restoration is held by France, whose team of technicians, funded largely by the CNRS, has been operating for many years at Panauti (cf. V. Barré et al., *Panauti, une ville au Népal*, Paris 1981), a small town 12 km southeast of Bhaktapur, in the temple area known as Asta Matrika. The complex dates from 1617 and is regarded as the work of Vishna Laksmi, wife of the sovereign Bhupatindra Malla.

Technically important but less extensive operations have been carried out by a joint Nepalese-US team financed by the National Fund for Monuments, a non-governmental North American organization. Their operations of consolidation and integration have focused on the temple of Gokarna Mahadev in Tribeni and in particular on its splendid wood carvings.

All the above operations have been carried out under an overall plan drafted by UNESCO (cf. Master Plan, UNDP/UNESCO, Paris 1977; Building Conservation in Nepal, UNDP/UNESCO, Paris 1978; J. Sanday, *La Vallée de Kathmandu, Monuments historiques népalais à restaurer*, UNESCO 1984, ISBN 92.3-201.992.2). The programme included no conservation work on wall paintings.

([2]) Wall paintings of the Safavid era were the object of study and of extensive conservation work on the part of the IsMEO restoration mission operating in Iran from 1964 to 1978

Project' and signed by the Nepalese minister of culture and by IsMEO on 29 November 1983. Important and autonomous projects in the strictly archaeological field were naturally also included in the agreement.

Though limited in terms of time and space, the two surveys of 1981 and 1983 sufficed to give a rough idea of the enormous diffusion of wall painting in the Valley as well as the wealth of subjects specifically illustrated. IsMEO was thus led to consider the idea of accompanying the officially agreed-upon conservation project with a systematic or at least typological study on the wall paintings present in the Valley. Funds were therefore requested and obtained from the Italian National Research Council (CNR — Comitato per le scienze filosofiche e filologiche) for an art-historical study on Nepalese wall paintings (CNR-posiz. 115.00500).

The conservation work was carried out exclusively by the chief restorer Mr R. Boenni, despite the attempts of the local archaeological department to involve a number of young holders of diplomas. Dr A. Grossato was responsible for an iconographical study lasting roughly three years (see § 1.3), while the author of the present report was in charge of the project and its coordination with respect to IsMEO and the CNR.

An initial short campaign of work on the wall paintings situated in the Museum of Bhaktapur was carried out in February 1984. In addition to preliminary investigations aimed at determining the materials used and the general state of preservation, this also included a photographic survey of the paintings and inspection of the supporting walls, thus extending *de facto* into the more strictly architectural field.

At the same time a parallel series of short and medium-range inspections commenced in the Valley to locate the most significant specimens of wall painting. With different levels of intensity and success, such inspections have formed a constant feature of all campaigns up to and including 1995.

1.2 Scientific Aims and General Criteria of the Study

The field of the conservation and restoration of wall paintings — in which we would again emphasize IsMEO's particular expertise — proved to be practically unexplored in Nepal. To the best of our knowledge, and as reported at the time by the Nepalese authorities, there had been only one previous — and, as we shall see, not particularly successful — conservation project involving a number of paintings, and in particular precisely those in the Museum of Bhaktapur. In 1965 a team of chemists, some of whom from India, carried out a series of operations on the site ([3]), the consequences of which will be examined in § 5.4.

In undertaking this art-historical study in Nepal, IsMEO also intended to pursue a second and more ambitious goal, which has so far been achieved only in part. The experience acquired in Iran on wall paintings of the Safavied era (*c.* 17th century) could in fact find in Nepal a natural link and ideal continuity — albeit with varying connotations — with the palatial and courtly component of the paintings present in Bhaktapur, the feudal capital of the Malla from the end of the 17th century to the middle of the 18th. From the very outset there were evident signs — largely borne out by subsequent observation — of the influence exerted on Muslim India by *Rajput* painting ([4]) and, going back further in time, by Timurid and then Safavid Persia, apart from the more obvious and traditional *Hindu* sources. The IsMEO decision to initiate the project and the parallel study was also influenced by the fact that this constituted a virtually unique opportunity to investigate probable 'regional variants' and local forms of expression with respect to literary sources and to the iconographic and iconological heritage of religious painting in the Indo-Himalayan area. As this particular aspects

in connection with a project aimed at the conservation of monumental buildings in the provinces of Fars and Esfahan. The main studies published in connection with these wall paintings are listed below. P. Mora, 'La restauration des peintures murales de Chehel Sutun', in G. Zander, ed., *Travaux de restauration de monuments historiques en Iran*, Rome 1968; text pp. 321-28 and documentation pp. 329-82. G. Zander, 'L'IsMEO e il lavori di restauro di monumenti in Iran', *Il Veltro*, XIV, 1970, pp. 141-52. E. Galdieri, 'Le attività di restauro dell'IsMEO in Iran', *Atti del Convegno La Persia e il Medio Evo*, Accademia dei Lincei, Roma 1971, pp. 389-403. E.J. Grube, 'Wall Paintings in the Seventeenth Century Monuments at Isfahan', *Iranian Studies*, VII, Boston 1984, pp. 210-14. E. Galdieri, 'L'acqua nell'antico aspetto di Isfahan', *Gururājamañjarikā*, IUO, Napoli 1974, pp. 342-59. K. Karapetian, *Isfahan: New Julfa. The Houses of the Armenians*, IsMEO, Roma 1974, *passim*. E. Galdieri, 'A Newly Discovered Wall-painting from the "gav-chah" in the Jami Mosque at Isfahan', *AARP*, 11, 1977, pp. 56-60. E.G. Sims, 'Late Safavid Paintings: the Chehel Sutun, the Armenian Houses, the Oil Paintings', *Akten des VII Internationaler Kongresses für Iranische Kunst und Archaeologie*, Berlin 1979, pp. 408-18.

([3]) 'The murals in the palace forming part of the Museum of Paintings, which had been obscured by soot grace [*sic*!] and dust and had been differently damaged by leakage of rain water through the roof, were cleaned and secured [*sic*!] by chemical treatment during 1965-66, by a joint team of H.M.G. (Department of Archaeology) and the technical team from the Chemical Branch of the Archaeological Survey of India' (Banerjee 1977: 17, 27). See § 5.4 for technical comments on these operations.

([4]) See, for example, in connection with paintings on palm leaves: '[...] leur hyeratisme est calqué sur celui des écoles *pala* et *gujarati* du XI siècle' (Coomaraswamy 1916: 56, cited in Singh 1968) or, in connection with the scrolls illustrating episodes of the Krsna Lila: '[...] the faces which are painted in profile are expressive and recall the early rajasthani school' (Macdonald, Vergati 1979: 140) or finally: '[...] they served the same function as the miniatures did in a Rajput Court [...] and hence, perhaps, imitated their style' (Pal 1985: 102).

lies, however, not only beyond the specific area of responsibility assigned but also beyond the objectives of the present volume and the specific knowledge of its author, I shall confine myself to pointing out the multiplicity and complexity of the problems connected with such a study despite its apparently simple and — by definition — *superficial* nature.

In addition to technical aspects, issues regarding historical aspects and the possible origins of wall painting in Nepal will obviously be dealt with, but exclusively with respect to *pictorial technique of representation*.

1.3 The Present State of Knowledge and Recent Studies

All practical operations were preceded by examination of text containing information on the specific subject of wall paintings in Nepal and in particular on its historical and artistic relations with the art of the Indian sub-continent, the Tibetan-Himalayan area and the Iranian area. An initial difficulty was thus encountered with respect to the fragmentary nature of existing scientific texts, the different approaches adopted by the individual authors, and the scarcity of texts providing a conspectus of the subject as a whole.

While wall painting shares subjects and expressive elements with other forms of art, it also possesses a specificity of its own. It is more receptive towards simple and popular forms. It has greater technical immediacy. It adapts with greater facility to the different environments available. Finally, as it is not *fresco*, it lends itself more readily to touching up and to more or less substantial modification, even to the point of replacement by simply being covered with a new layer of painting. The price of this adaptability is certainly a far shorter duration, with all the foreseeable consequences as regards correct art-historical appraisal. The immediate and elementary technique used does, however, make it possible to calibrate the degree of sophistication of the finished work, which can thus quite easily reach levels of great artistic value. Ultimately, wall painting constitutes the simplest and most effective way of producing what could be defined as a *miniature* (in the Oriental sense of the term) *on an architectural scale*.

The use of the term 'wall' painting serves to indicate that we are generally dealing with a pictorial layer of decorative or figurative type executed on a 'wall', i.e. on a structure made of stone, of baked or sun-dried brick etc. It should be borne in mind, however, that the term also encompasses the by no means rare cases (as discussed below) of paintings executed on horizontal or vertical wooden panelling (*boiseries*) used as fittings in certain chambers. This type of painting (*type* rather than *technique*) is closely linked to the structure of the building and has — perhaps for this very reason — seldom formed the object of specific studies, the attention of art historians being naturally focused on stylistic or iconographic aspects rather than on technical aspects concerned with execution. This has given rise to a certain confusion, also in terms of specific vocabulary, which has certainly not been conducive to in-depth examination or understanding of the various problems involved. For example, many wall paintings are still referred to as *frescoes* even in scientific publications (and by no means only in Nepal).

While the literature on wall paintings in many areas of the Indian sub-continent, including Sri Lanka, is vast and rich, the literature on the Nepalese area is confined to works focusing largely upon the iconographic aspects. We thus regard it as imperative to list the works which, in our view, provide a correct and useful treatment of the subject dealt with here, and which we have most frequently consulted in drafting this volume.

The general bibliography (pp. 51-52) contains not only the works regarding Nepal but also those on the Indian area, which are also widely cited.

Full bibliographic details regarding other areas or other events that may be of use for purposes of comparison (e.g. those on the Islamic invasion of Nepal or those on specific subjects such as nepalese flora, fauna, games and so on) are given in the connected foot-notes.

2. COLOUR IN THE VALLEY. TYPOLOGY AND GENERAL CHARACTERISTICS OF THE WALL PAINTINGS

2.1 The Wall Paintings and the Valley Context

In a composite natural, social and ethnic context such as that of the Valley (an area of over 550 sq. km) it can readily be asserted that the use of wall painting — understood in terms both of its elementary technical essence and of its specificity as a direct means of communication — is deeply rooted in popular culture and not peculiar to certain social classes or castes displaying particular openness towards forms of art. It follows that the term 'wall painting' can encompass both a primitive apotropaic sign (the *tilak*) and an elaborate iconographic tale with a mythological or religious subject. Recent years have seen the appearance and the by now consolidated diffusion of the same pictorial techniques also in the sphere of commercial advertising and of electoral competition. Indeed, the identification, modification and representation of the symbols of the new parties could form the object of an autonomous area of research, to which we devote a few lines in § 2.4. At the same time, the fact cannot be overlooked that the very nature of the Kathmandu Valley (the semi-intact nature of the countryside and the more isolated rural settlements but also the more strongly anthropic nature of the cities and the settlements developed along the highways) itself constitutes an uninterrupted message consisting of signals of an often minimal degree but above all of colour. Throughout Nepal, but especially in the Valley owing to its less extreme climatic and social conditions, the presence of colour represents something so deeply rooted in the minds and eyes of the population as to have become an existential condition and necessity which the people not only never seek to escape but, on the contrary, abandon themselves to with joy and in any case with a serene spirit of participation. The use of colours (and such vivid colours!) in everyday life thus constitutes a wholly natural form of expression and communication. This basic attitude is then combined with the functional role that 'painted stories' ([5]) have always played in popular worship and in the secular iconography of the Indo-Himalayan area, with the ancient custom of underlining divine omnipresence — often only by means of colour — even on a miserable stone, and finally with the rules which have since the earliest times prescribed the use of colour to identify and represent divinity in the syncretic Hindu-Buddhist world ([6]). All of this cannot but give rise to a total identification of the nature of the places and of the people with their wall paintings, which become a sort of global mirror in which reality and image at times seem capable of exchanging their respective roles.

From the spontaneous abundance of poinsettias or *lalupati* (*Poinsettia pulcherrima*, which is merely a low shrub or pot plant in Europe) to the golden terraces where *tu* is grown (*Brassica campestris* and *Sinapis alba*, two types of mustard that play an essential role in Nepalese life) or the intense blue of the jacaranda flowers; from the multicoloured papier-mâché masks worn by dancers to the traditional 'guardian animals', whose gleaming paintwork is periodically renewed; from the dark towering trunks of *sal* (*Shorea robusta*, the resinous pine of the Valley) to the walls of baked brick stained red with natural protective resins; from the gigantic green and yellow tufts of bamboo to the ritual

([5]) The paintings appear to have two essential functions, one of a ritual and magical character and the other didactic: evocation of the event — understood as an aid to meditation — but also contemporaneous illustration — understood as description — of the event itself. '[...] Icons consecrated strictly for ritualistic purposes and paintings illustrating stories and myths for general edification' and 'The manuscript illuminations had a two-fold function: magical as well as decorative' (Pal 1985, prologue: 2, 3).

([6]) 'Le *sadhanamala* fixe les couleurs des Dhyani-buddhas, le blanc pour Vairochana, le jaune pour Ratnasambhava, le rouge pour Amitabha, le vert pour Amoghasiddi et le bleu pour Akshobhya' (Sing 1968: 243); 'Il colore è elemento fondamentale in questo linguaggio figurato che serve a identificare in modo certo un aspetto della divinità dall'altro e la sua famiglia [...]' (Tucci 1958, III: 23); 'I colori sono quindi carichi di significazione mistica, elementi essenziali di quella ieroglifia che tramuta l'arte del tardo Buddhismo nel suggerimento di un mistero: essi sostituiscono, con il loro segno preciso, lo splendore dell'oro che accennava nella letteratura antica la maestà sovrumana del Buddha: questi è *Suvannavanna*, "d'aureo colore"' (*ibid.*).

coloured powders offered in front of the temples; from the yellow terracotta of Thimi to the black ware of Bhaktapur and the red, translucent sheets of plum sun-dried jam, everything is pure colour with practically no gradations.

In this polychromatic universe, the wall paintings simply appear to adapt to the everyday reality that surrounds them.

2.2 The Scope and Limits of the Study

The study outlined in comparatively concise terms below obviously took the major cities of the Valley as its starting point before moving out into the small towns (often no more than small agglomerations scattered through the countryside) and ending with a number of visits to places of particular interest in connection with our subject but lying just outside the administrative and geographical boundaries of the Valley itself. The data and observations reported refer — in greater detail — to the following localities:

01 = Banepa
02 = Bhaktapur, city
03 = Chabahil
04 = Kathmandu, city
05 = Kirtipur
06 = Nala
07 = Panauti
08 = Pashupati
09 = Patan (Lalitpur)
10 = Sanku
11 = Swayambu
12 = Thimi

(the various localities can be identified on the general map of the Valley in Pl. I, 1).

The number and characteristics of the places examined are such that they can be regarded as amply representative with regard to our subject.

Owing to two main factors the study was obviously not developed — or intended to develop — in a systematic fashion but rather in terms of a 'sampling' approach. In the first place, as mentioned in passing above, there was no intention to catalogue all the existing wall paintings, which would have called for a radically different logistic organization, long stays on site, difficult journeys, and above all solid guarantees of free and total access ot the places in question. The second factor was in fact the enormous difficulty — and often the total impossibility — of even just being allowed to see certain paintings, especially those located inside the temple sanctuary. As it is reasonable to assume that the paintings involved in such cases are those of the greatest antiquity and importance from the religious standpoint, it is precisely these works that end up being omitted from study and from useful documentation.

The bulk of the material documented or described here thus consists of wall paintings situated outside the buildings and in any case in places open also to *non-Hindus*. Despite repeated promises, as in the case of the Bagh Bhairava Mandir at Kirtipur, specific authorization never arrived despite the efforts and good will of the functionaries of the Kathmandu Archaeological Department.

At the same time it would be unjust to forget — in addition to the necessary respect for local religious customs — the difficulties encountered both previously and at present by the *chitrakar* themselves (i.e. the artists responsible for the production and periodical repair of the wall paintings) ([7]) in carrying out their work. Despite their lowly caste, they can and must receive the ritual initiation or *diksa* reserved for the highest castes 'because it is they who paint temple interiors where normally only the initiated have the right to penetrate' (Macdonald, Vergati 1978: 145). This prohibition naturally imposed a severe limitation on our investigations and created a good deal of frustration for our researchers, only partially offset by the conviction that many of the forbidden paintings are by now almost completely illegible as a result of constant modification and addition as well as layers of oil, blood from small animals, soot and wax that have built up over the centuries. Direct experience in this connection was acquired during work on the paintings in the Pujari Math in Bhaktapur (§ 4.4), when a vast amount of material had to be removed before any conservation work could be undertaken.

2.3 A Provisional Typological Classification

In the light of the investigations carried out in the Valley and the hundreds of carefully registered examples, we feel able to put forward a typological classification of Nepalese wall paintings to serve as a point of reference also for future studies and in different but related fields. This classification (which is obviously open to modification and improvement and makes no reference whatsoever to specific iconographic content) is based on the following main parameters:

a) technique of application on the supporting wall or panelling

b) geometric shape or form in which the painting is set

c) function and communicative medium of the painting (whether iconic or aniconic)

d) size in relation to the wall and the building.

([7]) The frequent maintenance — often amounting to complete renewal — of the wall paintings of a religious nature fully reflects the oriental concept of continuity but makes historical and scientific research still more difficult. See also § 4.5.

The application of these parameters to the different typologies recorded resulted in the following classification:

Type A = Simple signs or symbols, generally of an apotropaic or Tantric character, painted directly on the brick wall or on the general coat of plaster covering the walls of the building.

Type B = Images painted inside medallions of mixed plaster applied to wall surface.

Type C = Painted 'frame' composed of one or three separate elements attached to the frame of a door providing access from outside; possibly on a prepared plaster base but nowadays also on wood and even on paper.

Type D = 'Story' consisting of a sequence of small-scale images on one or more panels with or without general or partial captions. Can be painted on a prepared plaster base, on wood or on paper, as in the case of *scrolls*.

Type E = Small, isolated scenes always of a descriptive nature and often framed within arches; on plaster, wood or paper.

Type F = Large-scale isolated images, generally representing *dvarapala* (doorkeepers) or other 'guardians', also animals, placed at the sides of access portals together with or in place of traditional sculptural elements. Painted on a specific prepared plaster base and, more recently, also directly upon brick wall surfaces.

Type G = Large-scale isolated images representing divinities set in lobed niches with a few late examples of secular or courtly images; painted on general plaster coating.

Type H = Large-scale isolated images often representing the titular divinity of the temple in question with a few instances of royal personages depicted as donors. Normally painted on the general plaster coating of the building and in covered but open places such as arcades. Can be full-filled painted or simply outlined.

Types A-E are always small-scale works. When personages are depicted rather than simple signs, they never exceed a height of 20 cm.

Types F-H are always large-scale or architectural-scale works. The personages represented can measure from about 50 cm to about 2 m.

3. ORIGINS AND DEVELOPMENT OF THE WALL PAINTINGS

3.1 Precedents, Possible Roots and Development

Many art historians agree that 'selon la tradition, la peinture [and also carving] est considérée comme une forme de représentation matérielle (*chitrabhasa*)' (Singh 1966: 208) of the religious world and that one of the two forms comes to predominate over the other in different periods though both are often simultaneously present, as in the case of painted carvings in wood, stone or metal. At the same time, this 'material representation' must not be regarded as an act in itself devoid of religious significance: 'Il contribuire ad una immagine o ordinarne l'esecuzione è una delle più raccomandate e utili opere meritorie come il dono fatto alla comunità: elimina il peccato, rende più agevole il conseguimento della "*sambodhi*"' [Contributing to an image or ordering one to be executed is one of the most recommended and useful of good works, like a gift made to the community: it eliminates sin and facilitates the achievement of *sambodhi*] (Tucci 1958: 25-26).

As the influence exercised by carving on painting decreased and minuscule illustrations began to appear on palm leaves or on wooden tablets serving to protect manuscripts, the earliest of which are regarded by Singh as dating back to 1028 AD, the use of illustrated scrolls (*pata* or *paubha*) spread. This marked a transition from a static or stereotyped image to a type of narration, expressed at times in forms of a dynamic but always chronologically connected nature. The fundamental transition from fixed citation (at times of a purely symbolic nature) to descriptive narration may be connected in some way with the appearance in the distant past of story-tellers ([8]) 'qui voyageaient à travers le pays, brandissant d'une main une peinture déployée entre deux bambous, tandis que de l'autre ils désignaient à l'aide d'un roseau les différents épisodes de la légende qu'ils étaient en train de raconter' (Singh 1968: 209). This didactic and popular aspect expressed in itinerant forms lends greater comprehensibility and pertinence to the following interesting observation made with regard to the painted scrolls: 'In India as well as in Nepal it is often difficult to distinguish between the religious and secular function of an object of art. Scrolls such as these had a didactic value and were also enjoyed aesthetically. They served the same function as the miniatures did in a Rajput court or household in India, and hence, perhaps, imitated their style' (Pal 1985: 101). It should also be remembered that numerous palettes with earth-based colours ready for use are found among the remains of Neolithic India (Childe 1928: 37) and that in later but still quite remote ages — e.g. in the caves of Sirguya and Ajanta (Yazdani 1930: 55; Durant 1956: 676) — the techniques of wall painting were well known and highly polished. On the other hand we cannot forget the painted stories of the Kuchā hindo-Buddhistic area and in particular the group of grottoes in Qïzīl (*c.* 5th century BC). With respect to the Kathmandu Valley, and in the light of our present knowledge, we can put forward the hypothesis that the crucial, mature transition from the descriptive form of the *pata* to the technique of wall painting took place a little later and that wall painting became a flourishing artistic activity towards the end of the 14th century. The sovereign Jayasthiti Malla (1382-1395) was apparently responsible for a large-scale social and artistic renewal continued by his son, Jyotir Malla (1408-1428), and grandson Yaksha Malla (1428-1482). Many of the paintings in the Taleju Temple in Bhaktapur belong to this period of renewal (Macdonald, Vergati 1979: 140). In the same period and in areas located further west but culturally close to the small Nepalese kingdom, Timurid painting was established through the two schools of Shiraz and Herat with superb

([8]) These story-tellers are referred to both in the treatise known as *Ashokavadana* and in the *Harshacharita*, the biography of Harshavardhana, sovereign of Thaneshar (606-664 AD) (Singh 1968: 209). This custom appears to have almost completely disappeared. It survives only in the Tibetan area and on days regarded as propitious for pilgrimage story-tellers can often be found in the vicinity of the major stupas, even in the big cities (Pl. I, 2).

miniatures on paper and more modest attempts at large-scale wall painting ([9]).

The wall paintings in the temple of the Taleju Bhavani — and especially those in the main courtyard or Mula Chowk — would still be totally unknown to the western world and to non-Hindus but for a certain number of reproductions (some of which are particularly significant) published with a commentary by Madanjeet Singh for UNESCO in 1968 (Pl. I, 3a, b, c).

The refusal of admittance even solely for purposes of study and the particular layout of the temple and palace complex have so far prevented an exhaustive examination of the monument in artistic and architectural terms. This has given rise to frequent errors and misunderstandings as regards the various phases of construction and even as regards the actual location — and hence the possible relative chronology — of the different pictorial cycles contained there ([10]). It would thus be desirable — not to say indispensable — for initiated local scholars and foreign colleagues to make a joint effort to tackle and solve at least some of the problems connected with the temple's religious painting and architecture. As regards the latter, attention should be drawn to the creditable attempt (Korn 1979: 57-59) to make known the few historical data available on the Taleju complex ([11]). As regards the paintings, absolute confusion still reigns. We even lack exhaustive graphic and photographic documentation, complete with measurements and other technical data, which can certainly not be obtained from the highly selective and therefore incomplete documentation provided by the above-cited volume by M.J. Singh.

While awaiting further illuminating investigations of historical but also archaeological nature (no excavations appear to have been carried out within the temple complex), we must recognize that many of the specific formal aspects of examples that can be dated to the 14th century (and hence linked to the more ancient parts of the temple) were transferred through a traditional continuum to the paintings best known today, i.e. those attributed to the period from the end of the 17th century practically up to the eve of the 20th century. As pointed out above, continuity is ensured also by the custom of periodical repainting and repair incorrectly referred to as 'restoration'.

In our examination of the emblematic case of the Taleju complex and the paintings in the royal wing or the wing 'of 55 windows', we are obviously dealing with a cultured and courtly type of wall painting produced for buildings of great prestige and hence particularly privileged in the qualitative choice of *chitrakar* and their precious graphic repertoires ([12]) (Pl. II, 4a, b, c). According to tradition, the Taleju Temple was founded by the legendary sovereign Harisimha Deva ([13]) after the sacking of the Valley by the troops of Shams ud-din Ilyas in 1349 ([14]). The temple thus enjoyed royal favour from the outset and the high quality of its

([9]) There is an ample literature in various languages on Timurid painting and on the school of the court of Shah Ruh (and in particular on the so-called Shiraz and later Herat style, which spread throughout the area between the Hindu Kush and Kashmir). See for example E. Kunhel, 'History of Miniature Painting and Drawing', *A Survey of Persian Art*, 1939, III, pp. 841-72; S.E. Ratija, *Mecet'Bibi-hanym v Samarkande*, Moskva 1950; I. Stchoukine, 'Un manuscript de Mehr et Moshtari illustré à Herat vers 1430', *Arts Asiatiques*, VIII, 1961, pp. 83-92.

([10]) There is, for example, a great deal of ambiguity (which will remain at least until it proves possible to obtain a credible and detailed plan of the complex, complete with the exact position of each cycle of paintings) as regards the identification of the painted gallery described in Macdonald, Vergati 1979: 140. 'The gallery in the *palace* is twelve metres long and two metres fifty in width; it is parallel to the south wall of the main courtyard and seems to have formed the old parapet of the royal palace'. A similar gallery with the same measurements is the one containing the Visvarupa, as discussed below, but it is certainly not the same. The gallery described by Macdonald and Vergati is 'covered with miniatures grouped *in three* superimposed panels, *one metre above* the floor level', whereas the one examined by us has no fewer than five superimposed panels and ends directly at floor level. Moreover, the first gallery forms part of a *palace*, while the wings around the main courtyard must all be regarded as serving the temple.

([11]) In point of fact, the Korn's three pages dedicated to the palace of Bhadgaon provide a summary of all the historical data known so far. The resulting picture is completely disappointing as regards the possibility of an ideal reconstruction of the various phases of construction following one another over a span of at least 300 years starting from 1324 AD, the presumed date of the construction of the Mul Chawk. This is demonstrated by the following illuminating phrase (p. 57): 'Of the existing buildings, only the Mul Chauk as well as the building with fifty-five windows have survived the last few centuries with little alteration. With the legendary 99 inner courtyards of the palace, 12 existed in 1742 and now only six are left'.

([12]) 'The painters did not draw entirely from memory or from *sadhana* learnt by heart: they had sketch-books which served as memory-aids' (Macdonald, Vergati 1979: 143). See also Lowry 1977: 83-118. The author examines one of these graphic handbooks, apparently dated 1453, which he regards as the most ancient known in Tibet. There are captions in the Newari language that 'give the names of faces and figures'. Macdonald and Vergati also refers to another sketchbook 'used by Visnu Bhahadur Citrakar of Bhaktapur'. The manual, which is still consulted for the execution of wall paintings, masks, *patha*, etc., appears to date from over 150 years ago.

([13]) The *Vamshavali*, genealogical manuscripts of the sovereigns or princely families, contain traces of a legend regarding the creation of the Taleju Temple in Bhaktapur. It is connected with the flight to Simraongarh of King Harisimha Deva under pressure from Muslim troops (see the following note); with the attempt of the king to erect a temple to the goddess Taleju Bahvani with the aid of a demon, Mayabija, the lover of one of his female slaves; with the malice of the demon, who left a section of the temple wall unfinished; with the entry of the king's enemies through the breach; with the new flight of Harisimha Deva — this time inspired by Taleju herself — and his arrival in Bathgaon in Nepal. The inhabitants adopted the goddess and entrusted power to the king, who dedicated the temple of Mula Chowk to his protectress. A more detailed description of this complex and imaginative tale is found in Singh 1968: 212-13.

([14]) For the brief but dramatic Islamic invasion of the Valley

various pictorial cycles therefore had a twofold reason for remaining constant over the centuries.

The poorer and popular type of painting is excluded from this particular context. While it is in some respects still more strongly linked to stereotypes, owing also to the lesser degree of creativity and skill displayed by its creators, in other respects it proves to be far more lively precisely because of its immediacy. Popular painting also appears to be still richer in the 'regional variants' mentioned in § 1.2 and therefore capable of drawing more freely upon the heritage of more immediately understood and enjoyed signs and symbols in a more familiar and secular context.

3.2 'Poor' Painting and Cultured Painting

A division of Nepalese wall paintings based on subject matter (religious or secular) appears to be neither very satisfactory nor particularly useful in the case of the inquiry in question and within its limitations.

In dividing the paintings into *religious or secular*, P. Pal himself admits that '[...] in the context of Nepali culture, one cannot easily distinguish between the sacred and the secular [...]' (Pal 1978: II, 114) and indirectly acknowledges that this particular criterion regards the commissioning of works more than their content. Except in very rare cases, the source of inspiration is exclusively religious and the boundary between religious inspiration and literary and mythological inspiration is very subtle and vague. The same holds for erotic subject matter, another important iconographical area which is, however, far less present in wall paintings. The close links between this area and the spiritual and religious world have by now been definitively clarified ([15]).

In actual fact, it appears far more useful to suggest a technical division capable of also taking into account the *ductus*, i.e. the hand of the *chitrakar*. Such a division should be such as to take into account not only the objective level of execution (quality of the composition, pigments, design and details) but also the location, social context and architectural setting (private residence, *pati*, private temple, monastery, temple erected by royal decree etc.).

Technical execution and type of building often prove to be useful elements also in determining the date of a painting and cannot always be inferred solely from stylistic examination. It is in fact unquestionably true that a *poor* painting can be more easily and more frequently retouched, modified and even totally replaced, whereas a *cultured* painting, executed with greater skill and placed in a more important and better protected physical and social setting, can enjoy greater 'sacrality' — so to speak — and hence undergo less frequent and radical intervention. It should, however, be noted that a poor or popular painting is not necessarily cruder or more primitive, just as a cultured painting executed with technical maturity and on a consolidated iconographical basis is not necessarily more vivid and refined. The latter assertion is borne out above all by the large-scale images (types F-H in our proposed classification) and even more so by the portraits of important personages, where the defects caused in particular by the need to fill both the pictorial space as a whole and the individual figure with a greater amount of detail are far more striking than in the small-scale works. A further and equally important cause is the almost total lack of perspective in the composition as a whole. While this defect, which is therefore intrinsically bound up with the actual size of the image, has been correctly perceived by some art historians (e.g. Singh 1968: 118-19), praise has nevertheless often been lavished on the external and proportional results of the forced enlargement of the image, which practically never involves any real enrichment of the painting ([16]). The observation that the perspective and spatial effect is often obtained — as in paintings from the Punjab — by the expert use of different scales of representation or dimensions is therefore quite pertinent ([17]). On the other hand, the following judgement expressed on the large portrait — over

of Kathmandu by the Muslim sovereign of Bengal, Sultan Shams ud-din Ilyas, in 1349, see the following: S.M. Saraswati, 'Shams ud-din Ilyas Shah's invasion of Nepal', *Proceedings of the Nineteenth Indian History Congress*, Calcutta 1958, pp. 205-208; S. Lévi, *Histoire d'un royaume hindu: le Népal*, Nanterre 1977; E. Galdieri, 'Le due moschee di Kathmandu', *Islam, storia e civiltà*, VI, n. 1, Roma 1977, pp. 22-29. In addition to the destruction, there were also late and indirect repercussions on Nepalese painting, as we have seen. These are summarized in the following observation: 'Une école, celle de l'Inde occidental, pendant plus de deux siècles musulmans, domina l'Inde du Nord; celle du Bihar et du Bengale, et celle du Cachemire, sont encore aujord'hui déterminantes pour la peinture du Népal et du Thibet' (D. Barrett, B. Gray, *La peinture indienne*, Genève 1953, p. 51.

([15]) See the well-known and still valid 'Saggio di interpretazione delle raffigurazioni tantriche dei templi del Nepal [Interpretive essay on the Tantric images in the temples of Nepal] in Tucci 1969.

([16]) An analogous phenomenon is found in the architecture of Muslim India. In the process of 'expansion' with respect to the more restrained and refined Persian models, the buildings no longer prove capable of offering a logical and consequential enrichment of the decorative fabric. This often communicates an unpleasant sensation of expressive fatigue and hence a feeling that the work is 'out of scale'.

([17]) 'Le style de ces grandes fresques [*sic*!] est le même que celui des miniatures. Cependent, comme les espaces plus grandes requéraient de plus grands pinceaux, les contours devinrent plus flous, le dessin plus audacieux et plus expressif. De telles surfaces demandaient une certaine gradation de couleurs afin de compenser l'absence de perspective linéaire par une certaine perspective aérienne. Cet effet de perspective était renforcé par la juxtaposition de personnages de grandeur différente, comme dans la peinture du Panjab' (Singh 1968: 220).

2 metres in height — of the Malla sovereign depicted as a 'donor' in the Sadashiva Chowk of Bhaktapur, 'Le magnifique portrait de Bhupatindra rappelle certaines oeuvres du Quattrocento italien' (Singh 1968: 219), appears rather strange and in any case hardly appropriate. Comparison with the rich and mature composition of the *Visvarupa* depicted in the middle of the room A of the royal palace or of the praying King in the same room strikes us as illuminating (Pl. II, 5a, b, c).

Radically different consideration apply in the case of the small-scale paintings, whose 'compendious' but extremely sharp and lively style attests to direct derivation from the scrolls both in terms of size and in their more plausible static quality.

Having clarified these basic points, we think it possible to assert that the difference between the two types of wall painting can only be grounded upon quality and technique in that these elements are distinct both from subject matter and from architectural setting.

3.3 Modern and Contemporary Issues

The foregoing remarks refer in particular to the golden age of Nepalese wall painting, which coincides largely with the reign of the Malla sovereigns in the three independent kingdoms of the Valley from the end of the 15th century to the second half of the 18th. The beginning of the 19th century saw the first drop in quality with the introduction of 'paintings on paper among the upper classes as a replacement for "hanging" pictures' (Barrett, Gray 1953: 46). At the same time, with the advent of the long pseudo-dynasty of the Rana governors, 1846-1950 ([18]), wall painting became increasingly rare until its virtual disappearance in concomitance with the forced entry into the country (which had hitherto remained obstinately closed to the outside world) of a classical taste of European nature, i.e. an English type of *Palladianism* which in some cases also excludes the Victorian mediation of the so-called 'Anglo-Indian style' of the colonies ([19]). This fashion led eventually to the widespread use of rococo mirrors and large imported oil paintings. Very little now remains of the first phase of wall painting from the Rana era ([20]) and recently (in any case after 1988) a vast and already mutilated building in the area of the Thapathali Darbar near the Bagmati river, the internal walls of whose two first floors were covered with large-scale images of divinities but also of personages belonging to the Rana court, was knowingly demolished in Kathmandu. One of the rooms certainly contained a large *visvarupa*, fortunately reproduced in Slusser 1982: pl. 512 and attributed to the year 1847, i.e. to the period of Jang Bahadur Rana ([21]) (Pl. III, 6a). Slusser also shows (*ibidem*: pl. 220) the remains of a full painted wall in Patan (Pl. III, 6b).

A progressive decline in the use of pictorial representation can be observed over the years. While the apotropaic, didactic or narrative purposes of the ancient paintings remain the same, technique becomes increasingly impoverished and execution more rapid in a perverse confusion of cause and effect running parallel to the growing scarcity of skilful *chitrakar*. For many years now, standardized images have been reproduced by means of stencils or printed directly on paper. The latter can in turn be pasted onto walls or attached to plywood shapes, as in the case of the auspicial frames placed by doors (type C in our scheme of classification).

A substantial contribution to the 'banalization' of the ritual aspect and to the qualitative decline of the images derives from the recent and massive introduction of commercial-type paper articles from India and Pakistan.

For the sake of completeness, it appears worthwhile to draw attention to a new element which, on closer examination, can be accounted for in terms of the above observations, i.e. the use of techniques of painting (on walls, mobile objects, wood, material or paper) in the most recent elections. On the one hand, we have signs connected with good wishes and prosperity or meditation — e.g. hands joined in the traditional *anjalimudra* or the sacred symbol of Om — or with objects and tools of the peasant culture, such as a tree or ploughshare, etc. On the other hand, and perhaps exhibiting a certain timidity, we have signs connected with political imagery of directly western derivation. A significant example is provided in this connection by the graphics of the Nepalese communist party (the UML or Unified Marxist Leninist Party). During its clandestine

([18]) For a more thorough historical analysis of the period which saw the rise of the pseudo dynasty of the Rana governors see D. Wright 1880: 75-81; D.R. Regmi 1966: 235-44; P.S. Rana, *Rana Nepal, an Insider's View*, Kathmandu 1978.

([19]) On the phenomenon of English Palladianism in India and on the circumstances of the Europeanization of certain Nepalese architecture during the governorship of the Rana family, see E. Galdieri, 'Sul Corinzio nepalese. Una introduzione allo studio dell'architettura del periodo Rana (1846-1950)', *Palladio*, n.s., Anno IV, 1991, n. 7, pp. 67-80.

([20]) Some paintings from the Rana period are mentioned in Pal 1978: fig. 135: 'Wall painting, from a monastery, Patan 1880'; fig. 199: 'Krsna and Radha, mural, 19th century, Thapathali'. The main room of the National Museum of Tribuvan in the Hanuman Dokha of Kathmandu holds a series of medallions of the Rana period depicting certain *maharajas* with the family. Purely as a curiosity — and with reference to the close artistic ties between Nepal and Muslim India — attention may be drawn to the presence in the same museum of an unusual portrait of the sovereign Bhupatindra Malla in *mogul* dress.

([21]) This unfortunate event was drawn to the attention of the Nepalese authorities responsible for safeguarding monuments in the IsMEO report on the conservation activities of the 1993-94 campaign, complete with suitable graphic documentation.

period and first appearances in public, the party logo was obviously the hammer and sickle. It was, however, immediately clear that — apart from its well-known (to western eyes) socio-political significance — this logo struck no psychological or visual chord amongst ordinary people, being iconographically alien to the Nepalese world. Imperceptibly, in just over a year, the concave section of the sickle began to rotate upwards and the handle to grow smaller while the hammer became smaller, lost the sharp profile of its head, and shifted to the centre of the sickle. By the time of the 1994 elections, the old and well-known proletarian symbol had become identical to — or identifiable with — the moon as represented in the national flag ([22]) or with the sign of nasalization of the sacred syllable Om (Pl. III, 7a, b). The present form of the communist symbol always is sided by an old and auspicious sign: the *svastika*. All the symbols of the various competing parties have followed suit, being now more comprehensible and perfectly integrated into local tradition.

([22]) For the image of the crescent in connection with a star in the buddhistic culture, see the very recent M. Bernardini, 'Lo pseudo-cintâmaṇi... etc.', in *L'arco di fango*, Studi in onore di E. Galdieri, Lugano 1995, pp. 15-38.

4. ANALYSIS OF A NUMBER OF EXAMPLES OF CULTURED PAINTINGS

4.1. Preliminary Notes on the Architectural Context

As pointed out, wall paintings cannot be examined as a specific pictorial type separately from their supporting element and hence from the architectonic context that provides their setting and to some extent suggests or justifies their content and purpose.

The following sections therefore furnish an exclusively technical examination of the settings of certain wall paintings displaying a particularly high level of execution or particular 'environmental' importance independently of their present state of preservation.

For the first three, the IsMEO experts have been able — within the context of the above-mentioned project — to contribute their experience in the field of conservation and are therefore in a position to express a well-grounded technical judgement. A certain number of details regarding environmental and architectural context will also be furnished for the same three paintings.

We shall be concerned in particular with the following buildings:

a) Kirtipur, Bagh Bhairava Mandir
b) Bhaktapur, palace 'of 55 windows'
c) Bhaktapur, Pujari Math
d) Bhaktapur, private residence
e) Bhaktapur, Kuthu Math

4.2 The Bagh Bhairava Mandir in Kirtipur

This is a 'pagoda' type of religious building (Galdieri 1990: 603, 607; Bernier 1979: pl. 63) with three sloping roofs of decreasing size ending in a turret. It has a somewhat elongated rectangular plan (ratio 1: 2.4) and is built on a podium constituting a perimetral gallery. According to a number of historians and to approximate oral descriptions, the sanctuary contains an image of the divinity in its awesome form (cf. Oldfield 1880, I: 129: 'Inside the temple is a painted image, not of a man, but of a tiger — from which the temple is called Bagh Bhairab — that animal being looked on as a symbol of the god').

The excellently constructed traditional building (timber load-bearing structure and perimetral curtain walls of brick and stone) (Pl. IV, 8) displays a number of features which distinguish it from most of the other temples resembling it and which led to its selection as a sample starting point for our wall-painting conservation campaign. In addition to its plan — which bears some resemblance to that of the Bhairav Nath in Bhaktapur, the temple located beside the imposing and better-known Nayatapola — the building has two *torana* of wood and metal displaying a high level of artistic craftsmanship and a rich series of traditional wooden fittings as well as a series of objects hanging from the edge of the second roof in accordance with the local tradition of *ex voto* offerings. In addition to the customary array of objects connected with everyday routine in the fields and the house (agricultural tools, dishes, pans, etc.), the temple houses a whole collection of military items including helmets, swords and shields, which local tradition regards as deriving directly from the bloody historical siege of Kirtipur by Gurkha troops from 1757 to 1766, the year of its fall (Lévi 1905-8: 269-71; Galdieri 1990: 601-21).

Apart from the limited areas occupied by portals, fittings of various types and supporting timber structures, the upper part of the four walls of the building is completely covered with paintings. These start from the area in direct contact with first roof and work down to a height of 2.2 m above floor level. The perimetral development of 30 m and average height of 2.25 m give a painted surface of about 66 sq. m. Starting from the top, there is a painted strip with images of divinities contained in medallions of mixed profile. This is followed by two small decorative strips with geometrical patterns and finally by the narrative section proper: three superimposed panels depicting small-scale scenes of a barely decipherable nature — due to the poor state of preservation of the painted surface — which can perhaps be regarded as a 'selection of myths and legends from the *Siva Purana*' (Pal 1978, II: 129).

The painted section ends with a robust wooden cornice below which the walls are covered solely with white plaster. The whole of the painted surface has been damaged, mainly by exposure to atmospheric agents and especially by high levels of environmental humidity, by the abrasive action of wind-borne mica particles, and finally — in the case of the walls facing north and northeast — by extensive attack by micro-organisms. Interpretation of the images is further complicated by the large-scale phenomenon of chromatic inversion of certain pigments, which is discussed in greater detail in § 6.3.

According to local tradition, the temple and its paintings date from the first half of the 15th century. If this were true, the temple would provide one of the earliest surviving examples of wall painting in the Valley: 'Among the earliest murals existing in the Kathmandu Valley are those decorating the external walls of the Bagh Bhairava temple in Kirtipur' (Pal 1978, II: 96). Both historians of architecture and archaeologists are in fact well aware of the 'black hole' which has swallowed up most of the religious and civil buildings dating from the period between the 1st and the 14th centuries AD.

It follows that, in the absence of systematic investigations, we cannot know whether the buildings erected during this long period were physically replaced in their entirety by those visible today or whether it is still possible to find their remains at least in the large open spaces which at present still characterize the urban areas of the Valley.

We were not able to examine the interior of the sanctuary, whose paintings are in any case to be regarded as wholly indecipherable unless radical action can be taken some day to remove the age-old layer of dirt. For that matter, the trial cleaning and consolidation of the external paintings in a sample area on the east wall soon proved useless because of the casual habit of sticking up electoral posters, funeral announcements and the like on top of the paintings.

As an inevitable result of this appalling situation, we were forced to abandon all plans for work on the building at the end of the second campaign and after carrying out the indispensable operations of graphic and photographic documentation (Pl. IV, 9a, b).

4.3 The Palace of Fifty-Five Windows in Bhaktapur

This building, once an integral part of the royal palace of Bhaktapur, is today known as the 'palace of fifty-five windows' because of the number of external wooden fittings making up the entire top floor. It was seriously damaged by the earthquake of 1934 (see § 3.1). As pointed out above, the palace — or rather the oldest part of the entire complex as a whole — has received only a fraction of the investigation its deserves. Not even the section now open to the public as the National Museum of Bhaktapur can be described as fully known in its various historical and artistic aspects, as demonstrated by our chance discovery that a small room adjacent to the one assigned to us for restoration was actually painted from top to bottom, but the paintings were hidden under numerous layers of not very recent plaster and their existence had been completely forgotten.

In order to give a precise idea of the two pictorial cycles of interest in their physical setting we shall have to confine ourselves to the part of the complex in which they are located and ignore its connections with the other wings, which are insufficiently known, altered or no longer in existence.

It has been established that this wing of the building was built by the sovereign Bhupatindra Malla (1696-1721) at the very end of the century, as attested by a great deal of historical and literary evidence regarding the event itself and — more generally — the large-scale building programme undertaken by the sovereign and by Visvalaksmi, one of his wives, in the city of Bhaktapur and on the land under their rule in its immediate surroundings (Regmi 1966, II: 235 ff.). The following observations are made with regard to the palace: 'To him [the King] goes the credit of adding more wings to the royal palace which had seen many additions during the three generations of his predecessors [i.e. the sovereigns Naresamalla, 1637-44, Jagatprakasamalla, 1644-73, and Jitamitramalla, 1673-96]. The main courtyard of the palace containing the shrine of Taleju as also courtyards inside were refurnished and many wings left unfinished were completed by him. According to an inscription, Bhupatindra repaired the temple of Taleju with gold roof and a top on which stood gold finials supervening. About the royal palace, the chronicle observes, it has 55 windows, in one of which there is a small pane of glass, presented to him by a man from the plains of India. This piece of glass was considered so rare and valuable that the raja placed it in the window as an object of wonder for the people'. Needless to say, all memory of this priceless sheet of crystal has been lost.

The two rooms containing the paintings are on the second (or intermediate) floor of the building in the part now overlooking the square. The latter is quite recent, having been built after the complete demolition of the remains of many buildings that collapsed in 1934 (Pl. V, 10). The earthquake also caused the whole of the external wall of the intermediate floor of the palace alone to rotate roughly 10° in the direction of the square, thus detaching itself from the perpendicular internal walls delimiting the various rooms. This also led to a partial shifting of the timber roof beams from their positions. The collapse of the crowning timber structures and the rotation of the outer wall led to the washing out of the painted walls with disastrous consequences, as can easily be imagined.

See Korn 1979: 58 and Galdieri 1985: 4, 14 for details of the collapse of the top floor and its incorrect reconstruction.

With some exceptions explained below, the inner walls of the main room (room A) are conceived as one great epic tale related over five narrative panels (Pl. V, 11a, b). The centre of the 12-metre wall facing south displays a complex drop-shaped medallion with a large-scale representation of Visnu Visvarupa in his macrocosmic form together with his *saxti*. The delicate cleaning operations carried out prior to fixing and restoration made it possible to verify the hypothesis that the divinity — represented as a realistic portrait — might be identified in some way with the sovereign who erected the building. After cleaning it was in fact possible to read the name Bhupatindra clearly on the ribbon tied around the chignon of the female figure (see our Selection).

In the smaller room (room B) adjacent to the main room, sondages and subsequent cleaning brought to light other paintings on a larger scale with ceremonial subject matter, probably depicting an official visit by the sovereign and his court to the adjacent Taleju Temple. In addition to the *mauti* — driver or *kornak* — two elephants in processional trappings (wholly identical to the sculpture known as the 'Malla elephant' on the edge of the Rana Pokhari in Kathmandu (Galdieri 1987: 502, figs. 5, 6, 7)) carry the sovereign and other richly attired personages. The paintings also depict two riders of the royal procession, two figures of guardians (*dvarapala*), and finally, above the doorway communicating with room A, the remains of a hunting scene in fresh, authentic *rajasthani* style (see our Selection).

As the two wings of the palace facing north appear to have been brutally truncated and replaced with recent buildings (see the schematic plan in Pl. IX, 24), the present-day presentation of the room (containing the more important of the two cycles) as 'the King's bed chamber' appears doubtful to say the least. This popular and possibly tourist-oriented label seems to clash not only with the shape and size of the room in question (2.5×12 m) but also with its position within the complex. If the view is correct that the palatial complex developed northwards and that the present building therefore constituted its southernmost boundary (see note 10), it is more reasonable to assume that the entire wing was used for public or ceremonial purposes. Moreover, the iconographic subject matter depicted in room A, the presence of the central medallion with the image of the god-sovereign, and the courtly-ceremonial subject matter of the paintings uncovered by us in room B are certainly appropriate for rooms open to the public.

Our understanding of the rooms in question might also be improved by another two considerations, the first of which regards the state of the masonry in the two painted rooms. At the beginning of operations in room A, two large interruptions were visible in the painted surface. The first was constituted by a doorway which had clearly been opened in recent times at the left-hand end of the internal wall facing south. This carefully squared-off aperture fitted with two doors providing access to the gallery brutally interrupts the narrative thread of no fewer than four panels and was presumably effected during the period when the building was used for military quarters (Pl. V, 12a, b, before and after our refilling work). The second interruption consists of a vertical cut of 6-7 cm in width running from top to bottom of the same wall but at the opposite end. No trace of colour remains in this cut and the preparatory surface is clearly visible. The panels continue on either side of the cut with no allowance made for the interruption and also with a certain carelessness as regards the continuity of the strips and the cornices. As the interruption coincides with one of the smaller timber beams of the upper ceiling but is not mirrored on the opposite side (i.e. the side with windows overlooking the square), we can assume the existence of a wooden grille-type partition of the kind normally used at doorways to prevent unduly direct access (Pl. VI, 13a, b). A good example can be seen in the old Hanuman Dhoka in Kathmandu, now used as a museum.

The second consideration regards the wall of windows, which is characterized — as can be more clearly seen from outside — by the alternation of large and small apertures. This gives a practical demonstration of the disregard displayed by the local architecture, also at the courtly level, for the concepts of symmetry and correspondence between interior and exterior. In point of fact, the centre of the pictorial composition on the wall facing south — occupied as we know by the large drop-shaped medallion containing the *Visvarupa* — corresponds asymmetrically to one of the smaller windows of the outer wall. Being physically occupied by five windows and eight lobed niches, this wall has very little space for the painted narrative, the rhythm and sequence of which are completely disrupted and fragmented.

Large interruptions are visible in the painted surface of room B, above all in connection with the upper parts of each wall and with a hole in the wall shared with room A (possibly for a wood-burning stove). The washing out of the upper sections of the paintings and of the areas in contact with the floors (which were recently replaced with a modern parquet floor) was found to be common to both rooms at the beginning of our operations. The external fittings, which constitute authentic works of wooden sculpture, are all original and in good condition. The doors of the five internal doorways are modest items of recent manufacture, possibly from the 1970s. The frames are original, and careful cleaning has revealed their brilliant painted decoration (Pl. VI, 14a, b).

4.4 The Pujari Math in Bhaktapur

The room we were concerned with is part of the vast complex known as the Pujari Math and now used as a museum of wood carvings run by the German Mission. It is located in the higher part of Bhaktapur, just behind the well-known temple of Dattatreya, which it may have been erected to serve as an annexe. The temple appears to have been built in 1427 during the reign of the sovereign Yaksha Malla and thus constitutes one of the most ancient in the Valley, whereas the Pujari Math appears to date from a more recent period but in any case no later than the first half of the 17th century. The lateral east façade of the interesting *Newari* building, also known as 'the monastery', displays two small masterpieces of wood carving, namely the two 'peacock windows'.

The painted room is located on the intermediate floor and overlooks both the square outside and the internal courtyard (for general architectural details of the building, see Korn 1979: 40-47). It is built on a rectangular plan (Pls. VI, 15 and VII, 16) and divided into two sections by the load-bearing timber structure typical of *Newari* buildings: two carved wooden pillars and finely carved and corbelled architraves forming three bays. The internal walls of the room have an average height of 2.2 m and are completely covered with wooden panelling, many of which in the form of lobed lunettes, fitted into a modular, vertical, wooden frame. In accordance with traditional practice, the ceiling is formed of the same boards as constitute the floor of the upper storey.

When the Italian Restoration Mission was requested to assess the feasibility of restoration in 1991, the inner walls and ceiling were completely black owing to a mixture of soot, dust, grease and so on that had built up over the years. A few limited trial cleanings carried out one year before by local chemists had established the presence of painted surfaces beneath the hard layer covering them. Although these were not wall paintings in the strict sense (see § 1.2), the paintings and supporting surface were treated with the same techniques and the same prudence as in the two previous cases. One of the initial operations, which was aimed at eliminating some swelling and yielding of the wooden structures, above all in connection with an internal wall originally built of unbaked mud bricks (*gharu*), revealed that the masonry beneath the panelling had already been plastered and prepared for painted decoration that was never executed. It was only at a later phase that the present wooden facing was introduced instead. The same operation also brought temporarily to light a lobed niche, again prepared for painting (Pl. VII, 17a, b).

At the end of long, laborious and delicate cleaning — especially because of the patina of dirt and the deep carving and incisions on certain parts of beams and pillars — the room reappeared in all its polychromatic splendour. The lunettes hold scenes of a religious nature (*namtosa*, in tibetan: stories of Durga, the reincarnations of Vishnu etc.), executed in vivid colours with the same technique used for miniatures. The internal doors and window shutters are also painted with divine figures or *sadhu* on a larger scale. On a still larger scale, one of the doors displays a painting of Kuber, king and god of abundance, with his main attributes, including a sceptre and a mongoose vomiting jewels. The decoration of the flat ceiling simulates a large tent made of the skins of two tigers, whose stripes gradually change into leopard spots, may be as a tibetan influence (Lipton 1990). The centre of each area of the ceiling is occupied by a *mandala*. The one nearest the courtyard, which has been severely damaged by leakage, is in the form of a lotus flower, depicting Vishnu in the centre, surrounded by eight divinities (Pl. VII, 19a). The one nearest the square, which is in excellent condition, is square and depicts a labyrinth with a swastika-shaped centre decorated in turn with small figures of warriors, elephants and shrines ([23]) (Pl. VII, 19b). The portion of the ceiling toward South simulates, in each of the four corners, an opening from which a white bird — a little egret — can be seen.

4.5 Notes on the Kuthu Math and on a Private Residence in Bhaktapur

Although no work was carried out in the first case and only simple cleaning in the second, it seems worthwhile to mention the two pictorial cycles that we were given the opportunity to inspect, if only to draw attention to their existence and to certain of their features.

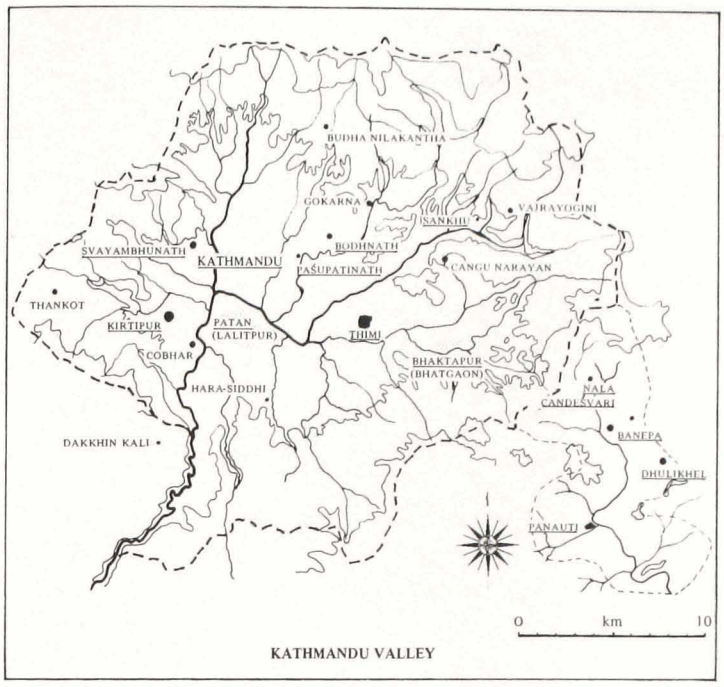
As regards pictorial quality and preservation, the two cycles display very different characteristics, which may be regarded as another good reason for discussing them. The first is situated in the Kuthu Math, a communal building of religious nature again located in the higher part of Bhaktapur to the north of Dattatreya Square. The building has recently been restored by the German Mission, which has been housed there since 1980 at least. In one of the rooms on the second floor a small and slightly raised wooden dais was erected, possibly at the time of building, to provide a *guru* with accommodation or a place for meditation. Until 1984 at least, the whole room was covered in wall paintings arranged in a

([23]) The now uncovered maze was drawn to the attention or Dr R.M. Cimino, IsMEO, who had for some time been concerned with images of labyrinths in the Indo-Nepalese area (Cimino 1986: 1151-63 and 1989: 581-99). Dr Cimino agreed to write a note on this subject, which is published here in Appendix B. An expanded version of the same note is now published in *East and West* (Cimino 1995: 381-83).

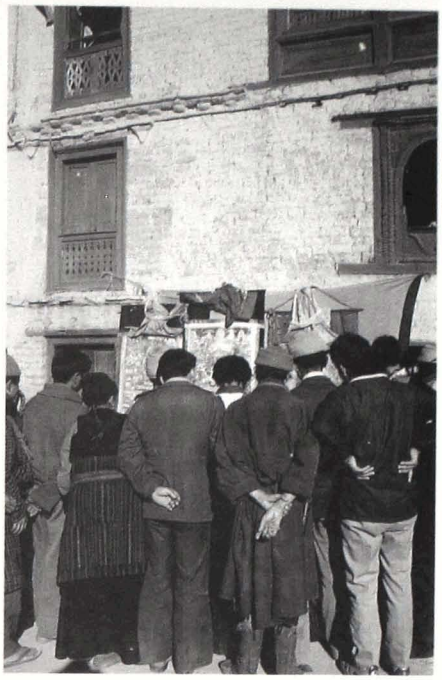
large number of panels and presumably depicting episodes in the life of Vishnu. The paintings were in a poor state of preservation and thus difficult to decipher. Wear, dirt, cracking and flaking had made the overall aspect of the walls practically unintelligible by the time that a local *chitrakar* was commissioned in 1985 to carry out repairs on the paintings in accordance with traditional practice (see § 2.2). In the absence of instructions to the contrary, the *chitrakar* actually *repainted* many of the scenes depicted, thus unquestionably and more or less consciously continuing an age-old tradition. It follows that the images and decoration visible today cannot be regarded as *fakes* ([24]), but neither can they be used for the purposes of stylistic appraisal or dating, also in view of the fact that any trace of earlier repair work has certainly been lost. For obvious reasons connected with the respect due to a foreign mission, we possess no photographic documentation of the paintings either before or after the repairs. We show here (see our Selection) a drawing by R. Powell, depicting the conditions of the room in 1980-81. This unquestionably interesting cycle must therefore be regarded as lost for the purposes of art-historical investigation.

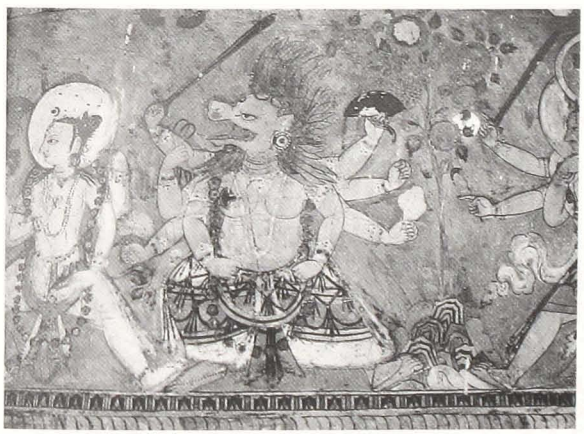
A very different situation is found in the case of a private home in Bhaktapur located on the second floor of a warren of structures less than 100 metres southeast of Durbar Square and practically in front of the temple dedicated to Pashupati, probably the last remaining part of an ancient monastery to survive the collapses, demolition work and rebuilding of the last 50 years. The building of interest, which we were able to visit thanks to the courtesy of its present owners, includes two rooms with wall paintings that have miraculously escaped not only the more recent modifications but also — at least in part — the coat of white plaster covering old and new masonry alike. In a corner of the internal wall of the present stairwell and in a large room of the dwelling itself, a number of religious images with a wealth of figurative and decorative detail have emerged from beneath a coat of whitewash. On the basis of necessarily superficial examination it can be stated that the paintings display excellent craftsmanship and can be regarded — albeit with reservations — as dating from the end of the 17th century. In response to a specific request on the part of the owners and after carrying out a careful operation limited exclusively to cleaning, we suggested some practical methods of protecting the paintings. The request itself convinces us that the paintings run no great risk, at least for the time being, and can be studied in the near future in their virtually intact original state (Pl. VII, 18 and Selection).

([24]) See the recent debate — particularly in connection with the ICOMOS and the ICCROM — on the concept of authenticity based precisely upon continuity of tradition; particularly, see the proceedings of *Nara Conference on Authenticity* (Nara, Japan 1994), edited by UNESCO, ICCROM and ICOMOS and more recently, J. Jokilehto, 'Points de vue: le débat sur l'authenticité', ICOMOS *Chronique*, 21, jul. 95, pp. 6-8.



KATHMANDU VALLEY



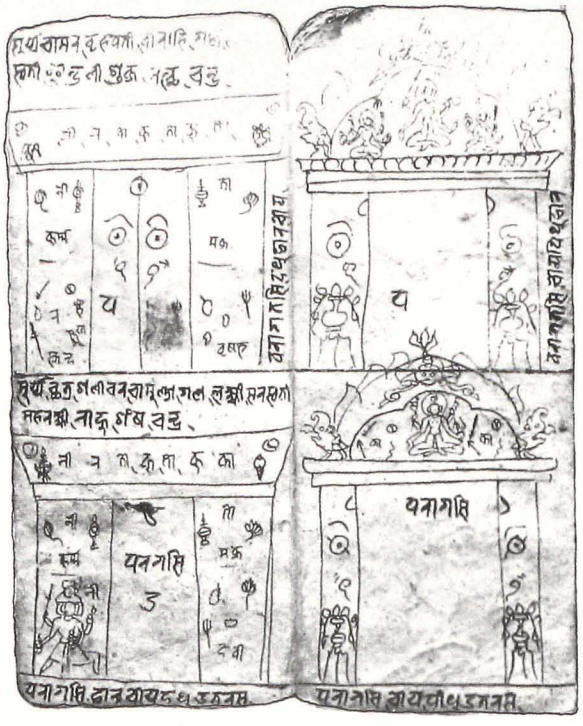


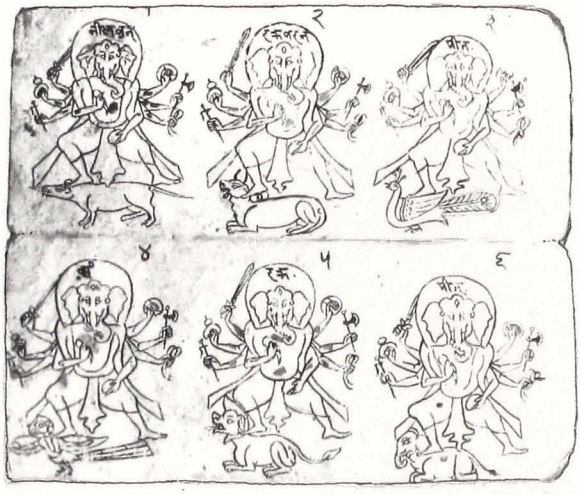
Pl. I

1 - The Kathmandu Valley: map showing the sites of our research.

2 - Bodhinath: a Tibetan story-teller with his 'posters'.

3a, b, c - Bhaktapur, Taleju Temple: some mural paintings (after Singh).





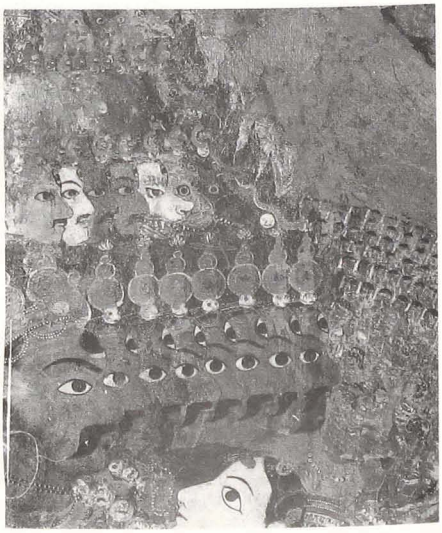
Pl. II

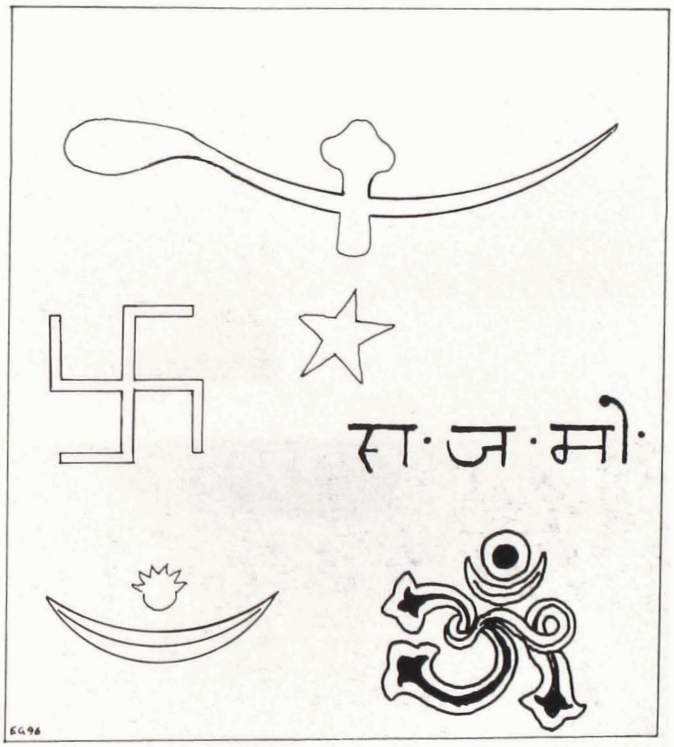
4a, b, c - Three pages from Visnu Citrakar's note-book (after Macdonald, Vergati).

5a - Bhaktapur, Taleju Temple: King Bhupatindra Malla, mural (after Singh).

5b - Bhaktapur, Royal Palace: King Bhupatindra, as depicted in room A.

5c - Bhaktapur, Royal Palace: the same King, as depicted on a squinch of room A.





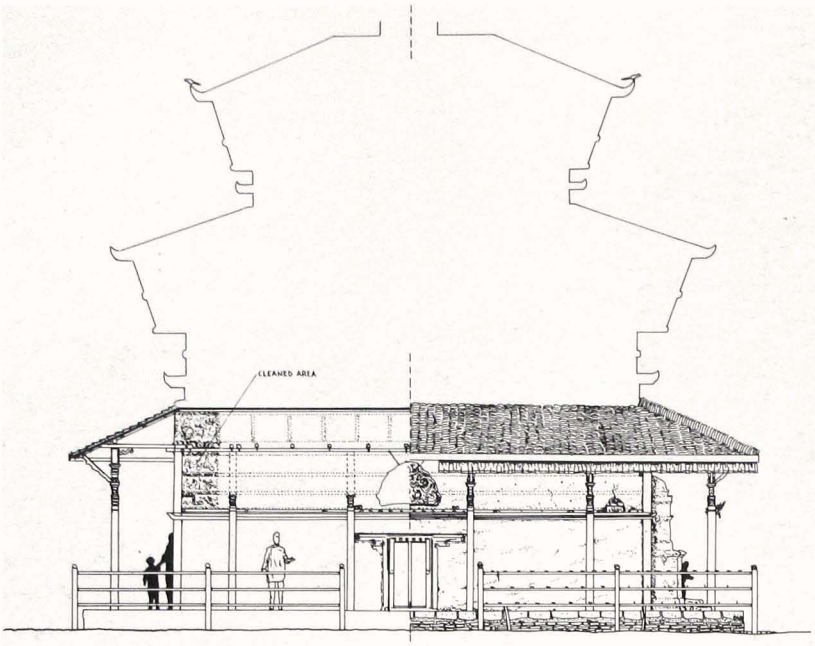
Pl. III

6a - Kathmandu, Thapathali (?): a Visvarupa, mural (after Slusser).

6b - Patan (?): ruins of a painted wall (after Slusser).

7a - Patan: the *logo* of the UML Party, before 1993.

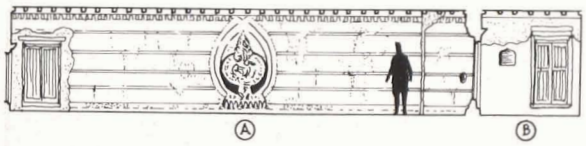
7b - The same *logo* today, among other auspicious signs.

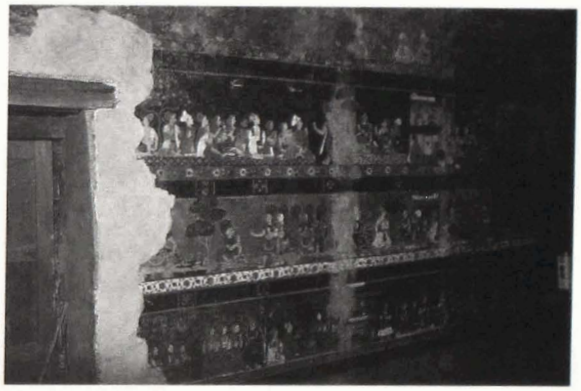


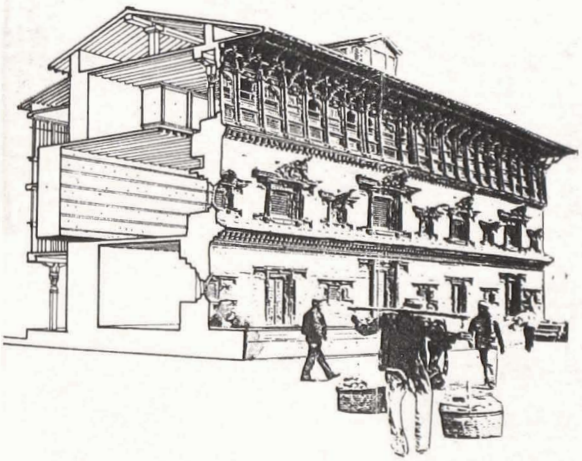
Pl. IV

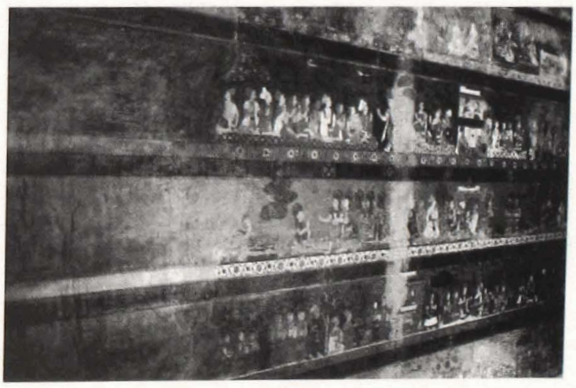
8 - Kirtipur, Bagh Bhairava: North elevation, lower zone with murals.

9a, b - Two details of the painted walls.









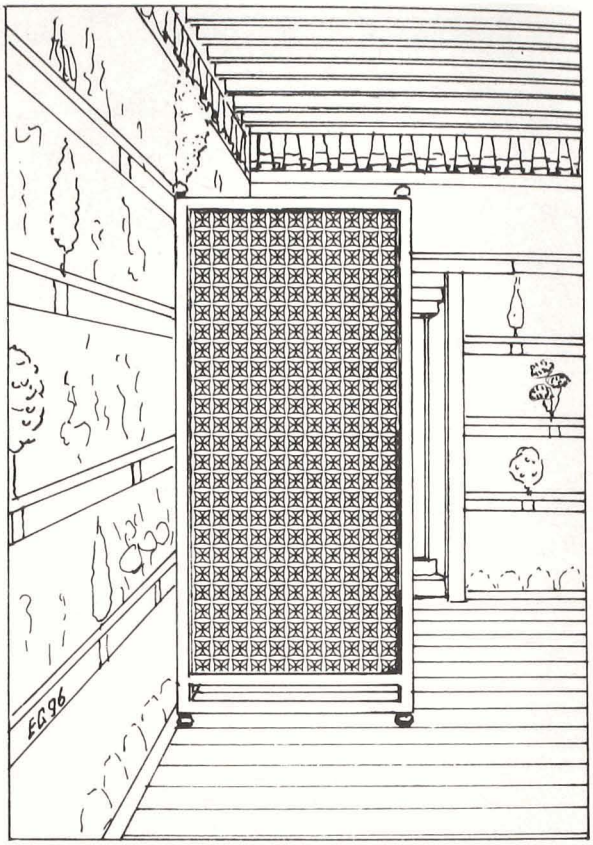
Pl. V

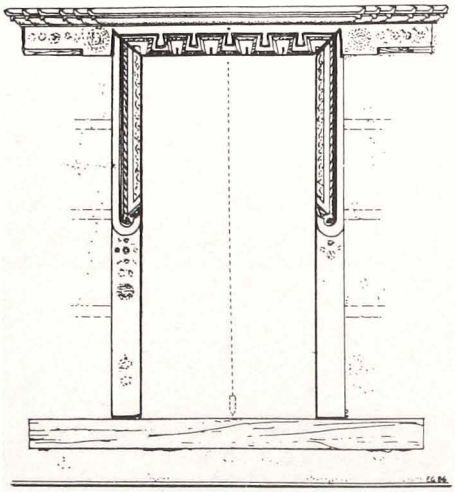
10 - Bhaktapur: remains of the whole 3rd floor of the Royal Palace, after the 1934 earthquake (after Slusser).

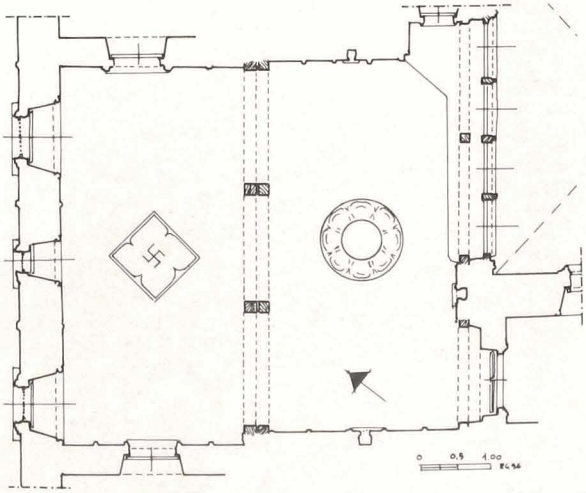
11a - Bhaktapur, Royal Palace: the wall facing North (rooms A, B).

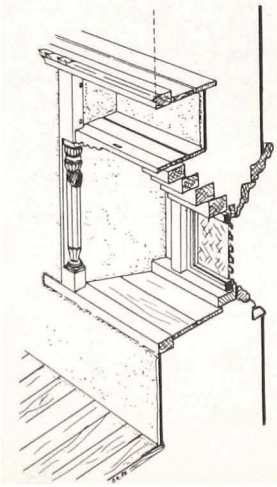
11b - The location of the painted walls in the building.

12a, b - Room A: the wall facing North, before and after the walling up of the modern opening.









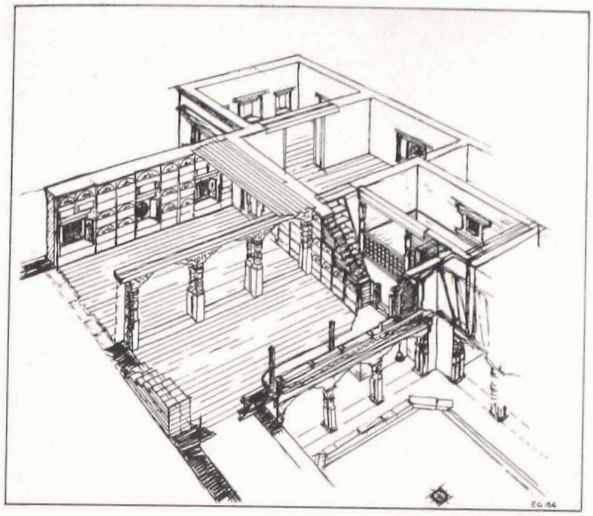
Pl. VI

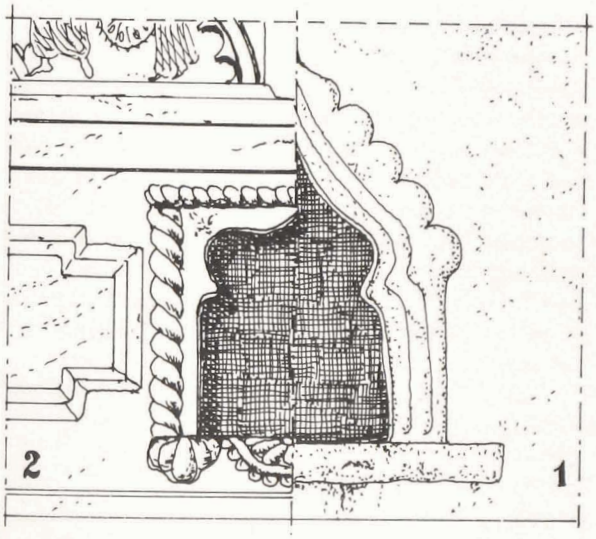
13a - Room A: the sequence of painted tales interrupted by a vertical cutting.

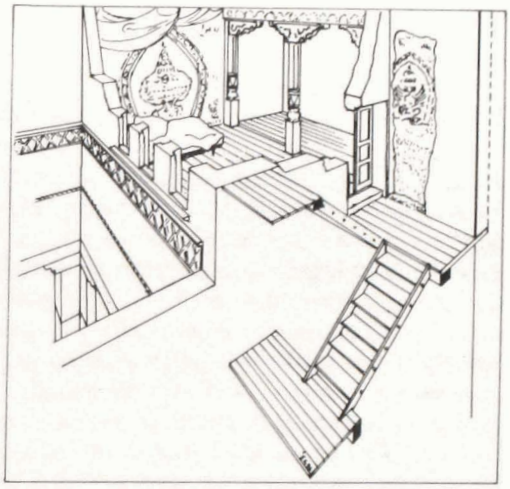
13b - Hypothetic reconstruction of a carved lattice, as a visual protection.

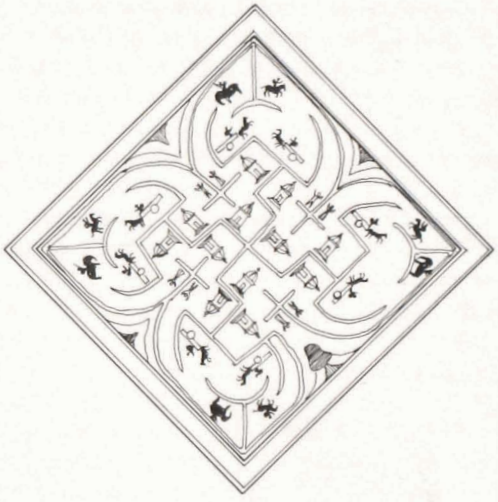
14a, b - A door and a window from the room A.

15 - Bhaktapur, Pujari Math: plan of the 2nd floor, also showing the position of the two *mandalas*.









Pl. VII

16 - Bhaktapur, Pujari Math: view of the painted room and the main courtyard.

17a - Pujari Math: the wall close to the entrance showing the original niche, after removing of the wooden panelling.

17b - The two different shapes of the niche: right, the original, stuccoed one; left, the same after panelling.

18 - Bhaktapur: a private house with painted walls.

19a, b - Drawing of the two *mandalas* painted on the ceiling.

5. THE 'REALITY DEPICTED': SUGGESTIONS FOR RELATED STUDY

5.1 Suggestions for Further Investigations on the Reality Depicted

It has been repeatedly stressed that the aims of this first volume do not include the iconographic or iconological interpretation of the wall paintings, which will be tackled by specialists in this field in the second volume. We shall confine ourselves here to discussing the more general historical and technical aspects regarding a specific sector of pictorial technique and to reporting the findings of our field study. At the same time, it is our intention to draw attention both to the vast diffusion of wall painting in the Valley and to the extent, the limits and the results of the conservation work carried out by the IsMEO Restoration Mission in Nepal.

While remaining within the boundaries laid down above, we also regard it as useful to draw attention to a particular feature of these paintings which, though certainly marginal, could by itself constitute material for separate investigations not included within the brief of the Italian Mission.

If we accept the validity of the initial observation (§ 2.1) that 'the wall paintings [...] appear to adapt to the everyday reality of their surroundings', it is legitimate to assume that, in addition to specific epic and religious contents, it is also possible to identify fragments of a 'real' reality, i.e. a reality more strongly linked to everyday life than the necessarily ritual and manneristic representation of particular episodes.

It should be immediately pointed out that in Nepal — despite the presence of a syncretism capable, for example, of working on 'temi iconografici che in India avevano raggiunto [...] uno stadio sperimentale [...] e adattare la iconografia buddhistica al pantheon hindu (iconographic themes that had reached [...] an experimental stage in India [...] and of adapting Buddhist iconography to the Hindu pantheon)' (Goetz 1963: 902) — forms and inspiration are predominantly of direct Indian derivation (Macdonald, Vergati 1979: 140; Pal 1985: 102). It will be the task of the iconologist to identify such specific regional variants as may exist. The investigation suggested here hinges upon all those accessory elements and background features that can be more freely interpreted by the artist, and perhaps in genuinely local fashion, precisely because they are not strictly tied to the canons of religious representation (e.g. to the strict rules of Buddhist iconometrics).

There is no doubt that the artists we are speaking of were all Nepalese. Their ability is too well known and their fame too widespread, even in the case of anonymous craftsmen, to require any further discussion here. It will be sufficient to quote some decidedly revealing modern judgements: 'Au XVI^{e} siècle, la peinture népalaise avait acquis une réputation solidement établie. Tels les sculpteurs de Balbahu, les peintres népalais étaient demandés jusque dans les régions les plus reculées du Tibet. Selon l'autobiographie du fameux historien tibétain Taranatha, les marchands indiens qui transitaient par le Népal étaient chargé, en guise de péage, d'y apporter des colorants, carmin et indigo surtout. [...] Un témoignage supplémentaire du rayonnement qu'exerçat dans tout l'Himalaya l'art du Népal est donnée par la présence au Tibet, sous le V^{e} Dalai Lama, d'artistes népalaises comme Day, Bhan, Siddhi, Mangal, Jaisingh, Amarajit et d'autres' (Singh 1968: 215). One thing is certain: the events represented form an integral part of the cultural, religious and artistic heritage of India. As a logical consequence — through creative laziness and through ascertained dependence on the sketch books mentioned above — the background to the paintings is not the local Nepalese reality but the Indian, assuming that this external difference could be so obvious and significant in the period between the 15th and the 18th centuries. While this fact limits the possibility of original results being obtained by the analytical investigation suggested here, there remains the possibility of attempting useful comparisons, of establishing whether there is total formal adherence to an environmental context different from or extraneous to that of the Valley, or finally of finding some genuinely local references. We shall therefore suggest some of the possible areas of inquiry.

5.2 The Architecture Depicted

In the narrative paintings in the royal palace of Bhaktapur and in the small 'genre' scenes in the Pujari Math, civil or religious buildings are often depicted by means of a technique that is always extremely compressed and allusive and practically never realistic. It is easy to see the efforts made by the artist to compress into a limited space the few elements needed to ensure a comprehensible narrative thread, which would however, in reality, display far greater development and a very different dimensional relationship with the personages depicted. For that matter, the same disproportion is also seen in what must be regarded as the archetypes and models of wall painting, i.e. the painted scrolls and miniatures (Pal 1985; Tucci 1949; etc.), whereas a more correct relationship between figure and environment is generally found in paintings executed on cloth or 'paintings to be hung'. Closer examination of the architectural elements — normally isolated pavilions 'constructed' and depicted in such a way as to display the personages clearly even when these are supposed to be located *inside* — leads us to make certain distinctions, of an unquestionably debatable nature, with respect to the Indian models. This could constitute the starting point for a specific line of investigation. For example, while constructive or decorative elements of clear Mogul or Rajasthani derivation, such as lobed arches and small domes (*chat'ri*) crowned with lotus-flower finials, etc., are comparatively scarce, pagoda-type roofs with raised edges are more frequently found. A certain propensity can also be observed for the depiction of asymmetrical buildings, whereas symmetry is pursued more rigorously in the Indian models, 'anche in virtù di un certo modo di concepire la prospettiva [also by virtue of a certain way of conceiving perspective]' (Cimino 1985: XLIII). The comparatively sketchy treatment of architectural structures is balanced by a more elaborate and realistic depiction of accessory structural elements or utensils, e.g. wooden grilles, carved pillars and roofing. An interesting example is provided by the care taken in the paintings in the royal palace to depict a metal padlock (*pothe taza*) securing the door of a small building. The shape and size, also in proportion to the house, are clearly local and the depiction is absolutely realistic (Pl. VIII, 20a, b).

5.3 Flora and Fauna

These two themes can be tackled only with the assistance of specialists, and perhaps only local specialists. Each narrative panel in room A of the royal palace of Bhaktapur — but also in the other specimens examined by us — is divided into separate episodes through the insertion of a painted tree running the entire height of the panel. Exactly the same device is found in the previously mentioned scrolls, where it also marks the lower sectors set aside for captions (Macdonald, Vergati 1979: 140). The difference with respect to the Indian models is, in our view, very subtle and lies precisely in the way the individual trees are depicted. Those in the Nepalese wall paintings seem intended to represent real local species, whereas those in the Indian scrolls appear to be rather the fruit of the artist's imagination and decorative requirements, as partially noted elsewhere (Pal 1985: 102) ([25]). The trees found in the Indian models, including some miniatures either earlier or later than the Nepalese examples, are more reminiscent of exploding fireworks in their geometrical and accentuated chromaticism. In the examples we are concerned with, the very frequency with which certain types of plant are repeated appears to indicate a precise choice of realistic representation rather than poverty of pictorial language, which would appear suspect and unjustified to say the least in comparison with the expressive richness of the other images in the tale. We thus believe that careful examination carried out with the assistance of specific experts or even based solely on the extensive literature, a partially list of which is given in the note ([26]), could lead to some useful and completely new findings. (See also the Appendix C).

The problem is fairly similar as regards the fauna, even though the differences between the species of animals typical of India and of Nepal are obviously minimal. (Once again we are speaking of accessory elements used in a decorative sense; animals that are ritually and functionally linked to the story are therefore excluded). However, since it is easier to 'invent' trees than animals, the task would be to ascertain the existence or otherwise of a real *bestiary*, including local references, in place of a generic and manneristic animal world. There appears in any case

([25]) 'As an example of the artist's inventiveness, we may point out that no two trees are painted alike. Each tree is given a different form and shape, different leaves and flowers and, although they are not naturalistic and the colours applied with an expressionistic flair, nonetheless they reveal the artist's familiarity with nature'. We suggest that the Nepalese artist seeks, albeit with limited expressive means, to give concrete shape to his familiarity with nature by painting trees that are *individual* and to some degree recognizable rather than generic.

([26]) From the abundant literature on the subject, we would draw attention to the following works: R.L. Fleming, *The General Ecology, Flora and Fauna of Midland Nepal*, Kathmandu 1977; HMG/DMP 74 (official publication), *Flora of Pulchoki and Godawari*, Kathmandu 1974; I. Majupuria, C. Trilok, *Sacred and Useful Plants & Trees of Nepal*, Kathmandu 1978; S. Mierow, S. Shresta, *Himalayan Flowers and Trees*, Kathmandu 1978; S.B. Malla, *Wild Edible Plants of Nepal*, Kathmandu 1982; K.K. Pandey, *Fodder Trees and Tree Fodder in Nepal*, Kathmandu 1982. See also the botanical note by M. Catalano in Appendix C.

to be a preponderance of birds. From peacocks to little egrets, the various panels are interspersed with dozens upon dozens of birds, which at times appear intended not just to provide a lively and realistic environmental background but also to underscore some salient point of the narrative thread. The investigation suggested should enable us to identify all the animals present — and their respective frequencies — again with the assistance of local experts and the specific literature on this aspect, a partial list of which is given in the note ([27]).

5.4 Customs and Habits

Taking for granted the assertion that 'the costumes and landscapes are Indian' (Macdonald, Vergati 1979: 140), systematic investigation could expand our knowledge of the clothes and accessories (headgear, footgear, belts and jewellery) habitually used around the 17th century in the area of interest. This would serve to enrich the already vast array of data drawn from sculptural and pictorial examples, many of which have already been published (Ghurye 1951). Here too, investigation could identify some particular feature of dress or hairstyle capable of forging closer links between the set of personages depicted and the real Nepalese world. We have already drawn attention to the artists' tendency to furnish a background to the ritual and stereotyed representations of divinities and religious or epic events by introducing elements that are freer and thus probably closer to the real world surrounding them. This is the case as regards two figurative elements which are unquestionably shared with Indian culture but deeply rooted in the everyday habits of Nepalese life. We refer to two pastimes which were fairly common at the time the paintings were executed and can still be found in some parts. The first is the characteristic game known in India by the name of *pacisi* or *copar* and in Nepal as *pasa*: 'si può giocare in due o quattro persone, consiste in una scacchiera cruciforme, solitamente di stoffa ricamata, e in 16 coni di avorio o di osso, gli spostamenti dei quali sono determinati da sei conchiglie gettate in aria [it is a game for two or four players and consists of a cross-shaped board, usually of embroidered material, and 16 cones of ivory or bone, the movements of which are determined by throwing six shells into the air]' (Cimino 1985: XXXIX, 101) ([28]). *Pasa* appears twice in two semi-circular panels in the Pujari Math in Bhaktapur, more precisely in those labelled West C-6 and South C-4 in the scheme drawn up by us to identify the subjects. In both cases it is played by only two personages of a probably divine or royal nature; because of the local custom of using three long dice, this game is known in Nepal as *tri-pasa* (Pl. VIII, 21a, b and Selection).

The second is a type of boxing match involving two pairs of fighters or *pahlavan* in a particular 'combattimento con gli artigli (*nakha ki kusti*) eseguito con una sorta di pugno di ferro a punte acuminate, che potevano anche causare la morte del lottatore. Solo nel secolo passato al ferro fu sostituito l'osso [combat with claws (*nakha ki kusti*) using a sort of knuckle-duster with sharp spikes that could even cause a fighter's death. Metal was replaced with bone only in the last century]' (Cimino 1985: XXXVIII). The scene is depicted along the bottom strip of the north wall of room A in the royal palace of Bhaktapur. Although in a very poor state of preservation, this portion of the painting is still sufficiently decipherable. The four fighters are half-naked, wearing only a loin-cloth and a helmet, possibly to protect the head. One of the fighters in each pair clenches a large spiked ring (the *baghnakha* or 'tiger's claw') in his right fist and holds a cloth sack in the other. The other wields an iron implement similar to a war bow but with a metal chain in place of the bowstring and again carries a cloth sack. The chain apparently serves to entangle to metal spikes of the adversary and the sack to deaden any blows ([29]) (Pl. VIII, 22 and Selection).

Careful inspection of the painted background may thus provide many surprises and furnish unknown or little-known data often overlooked during strictly iconographic examination.

([27]) We shall confine ourselves to listing the few following works: D.S. Ripley, *A Naturalist's Adventure in Nepal*, Washington 1951; D.A. Stanton, *Forests of Nepal*, London 1972; D. Mierov, H. Mishra, *Wild Animals of Nepal*, Kathmandu 1973; R.L. Fleming Sen., R.L. Fleming Jun., L.S. Bangdel, *Birds of Nepal*, Kathmandu 1976; R.L. Fleming, *Birds of Nepal*, Kathmandu 1979; R. Singh, *Bird and Wild Life Sanctuary of India, Nepal and Bhutan*, Kathmandu 1980.

([28]) For the game of *pasa*, readers are referred to the bibliography given in Cimino 1985, particular attention being drawn to the following: R.C. Bell, *Board and Table Games from Many Civilizations*, New York 1979; H.J.R. Murray, *A History of Board Games Other than Chess*, Oxford 1952; G.N. Sharma, *Social Life in Medieval Rajasthan, 1500-1800*, Agra 1968.

([29]) This singular athletic contest fits in well with the array of popular traditions and festivals common to a large part of the world. At the same time, however, the clearly war-like derivation of the instruments used also suggests comparison with a mystical and athletic practice widespread in Persia from the 14th to the 17th centuries and still found in present-day Iran. In the *zur-khane* (literally 'house of strength'), which is in turn linked with the Arabo-Islamic *futuwwa*, the instruments used by the *pahlavan* (Persian: fighting champion) are all related to instruments of war: the fighting club or *mil*, the stone shield or *sang*, the war bow or *kabbade* with chains and metal disks in place of the bowstring, etc. Of particular interest for our purposes is the exclusion from this type of athletic and religious association of barbers, wool carders, street sweepers, etc., which professions were regarded as 'impure for a champion'. Cf. A.M. Piemontese, 'L'organizzazione della "zurxâne" e la "futuwwa"', *AION*, 14, 1964, II, pp. 453-73.

6. TECHNICAL ASPECTS AND SPECIFIC PROBLEMS OF CONSERVATION

6.1 Painting Technique: Pigments, Preparation, Surfaces and Tools

With no significant exceptions, the wall paintings examined in the course of our numerous reconnaissance campaigns and conservation activities must be technically defined as tempera works. In particular, dry or poor tempera is used for the examples examined in chapter 4, i.e. the wall paintings on the outside of the Bagh Bhairava Mandir in Kirtipur, those inside the royal palace of Bhaktapur, and those in the P.S.N. private residence in Bhaktapur. The paintings in the Pujari Math are again in dry tempera but applied on wooden surfaces. Close examination of the paintings, analyses carried out on micro-samples of pigment and the particular reaction of the layer of paint on exposure to various solvents ([30]) have confirmed the validity of earlier observations (Singh 1968: 214 ff.; Macdonald, Vergati 1979: 143 ff., etc.). This holds both for the layer of paint and for the surface preparation. It should the pointed out immediately that the *binder* — i.e. the viscous liquid medium in which the infinitesimal grains of colouring material aggregate and emulsify — has been identified in the examples examined as egg. This is in fact one of the organic agents most commonly used (sometimes both egg yolk and white) to bind and fix the layer of paint ([31]).

The pigments encountered are almost exclusively of mineral origin (coloured earth) and reflect the knowledge of natural colours common at the time to most of the world, from China to Europe. The areas of origin of the individual colours employed cannot be established with certainty, but it is reasonable to assume that the journeys made by European missionaries and the trading activities that were already particularly intense between the Chinese, Indian and European areas by the end of the 16th century had led to standardization as regards sources and production techniques ([32]). Obvious exceptions are represented by the pigments typical of the Indo-Himalayan area, e.g. vegetable pigments such as indigo (*indigofera tinctoria*) obtained mostly from Bengal and Java, or rock pigments such as ultramarine (*lapislazuli*), a particularly rich source of which was found in Badakshan towards the Hindu Kush.

It should also be noted that the pigments originally used ([33]) — whatever their geographical origin and specific composition — were all obtained by natural methods. It was only towards the end of the 18th century — and for a few decades only in Europe — that the first attempts were made to produce synthetic colouring agents, which process was to assume enormous proportions from the second half of the 19th century on.

Which colours were most frequently used? 'Les tones les plus employés étaient le rouge, le jaune, le vert de vitriol, le carmin, l'indigo, le blanc de chaux, le bleu lapis-lazuli' (Singh 1968: 214), in other words the same colours used in Europe and in India (Bouet Haddad 1994: 21). It thus appears quite pointless here to give a detailed list of the pigments used in Nepal. It will suffice to remember the series of colours specifically required for the representation

([30]) In the identification of pigments and binding agents we followed the system suggested by the Istituto Centrale del Restauro, Dimos, parte I, modulo 3, 1978, drawn up by the technicians Diana, Marabelli, Meucci, Tabasso Laurenzi.

([31]) Other binders used in the Indo-Nepalese area include the following: animal glue and milk casein, both of which are highly perishable; oils and waxes such as linseed or nut oil, beeswax and carnauba wax, and molasses (mentioned in Macdonald, Vergati 1979 but completely absent here); natural resins such as fig latex, shellac, rosin, polysaccharides such as gum Arabic, etc. All of these products are used to maintain the elasticity of the binding agent.

([32]) For example, at the end of the 17th century Jesuit missionaries learnt in China and introduced into Europe a technique for protecting tempera paintings based on the use of alcohol-based varnishes (Capponi 1965: 760).

([33]) There is a great deal of evidence, especially in room B of the royal palace of Bhaktapur, of large-scale retouching and repainting, possibly to conceal total loss of the original pigments. One of the most obvious examples is provided by the foliage on the east wall beside the image of the royal elephant. The recent nature of the work is shown both by the *ductus* of the brush-stroke and by the quality of the pigments used (oil paint).

and hence the recognition of the individual divinities, as mentioned in § 2.1.

The preparation of the surface so as to make it more suitable to receive and hold the pigment appears to offer an area of greater interest. The medium between the supporting surface and the layer of paint is in fact more strongly affected by working techniques and locally available materials and is therefore included among the parameters upon which the typological classification proposed in § 2.3 is based. In the majority of cases and when different types of masonry surface are involved (stone, which is very rare, baked brick, sun-dried brick and compressed earth), the first foundation layer consists of a mixture of clayey earth, cow dung, rice chaff or straw and sometimes hemp laid on the wall to a thickness of no more than one centimetre, as it is shown on the micro-sections carried out by our team on the paintings of room A. With the necessary allowances made for variations in material, this layer is known as *arriccio* both in Italian and in English (*crépi* in French). The preparation we encountered in the Valley differs from that described by Singh, whose description is quoted here in order to give a more immediate term of comparison: 'La paroi était tout d'abord enduite de deux ou trois couches de *chaux éteinte* mélangée à de l'eau et à de la colle animale, après quoi la surface était polie au moyen d'un objet doux (à Ajanta on employait de la balle de riz pour augmenter l'adhérence du plâtre). La surface ainsi préparée, le dessin était esquissé avec de la suie provenant de lampes à huile [...] ' (Singh 1968: 214).

We have spoken of the first foundation layer because the surface was then subjected to a second and more refined form of treatment, with a thin layer of mud or kaolin and rice starch (known in Italian as 'colletta' or small glue) applied on top of the first. It is only on this smooth final surface that any preliminary sketching or *sinopia* ([34]) is carried out and colour applied in uniform and full layers. The type of preparation described by Singh is closer to that used for painting on wood. The wooden surface — smoothed or carved as the case may be — is prepared with a layer of gypsum (calcium sulphate), treated so as to be incapable of reacting chemically with water, together with animal glue. In some cases — e.g. in the Pujari Math — we found that rolled up paper had been used to smooth out major imperfections in the surface of the wood (knots or large veins) and even to fill any cracks before applying the preparation.

During the operations involved in cleaning the paintings, a large number of animal bristles detached from paintbrushes were found in the primitive binding agent. These were identified as pig or badger bristles, which attests to the poor quality of the brushes used at the time. Badger bristles are in fact to be regarded, together with horse, cow and goat bristles, as the coarsest type, while pig bristles, generally obtained from pigs with a short black coat, were imported from the Han-Kow region of China because of their cheapness. The best brushes were — and still are — made of bristles from the red sable (Kolinski or *martes zibellinus*, common in India), marten, weasel, beech-marten, polecat and grey or red squirrel (Petrucci 1935: 686).

Finally, as regards the quality of the supporting surfaces, it will be sufficient to recall the observations made in § 4 above. Most of the wall paintings we examined were on a suitably prepared wall of baked brick. Cases of paintings executed directly on masonry with no preparation are rare. Wood is used in some cases in the form of prepared trunks or boards. Finally, there are a very small number of paintings on a masonry support of sun-dried brick.

6.2 Damp: Causes and Effects

Given their nature as tempera works, the Nepalese wall paintings are extremely susceptible to damp. It is known that in the case of genuine frescoes, damage due to damp is far more limited once the process of carbonation has come to an end. We also know that in the majority of cases not only the *binding medium* but also the fixing agents are insoluble in water. There can be no doubt, however, that a high level of environmental humidity can contribute towards weakening the compactness of the layer of paint and hence towards the possibility of its slipping with respect to the foundation layer. The two preparatory layers can in turn swell through imbibition and become detached from one another. They can also — and still more easily — become jointly detached from the underlying masonry or wooden surface. In the case of wood, it is possible for even a slight hydration of the fibres to bring about the detachment of the less elastic thin preparatory layer of gypsum. All these phenomena become more evident and damaging when environmental humidity is combined with damp inside the supporting structure. Damp within the masonry structure can in turn rise from the ground level or be caused by leakage or infiltration from above. Both situations are unfortunately found together in some cases, e.g. in rooms A and B of the royal palace of Bhaktapur, and have contributed to the deterioration of the wall paintings together with the other negative factors described in § 4.3: lack of maintenance, creation of apertures in the walls,

([34]) According to some Indian sources — e.g. the *Samarangana Sutradhara* — the preparatory drawing or outline was executed in coloured chalk (*vartika*) before application of the final plaster coating (Bouet Haddad 1994: 37).

improper use of the rooms, etc. It is worth drawing attention once again to the main causes of the damage undergone by the wall paintings. The first is constituted by the earthquake of 1934, when the collapse of the upper storey, built almost entirely of wood, left the whole intermediate storey — where the paintings are situated — with no protection whatsoever from atmospheric agents. For almost a decade, until the albeit imperfect rebuilding of the upper floor, the wooden ceiling boards of rooms A and B were also their only form of roofing, and certainly ineffective against the monsoon rains. Rainwater filtered through the bare wooden boards, penetrated the walls and washed away the painted surfaces while transporting dirt and mica particles with a harmful abrasive effect.

The second cause was the use of the building for military quarters. Before our restoration work, the inner wall of room A — the one with the painting of the Visvarupa — was riddled with small holes in the painted plaster at a height of about 1.3 m as a result of driving hooks into the wall to hang up helmets and weapons. There is hardly any need to dwell at length on the harmful effects of this operation.

Only in 1985, once work had actually commenced, was it possible to discover that a third negative factor was threatening the wall paintings and frustrating our efforts to salvage them, i.e. the damp within the wall facing south, which is also the most important from the artistic viewpoint. As the room is situated on the intermediate floor with a covered veranda running behind it, the cause of the damp, which was absolutely non-existent on the other floors, was not immediately clear.

It was only by means of systematic pointwise monitoring of the percentage of damp within the brick wall measured on both sides ([35]) that it was possible to understand the particular conditions which had made it possible for the rain to soak the entire wall (Pl. IX, 23a, b; 24; 25). Our understanding of the mechanism involved in the phenomenon also made it possible to apply a prompt and adequate remedy. Also in connection with protection against damp, it must be noted that the oil-based varnishes applied on the painted surface during the work carried out in 1956, as mentioned in § 5.4, worked to prevent the materials from breathing and hampered or made insufficient the elimination of the damp inside the walls through a process of constant natural evaporation.

While this volume was being drafted, IsMEO received notice through the Italian diplomatic mission in Kathmandu of the intention of the Nepalese authorities to dismantle and rebuild the upper storey of the royal palace of Bhaktapur in accordance with the original layout (see § 3.1 and 4.3). The Institute regards this step as both valid and legitimate but wishes at the same time to express the deepest concern with respect to the timing chosen or proposed for its material execution. Such an operation should always precede — and never follow — conservation work, in our case long and delicate work patiently carried out on fragile and minute material. We hope that the timing and methods will be chosen with great care to avoid causing new damage to the paintings.

6.3 The Problem of the Original Captions

While the overall balance sheet of our conservation work — understood also as a tool to facilitate interpretation of the paintings — is highly positive, there is unfortunately one negative item which we think it worthwhile and indeed obligatory to account for. We refer to our failure, with the techniques at our disposal, to make a number of useful inscriptions more readable. As mentioned above, the individual episodes of the cycle of paintings identified as *Krsna Lila* in room A of the royal palace of Bhaktapur are carefully furnished with captions. In accordance with the practice normally followed with painted scrolls, these captions are situated on the strips running beneath each of the five panels and are written in the *Newari* language, originally with white characters on a black background. From the very outset we realized that the captions had become practically illegible as letters and background had merged into a homogeneous blackish colour in which it was barely possible to make out the geometrical shapes of the individual characters. The various methods applied failed to achieve any appreciable result. Overall cleaning to restore the original chromatic contrast proved fruitless, as did our attempts to identify the individual letters by using a strong lateral light and make evident their greater thickness with respect to the background. Our efforts to photograph the captions with infrared and ultraviolet film to bring out the photochromatic contrast between the two different pigments also proved completely futile (Pl. X, 26a, b and Selection).

The unusual resistance to cleaning (attempted with suitable solvents at increasing strengths but always remaining below the threshold of irrevers-

([35]) Monitoring lasted from 10.00 a.m., 3 February 1990, to 1.00 p.m. the following day and determined the percentages of humidity at 86 points both on the painted surface and at a depth of approx. 2.5 cm. The points were set along three horizontal lines at heights of 10 cm, 50 cm and 1 m above the floor level on both the inside and the outside of the northward facing wall of rooms A and B. The percentages, which were obtained by means of a hygrometer (Hydromette HTR 300-Gann, Stuttgart), were transferred to drawings of the elevation and horizontal section of the monitored rooms and then related to the general plan of the complex and the heights of the individual buildings.

ibility in their action on the original pigments) led us to carry out more specific analyses on the extraneous patina that still covers and renders uniform the strip containing the captions. Once again we are obliged to report damaged caused by the above-mentioned work carried out in 1956. In all probability the chemists appointed to carry out the work made massive use of *triethanolamine* as a cleaning solvent in their operations. Apart from its high solvent power, this substance may have triggered a chemical reaction with an unforeseen — but foreseeable — chromatic effect on the two pigments. On the one hand, the white of the letters was greatly diminished, thus facilitating the blackening of the pigment composed of basic lead carbonate ([36]). On the other, the black of the backgrounds was enhanced, thus facilitating the carbonation of the ivory black of which the pigment was presumably composed ([37]). Given that both reactions are irreversible (and effectively 'sealed' by the subsequent application of oil-based varnish), our remaining hopes of reading the captions can no longer be grounded on mechanical or chemical expedients but only on patient, systematic and laborious efforts to identify the individual graphemes that are still visible and work back from them to words of some sense and pertinence.

Purely as a curiosity, attention is drawn to an analogous case of chromatic inversion found in the external paintings of the Bagh Bayrava in Kirtipur, where only the pictorial narration is affected.

6.4 Summary of the Conservation Work

To conclude this technical excursus in the field of extant wall paintings in the Kathmandu Valley, it may be useful to furnish a brief summary of the conservation work carried out on some of the paintings (see § 4.2, 4.3, 4.4 and the second part of § 4.5) for the purpose both of facilitating subsequent iconographic interpretation and reading (cleaning and integration) and of ensuring their ability to last over time (consolidation and fixing).

In the light of the characteristics of the various materials employed, as described in § 6.1 and 6.2, and of the results obtained, no significant differences emerged with respect to the operative procedures normally used in other geographical areas. It will therefore suffice to list the main technical problems closely connected with the conservation work, drawing also upon the Iranian experience referred to above on more than one occasion (Mora 1968: 323-28, see note 2).

a) Plaster of a friable nature or detached from the supporting wall surface (Pl. X, 27).

b) Possible presence of more recent layers (of paint or whitewash) covering the first layer of paint or the original structure.

c) Blackening caused by smoke or by other superficial deposits or by treatment with varnishes.

d) Alterations caused by infiltration of water; slipping of the whole layer of paint and/or deposition of salts.

e) Alterations caused by micro-organisms.

f) Defects regarding the cohesion and/or elasticity of the layer of paint.

g) 'Wrinkling' of the layer of paint when it does not follow the movements of the foundation layer but without becoming detached.

h) Total crumbling and collapse of the layer of paint or the plaster coat with the resulting problem of restoring the unity and legibility of the painting.

i) Integration of pictorial unity in clearly identifiable and wholly reversible fashion, i.e. such as can be eliminated at any moment.

j) Fixing (again reversible) of the various surfaces treated and final 'chromatic balancing'. The latter serves to harmonize the areas treated at different times and in different environmental conditions and to attenuate the tonal contrast between the original parts and the necessary elements of integration.

In the course of conservation work, all the problems listed above (combinations of which were generally present in the cases dealt with) were tackled and solved by means of operations which were very simple and linear in conceptual terms but greatly protracted in practice. It is in fact essential that no operations should be completed in a hurry, both in order to ensure the maximum care and precision (it being often necessary to work on tiny fragments of the layer of paint or on preparations which have crumbled almost completely) and in order to give such chemical substances as solvents or fixatives the necessary time to act at the required depth. In connection with chemical products, it is also worth pointing out that the use of such substances — and the consequent effect on the painting involved — should not be regarded, as it all too often is, as a miracle-working device, and even less so as producing automatic results. A theoretical manual can indeed give the formula and composition of a product and the cases in which it *may* be used. But it is only certain diagnosis, rigorous preliminary

([36]) It is known that white lead (basic lead carbonate), used from at least the 1st century AD on, blackens rapidly in the presence of alkaline chlorides or ammonium sulphides. In 1473 Cennini wrote as follows in his *Libro dell'Arte*, chapt. LIX: 'Bianco è un colore archimiato di piombo, il quale si chiama biacca; guàrdatene quanto puoi, che per ispazio di tempo vien nera [White is a colour alchemized from lead and is called white lead; keep away from it as much as you can because it turns black over time]' (cf. Piva 1988: 363-64; Augusti 1949: 45).

([37]) Authentic 'ivory black', obtained by burning elephant tusks, is wholly neutral in its action and possesses great covering power. When mixed with whites, or even solely in their presence, its tone tends to heighten spontaneously (Piva 1988: 398).

analysis, experience and above all 'vigilant prudence', i.e. careful and constant monitoring of chemo-physical events and associated reactions, that can tell the conservation expert whether he is on the right road, when and where he should stop, what timing and degree of dilution to adopt, and so on. Only thus will it be possible to avoid the destruction not only of the infinite particles of colour that make up a painting but also of the minuscule traces of pigment that often constitute the only surviving evidence of a vanished pictorial event. This brings us, however, to a subject that we have no intention of tackling here, i.e. the art-historical knowledge that every conservation technician must possess to ensure that restoration work is not reduced to a mechanical operation carried out exclusively with chemical products.

We shall conclude by listing the operations carried out on the wall paintings in order of execution.

1 - Consolidation and fixing of the *arriccio* and the preparatory layer of plaster by means of pressure and glue injections.

2 - Consolidation and fixing of the layer of paint — often in a wrinkled, raised or crumbled state — by means of softening, pressure beneath special paper and glue injections.

3 - Cleaning of holes in the plaster — or wood — and of pictorial lacunae due to loss of pigment or collapse of preparatory layer; followed by filling in with stucco, generally of the same material as the original, together with suitable additives where necessary (Pl. X, 28).

4 - Removal, as far as possible, of any grease-based varnishes applied in the past. This operation was obviously limited by the type and hardness of the varnishes employed since the action of strong solvents or excessively long application could also affect or damage the thin original layer of paint.

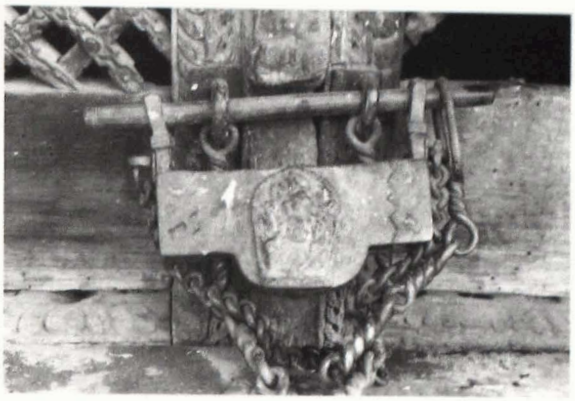
5 - Cleaning of the painted surfaces to remove every type of dirt deposited over the years: soot, vegetable or animal grease, etc.

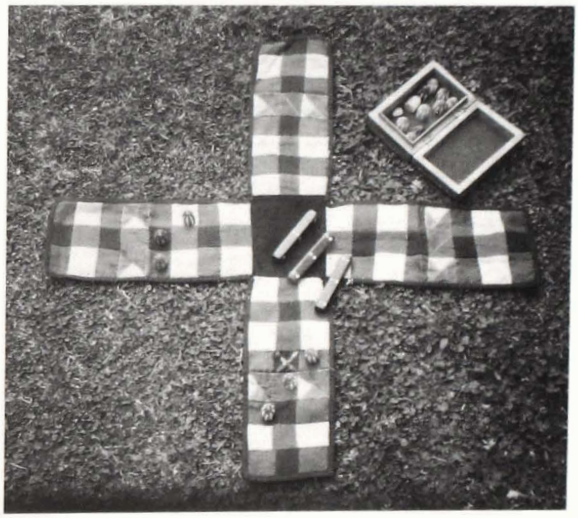
6 - Pictorial integration in the lacunae using natural pigments similar to those originally used but employing particular techniques to ensure that the integration is clearly recognizable as new, e.g. 'rigatino' or striped areas (Pl. X, 29) making it possible at a suitable distance to visually recompose lost shapes and colours and hence pictorial unity; or, for larger areas, the application of uniform 'neutral' colour to connect the surviving intact areas visually. As pointed out, all such operations can be easily and completely reversed.

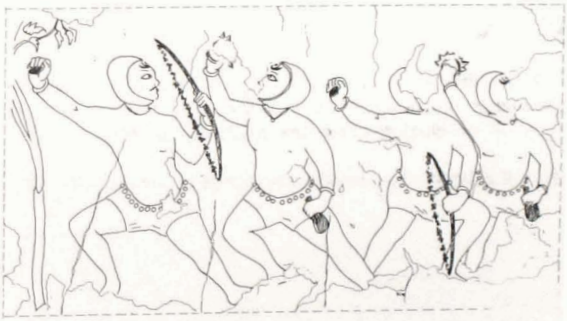
7 - 'Chromatic balancing' over all the painted surfaces (see above).

8 - Final fixing of all the surfaces treated by means of light, non-shiny and obviously reversible fixative.

All the operations outlined above were accompanied by constant monitoring of environmental humidity, using a Salmoiraghi 1750 hygrothermograph recording temperatures and humidity percentages on a single chart. The daily data were collected and recorded, together with systematic descriptions of the various operations carried out, both in the work journal and, in more concise form, in the final campaign reports submitted to the Nepalese authorities.







Pl. VIII

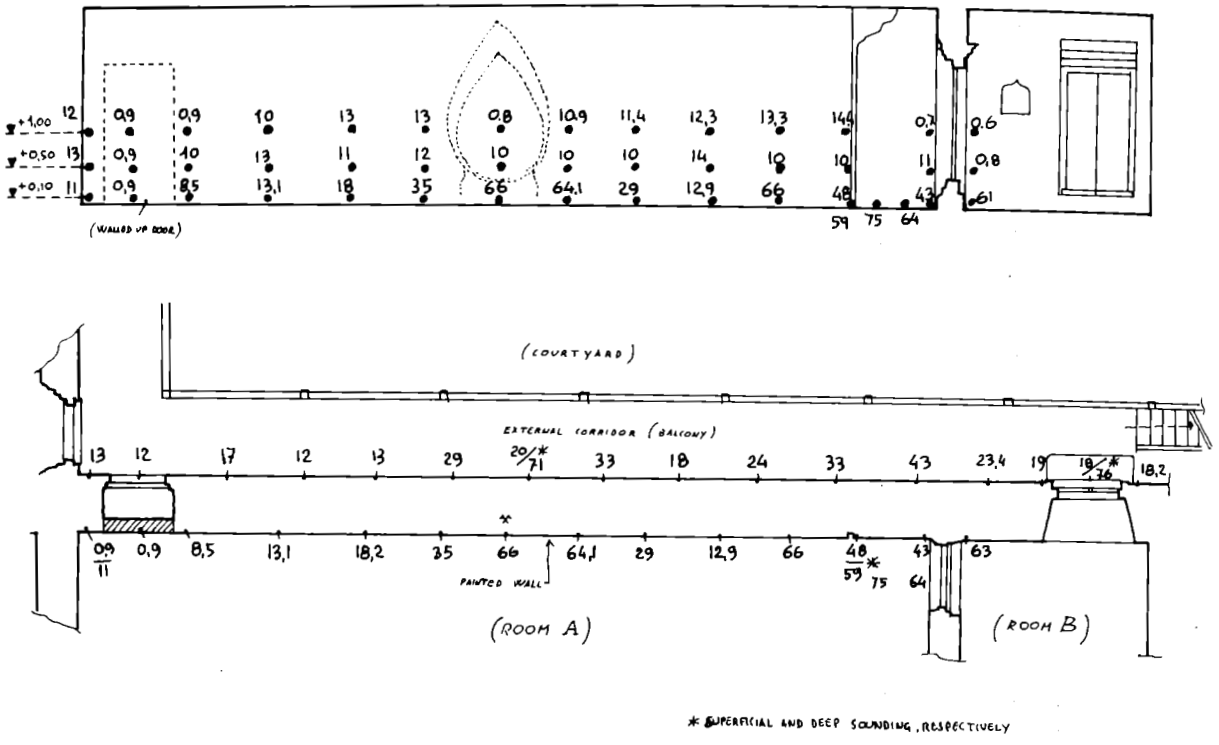
20a - Bhaktapur, Royal Palace: detail of a painting of room A, showing a traditional iron lock.

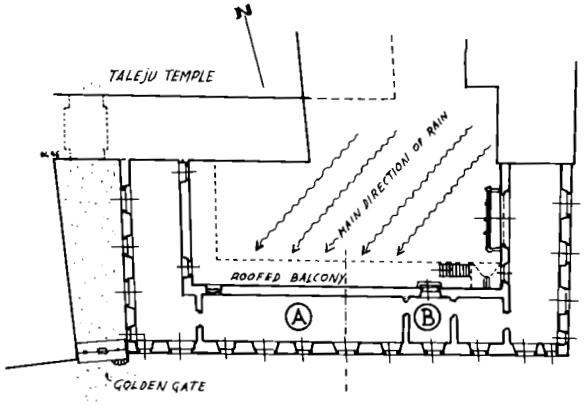
20b - Bhaktapur: a traditional lock.

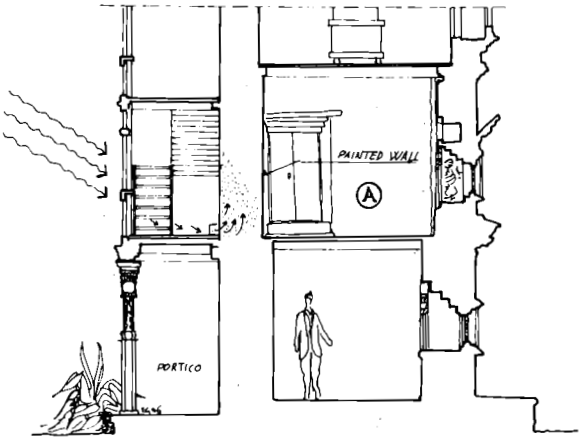
21a - Two players (divinities?) of *pacisi*, from a 17th century scroll (after Slusser).

21b - A modern *pacisi* device with material cross and ebony and ivory dice.

22 - Bhaktapur, Royal Palace: room A, a detail of two couples of *pahlavan* (champions) fighting by means of special iron bows and 'tiger fangs'.





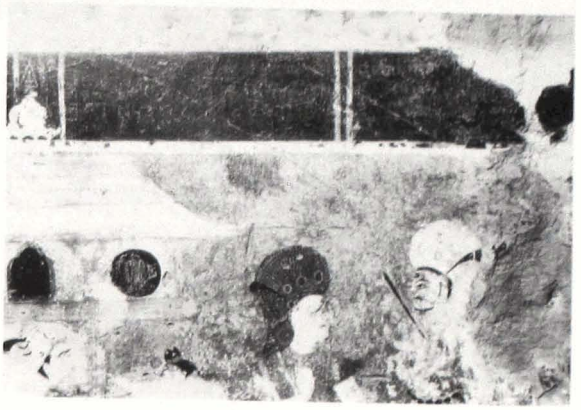


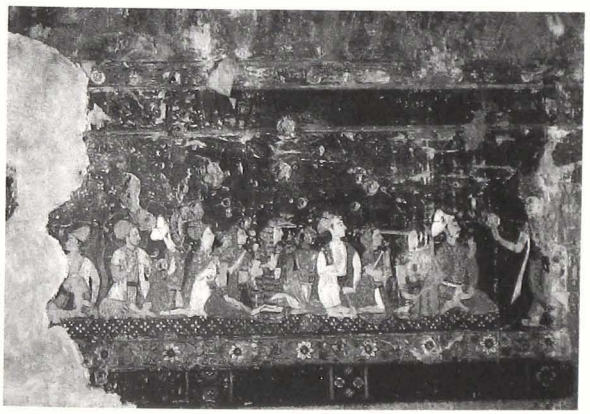
Pl. IX

23a, b - Bhaktapur, Royal Palace: diagram of presence (in percentage) of moisture inside the North wall (a, interior elevation; b, plan) as monitored in march 30, 1990.

24 - Bhaktapur, Royal complex: mutual position of different buildings, interpretation of main direction of rain.

25 - Bhaktapur, Royal Palace: cross section on the balcony of the 2nd floor showing the effects of rain.





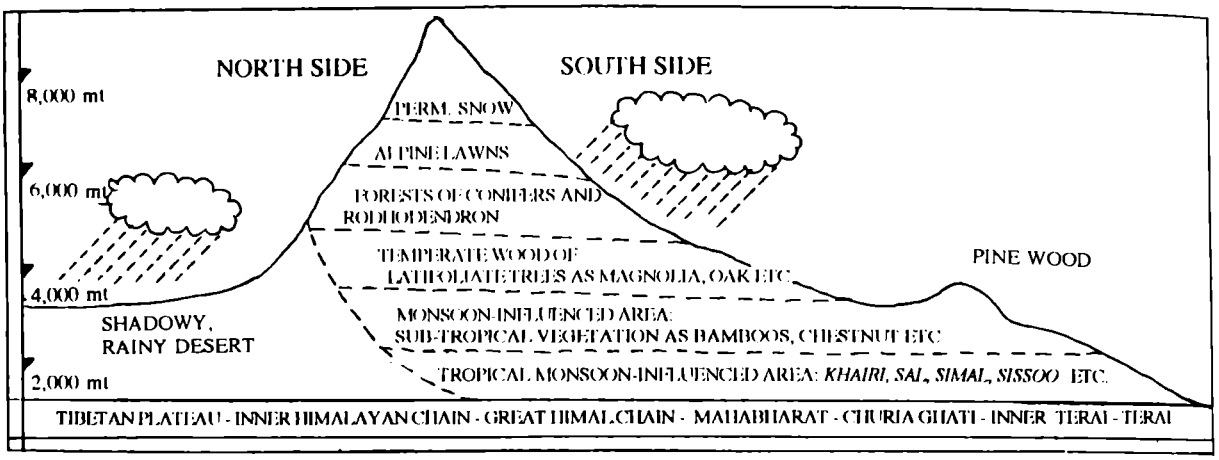
Pl. X

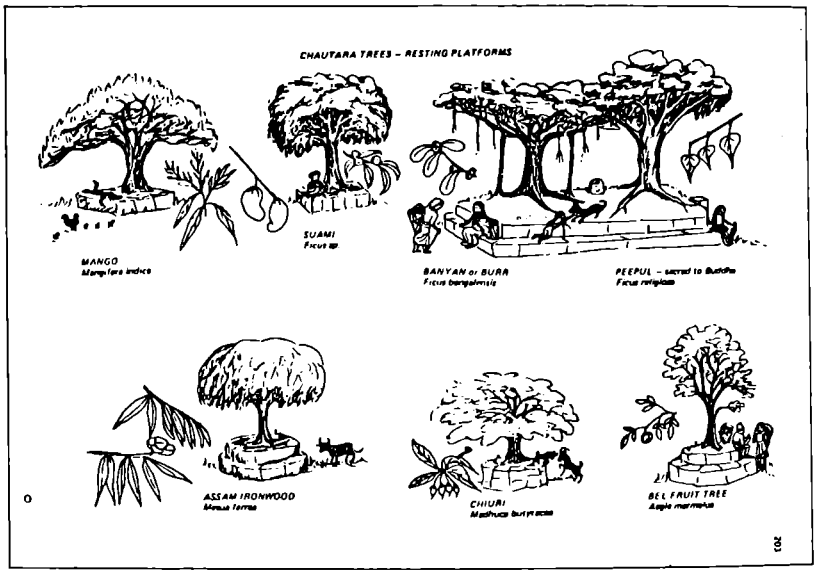
26a, b - Bhaktapur, Royal Palace: two infrared photos of painted strips; the single letters of the original captions remain unreadable.

27 - Conditions of the pictorial film and plaster layer.

28 - Holes and *lacunae* in the pictorial film, before stucco filling up.

29 - A detail of a painting after a complete conservation work.

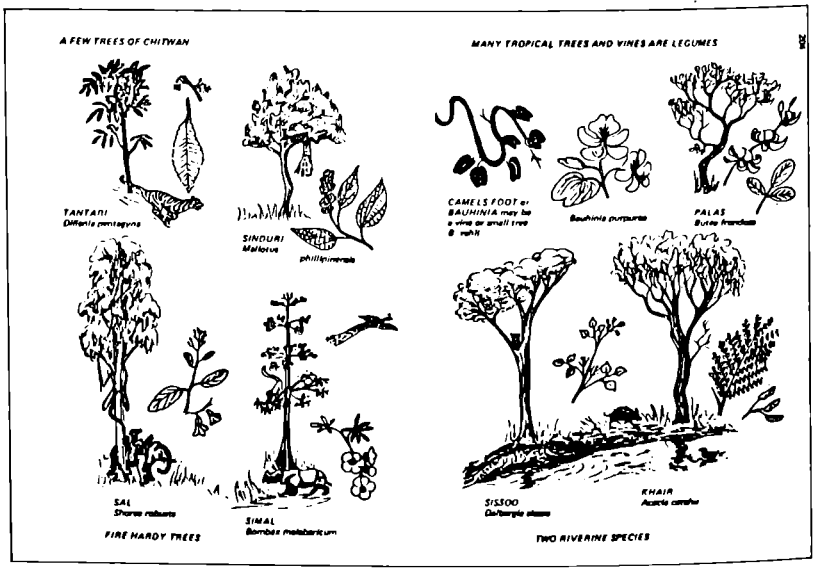




Pl. XI

30 - Cross section of the Himalayan area from Tibet to Gange's plan: — the *Mahabharat* Mounts: a chain running from West to East of the Himalayan range. — *Churia Ghati*: the Churia hills reach the height of 1,500 m. — *Terai*: the lowlands, forming a long strip, 25/40 km in width, are large areas entirely covered by the jungle.

31a, b - Some exemples of Nepalese trees.



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APPENDICES

APPENDIX A (with reference to § 2.3)

A SELECTION OF SIGNIFICANT EXAMPLES — IN BLACK/WHITE AND COLOR PICTURES — AMONG 1,200 SHOTS

by E. Galdieri

Given the impossibility of showing all the examples of wall paintings gathered and recorded during our study, we shall confine ourselves to furnishing a significant selection suitably arranged in accordance with our proposed typological classification and with details of the locality in which each example is situated.

Type A - Type A constitutes the first and the simplest level of wall painting, generally being little more than signs or symbols painted directly upon the supporting surface, often with no type of plaster or priming whatsoever.

Examples

(black/white)	(color)
1 - 96009 = Kathmandu	1 - 96d-1001 = Bhaktapur
2 - 96015 = Panauti	2 - 851-274b = Kathmandu
	3 - 840-024 = Bhaktapur
	4 - 860-166 = Bhaktapur

Type B - An image enclosed within a medallion — which may be circular, of four-petal shape, rectangular, with a mixture of straight and curving lines, etc. — on its own preparatory layer of plaster. Such images can represent individual divinities or holy places generally common to both religions, e.g. the very common image of the 'self-created stupa' (Swayambhu).

Examples

1 - 15500-27 = Patan	1 - 840-019 = Bhaktapur
2 - 16623-22 = Patan	2 - 932-002 = Patan
	3 - 932-049 = Patan
	4 - 860-180 = Patan

Type C - The most common type, consisting of a frame formed by one or three distinct parts, painted or applied as a cornice around the main doorway into the building. The horizontal part contains sacred protective images and distinguishes houses inhabited by Buddhists from those inhabited by Hindus, the former displaying the five *tathagata* (protectors or 'those who show the way') and the latter, especially in the case of *Shivaites*, Ganesh, Surya, Shiva, Vishnu and Brahma. The rigidly symmetrical vertical portions contain more auspicial images: the seven sacred jewels, the *ashta mangal* (eight auspicial objects), an eye, a parrot etc.

Examples

1 - 16622-17 = Bhaktapur	1 - 840-039 = Kirtipur
2 - 15499-1 = Kathmandu	2 - 880-174 = Patan
	3 - 880-194 = Patan
	4 - 880-193 = Patan
	5 - 880-189 = Patan
	6 - 880-184 = Bhaktapur
	7 - 930-188 = Patan
	8 - 851-255 = Chabahil

Type D - This is the typical small-scale, sequential 'story in images' developed over one or more horizontal panels, with or without captions, and often relating the deeds of Krishna (*Krsna-Lila*). It is always enclosed within an elongated rectangular frame occupying the entire wall and crowned with an image of a painted red and green festoon of cloth with flounces. In actual fact, the festoon (*tallar*) is still used in temples and crowns the free, lower edge of the 'pagoda-style' roofs. In the painting it therefore represents a sort of protective canopy.

Examples

1 - 14147-29 = Kirtipur	1 - 851-362 = Bhaktapur
2 - 16625-18 = Bhaktapur	2 - 840-222 = Kirtipur
	3 - 880-167 = Swayambu
	4 - 960-rp.01 = Bhaktapur

Type E - Isolated mythological scenes enclosed within lobed lunettes and in any case divorced from the general pictorial context, almost like windows opening onto a different world. The figures are generally small-scale, sometimes painted only in outline and hence substantially monochromatic.

Examples

1 - 932-035 = Bhaktapur	1 - 940-118 = Bhaktapur
2 - 930-052 = Bhaktapur	2 - 930-204 = Panauti
	3 - 930-195 = Panauti
	4 - 940-016 = Kathmandu

Type F - Large scale paintings generally depicting protective figures such as *dvarapala* (guardians of the doorway), angels or divine guardians in human, animal or mixed form. The donor is sometimes represented, in which case his hands are always joined in the gesture of *anjalimudra*.

Examples

1 - 16623-29 = Patan
2 - 16622-20 = Patan

1 - 860-169 = Patan
2 - 860-187 = Kathmandu
3 - 960-119 = Thimi
4 - 930-040 = Bhaktapur

Type G - Large-scale paintings which can depict divinities set within lobed niches or drop-shaped elements as well as images of a secular or ceremonial type.

Examples

1 - 15502-17a = Kirtipur
2 - 930-020 = Bhaktapur

1 - 851-258 = Chabahil
2 - 930-011 = Bhaktapur
3 - 880-212 = Kirtipur
4 - 880-187 = Panauti

Type H - Large-scale images, often representing the titular divinity of the temple, surrounded by its various associated features.

Examples

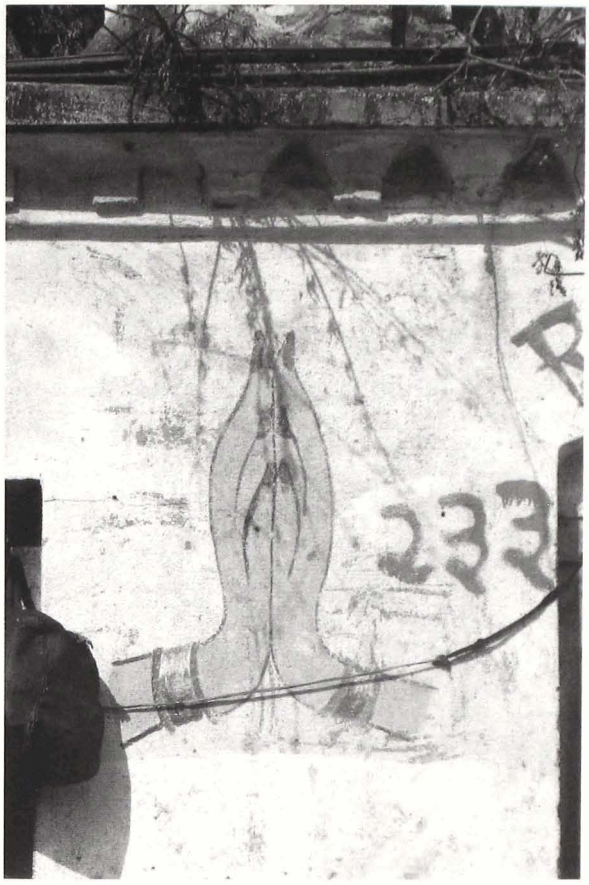
1 - 94001 = Chandesvari
2 - 17366-22 = Bhaktapur

1 - 880-200 = Pashupati
2 - 930-249 = Banepa
3 - 900ec-32 = Bhaktapur
4 - 900f-201 = Patan

Details, drawn from various types of murals and sites of location.

Examples

1 - 940-143 = Bhaktapur
2 - 960b-10 = Bhaktapur
3 - 900ec-51 = Bhaktapur
4 - 860-207 = Bhaktapur
5 - 900ec-52 = Bhaktapur
6 - 900ec-50 = Bhaktapur
7 - 940-128 = Bhaktapur
8 - 940-086 = Pashupati
9 - 851-357 = Bhaktapur
10 - 960b-12 = Bhaktapur
11 - 930-005 = Bhaktapur
12 - 932-006 = Bhaktapur



1 - Bhaktapur, Tamel section.

2 - Panauti, a shop.

Type A

1 - Patan, centre.

2 - Patan, centre.

Type B

1 - Bhaktapur, centre.

2 - Kathmandu, Hanuman Dhoka.

Type C

1 - Kirtipur, Bagh Bhairava.

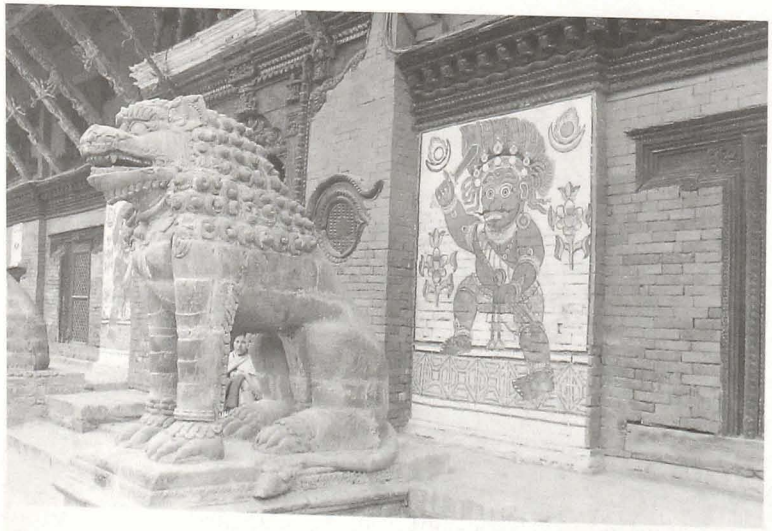
2 - Bhaktapur, Royal Palace.

Type D

1 - Bhaktapur, Pujari Math

Type E

2 - Bhaktapur, Pujari Math.



1 - Patan, Museum.

Type F

2 - Patan, fountain.

1 - Kirtipur, Bagh Bhairava.

2 - Bhaktapur, private house.

Type G

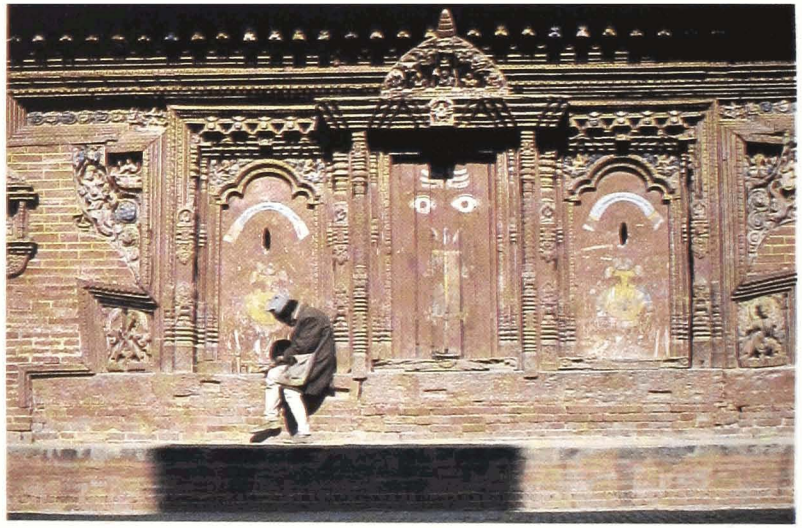
1 - Chandesvari, temple.

Type H

2 - Bhaktapur, Royal Palace, room B.

1 - Bhaktapur, shop's doors.

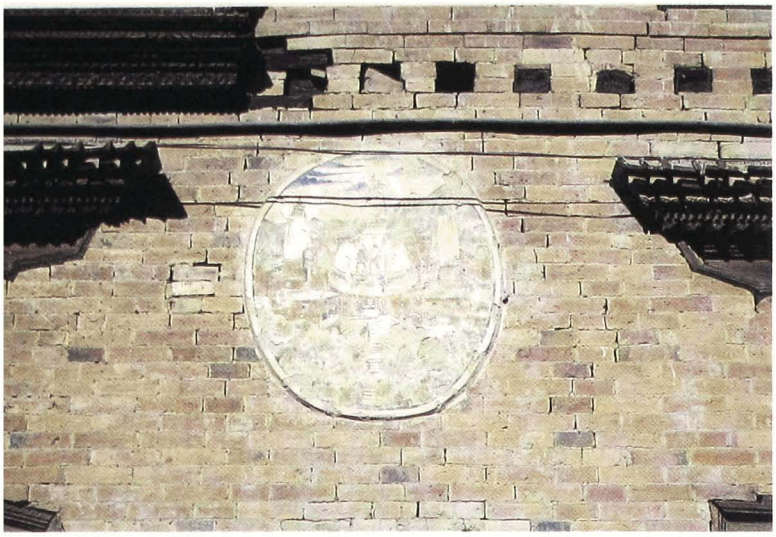
Type A

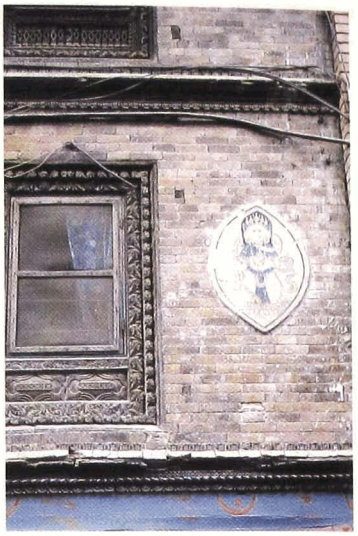


2 - Kathmandu, temple close to Hanuman Dhoka.

3 - Bhaktapur, temple.

4 - Bhaktapur, *Pati*.



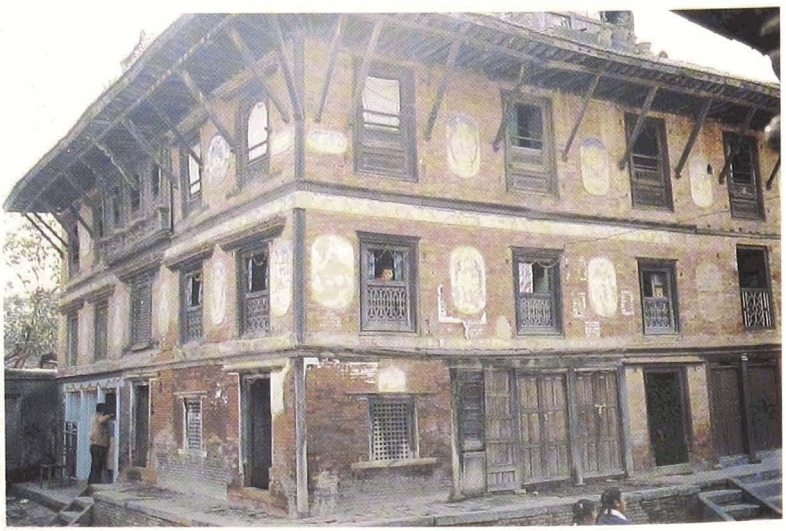


1 - Bhaktapur, private building.

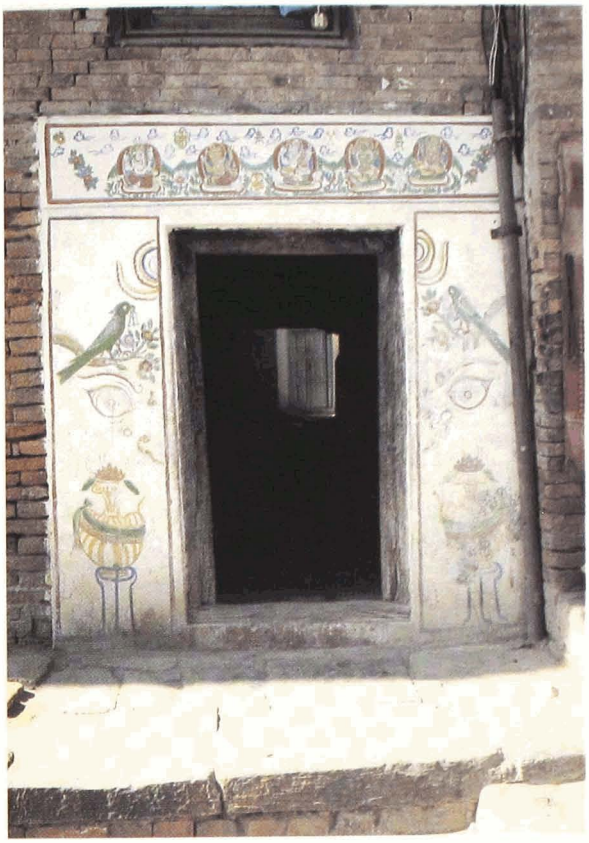
2 - Patan, private building (the mural shows Swayambunath).

Type B

3 - Patan, private building.



4 - Patan, private building.



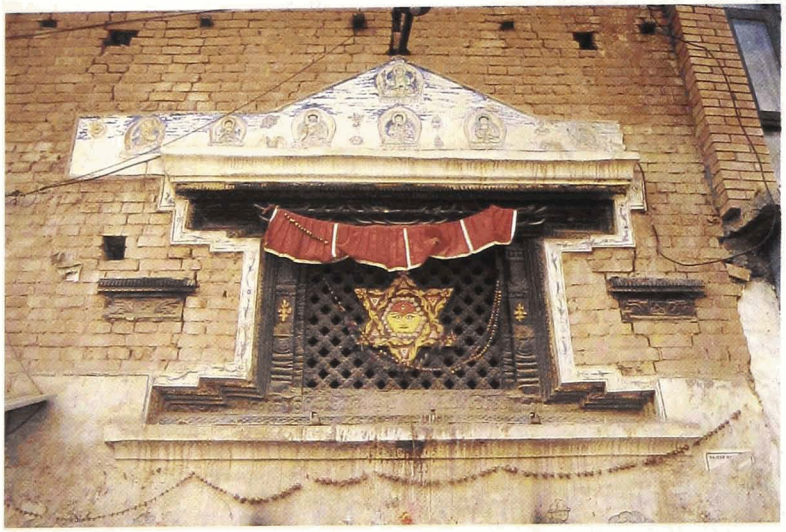
1 - Kirtipur, old royal palace.

2 - Patan, private building.

Type C

3 - Patan, courtyard.

4 - Patan, courtyard.

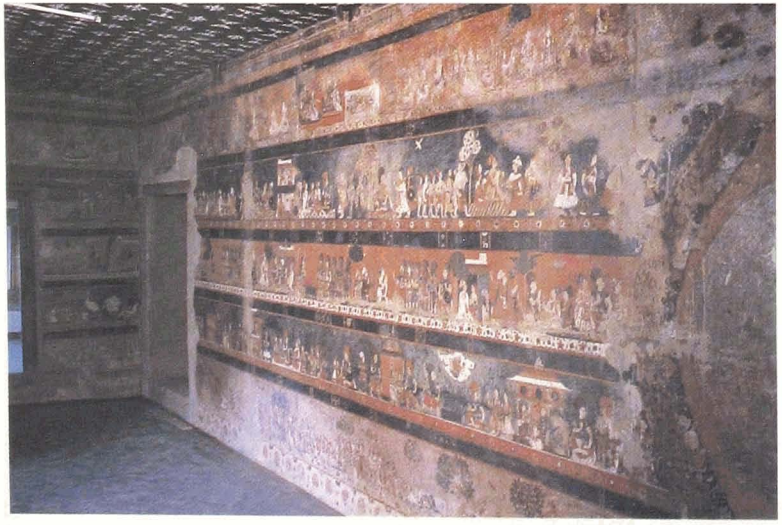


5 - Patan, private building.

6 - Bhaktapur, private building.

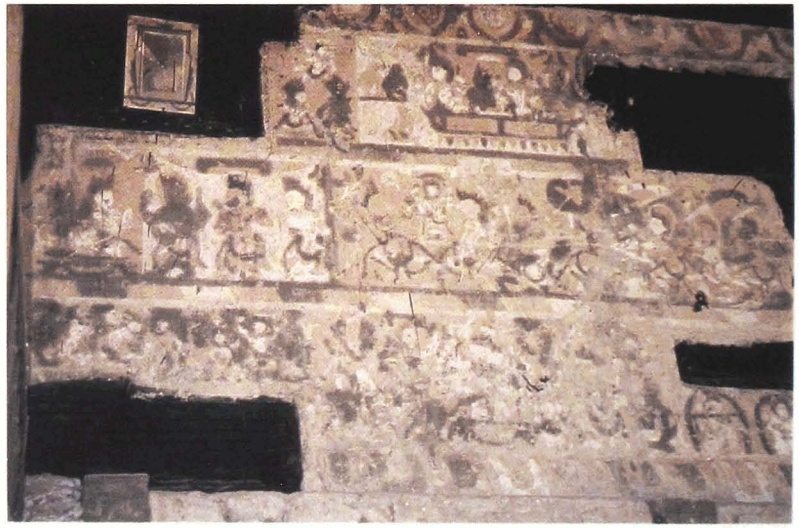
7 - Patan, private building.

8 - Chabahil, monastery.



1 - Bhaktapur, Royal Palace, room A.

Type D



2 - Kirtipur, Bagh Bharaiva.

3 - Swayambu, Shantipura temple.

4 - Bhaktapur, Khutu Math (watercolor by R. Powel).

1 - Bhaktapur, Pujari Math.

Type E

2 - Panauti, Kware complex, Bhadri Narayan.

3 - Panauti, Kware complex, Bhadri Narayan.

4 - Kathmandu, Buddhistic Chapel.

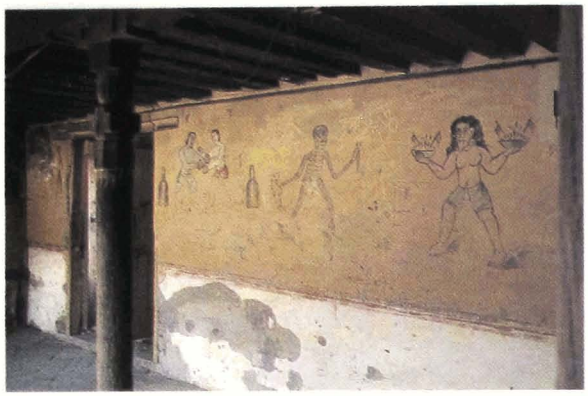
1 - Patan, royal complex.

2 - Harigaon (Kathmandu), temple of Bhajavati.

Type F

3 - Thimi, obsolete doorway of a monastery.

4 - Bhaktapur, Royal Palace, room B.

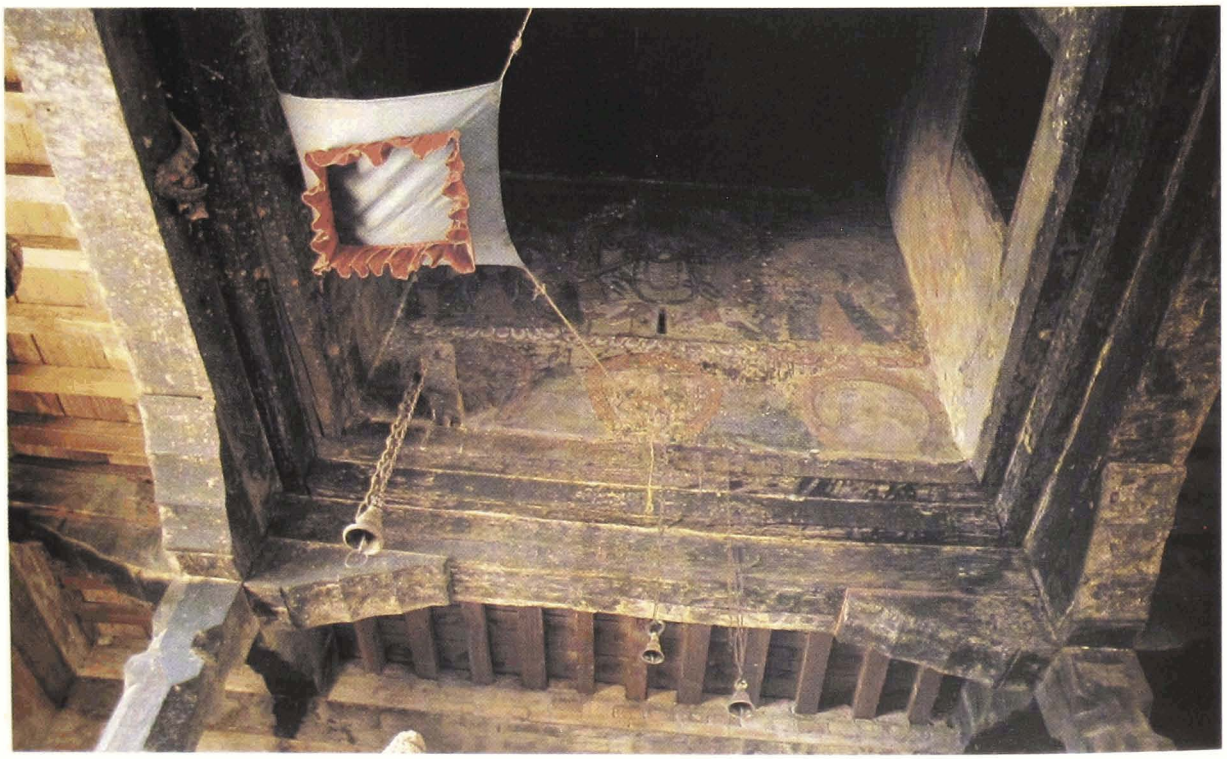


1 - Chabahil, monastery.

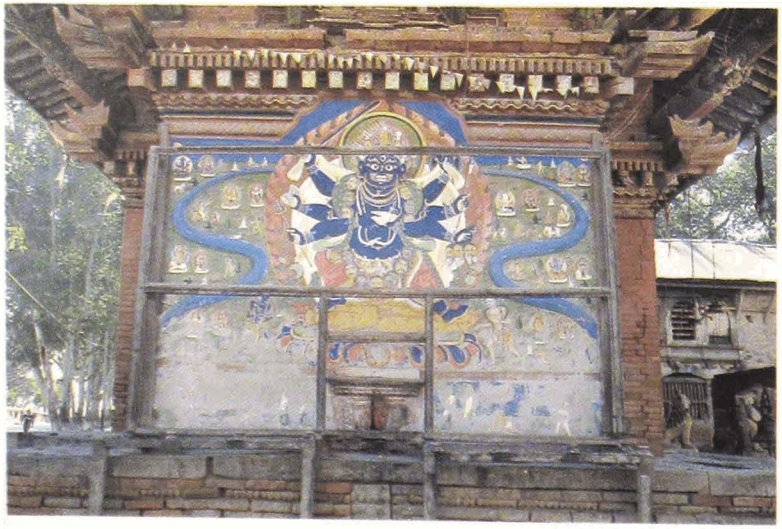
2 - Bhaktapur, private house.

3 - Kirtipur, Bagh Bhairava.

Type G



4 - Panauti, temple of Bhahmayani.

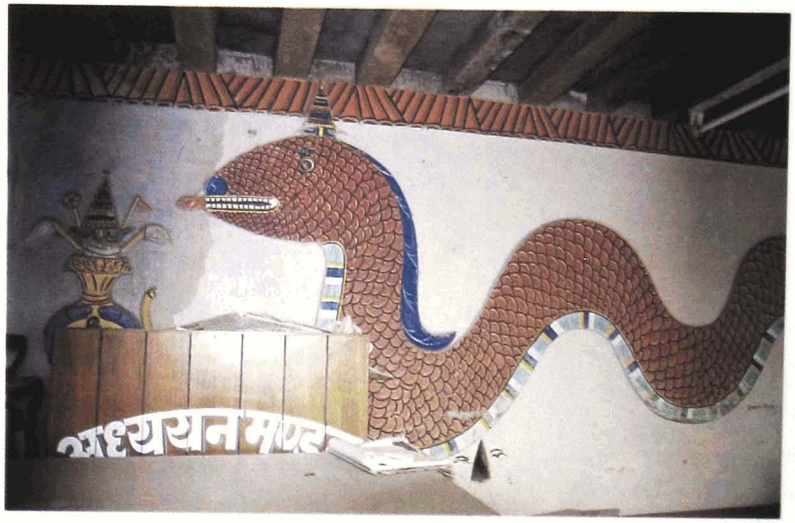


1 - Pashupati, temple of Jayabageswari.

Type H

2 - Banepa, temple of Chandeswari.

3 - Bhaktapur, Royal Palace, room B.



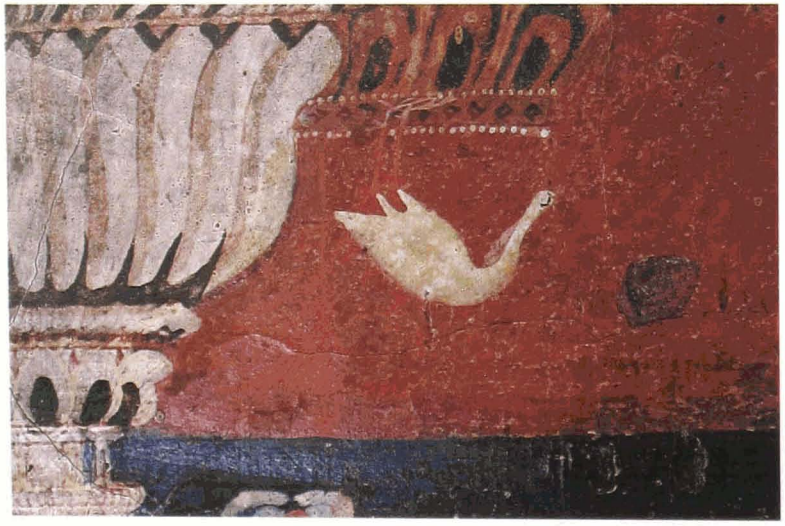
4 - Patan, Nagbahal.

1 - Bhaktapur, Pujari Math, a Saidu.

2 - Bhaktapur, Pujari Math, the flying egret.

3 - Bhaktapur, Royal Palace, the royal name on the Laxsmi's *chignon* (room A).

4 - Bhaktapur, Royal Palace, lost captions (room A).

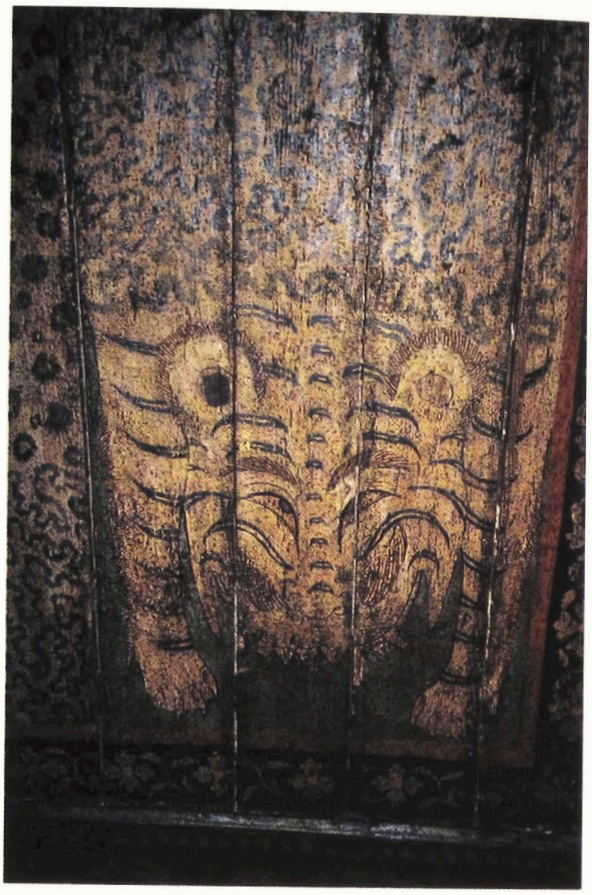


5 - Bhaktapur, Royal Palace, an egret (room A).

6 - Bhaktapur, Royal Palace, hunting scene (room B).

7 - Bhaktapur, Pujari Math, two players of *pacisi*.

8 - Pashupati, temple of Jayabageswari.



9 - Bhaktapur, Royal Palace, demons (?).

10 - Bhaktapur, Pujari Math, tiger-like ceiling.

11 - Bhaktapur, private house, Visvarupa.

12 - Bhaktapur, Pujari Math, labyrinth.

APPENDIX B (with reference to § 5.4)

NOTE ON A NEW NEPALESE LABYRINTH

by R.M. Cimino

Some time ago I wrote a paper on a labyrinth (Cimino 1985: 277-89 and 1989: 581-99), i.e. a drawing by Cassiano da Macerata, a Capuchin friar, supposedly representing the walls of Simraongarh. This city, situated in the eastern Terai region of Nepal and capital of the kingdom of Tirhut (Mithila) rose to a certain importance at the end of the 11th century and was then destroyed in 1325 by Ghiyas ud-din Tughlaq.

Fr. Cassiano claims to have seen the plan of the city walls carved on a slab of stone at Bathgaon.

According to tradition, the defeated sovereign is supposed to have taken refuge in the Nepalese valley and to have married the widow of the ruler of Bathgaon. The Malla dynasty, which followed these events and governed for centuries, traces its descent from the Tirhut of Simraongarh, its own place of origin being Karnataka.

It has hitherto proved impossible to trace out the slab in question or to ascertain the original form of the walls of Simraongarh, despite the fact that IsMEO has carried out a reconnaissance mission in the area and is still engaged upon trial excavations to locate the main structures of the ancient city.

The site is remarkably large, being mostly used for crops with a few scattered villages and a more populous township, complete with a police station, where the periodical market is held. There is also a sacred enclosure with a temple. Against the outside walls of the temple are arranged number of statues displaying fine craftsmanship and clearly exemplifying the Pala-Sena style. These probably belong to the ancient city. Other statues are to be found in the nearby villages, where they are still worshipped by the inhabitants.

A number of elongated embankments covered with vegetation are to be found in the countryside and may represent parts of the famous walls. Given their fragmentary nature, it has not yet been possible to reconstruct their original shape and layout.

The drawing of Fr. Cassiano is nevertheless of great importance in that it indicates the interest of the dynasty reigning over Bathgaon in the ancient capital, to which it felt somehow linked and which it sought to represent in emblematic form as a labyrinth to emphasize its nature as an impregnable stronghold. According to tradition, its defeat was the work of a traitor and certainly not due to any weakness in its defensive structures or shortcomings on the part of its defenders.

In previous studies we analysed the form of the labyrinth, which proved to be of the so-called 'Cretan' type, and examined other labyrinths found in Nepal and in India, also drawing links between them and the western tradition.

Labyrinths of various forms are found in a large number of *yantras* or magical diagrams of the 17th and 18th centuries, even though the origin of this archetype is unquestionably far older than the surviving texts. In this case it assumes a precise symbolic significance, performing a magical-protective function.

The same function is performed by the *nandhyavartas*, maze-like auspicial symbols which can be composed of one or more intersecting swastikas. Such a labyrinth apparently exists in the Nepalese temple of Pashupati, a sort of compulsory route composed of 522 votive *lingas* arranged in the form of a clockwise swastika. This tortuous path precedes access to the sanctum — which foreigners are prohibited from entering — and probably symbolizes the difficult path of salvation.

A labyrinth similar in form to the above and painted on the ceiling of a chamber in the residence of the *pujari* of the Temple of Dattatreya in Bhaktapur was recently brought to light as a result of consolidation, cleaning and restoration carried out for IsMEO by Mr R. Boenni, the chief restorer, under the direction of Mr E. Galdieri. I am indebted to their kindness and friendship for the news of this discovery and also for the drawings and photographs upon which this note is based, as my more recent article on the same matter (Cimino 1995: 381-85).

The Pujari Math is located to the side of the temple and was already so well-known for its open-work wooden windows as to have been turned into a museum of wood carvings some years ago.

Great care over decoration is also displayed in

the inner chambers, despite the fact that until two years ago soot from oil lamps and neglect had almost completely concealed the paintings on the walls and ceiling of a large room on the first floor of the building, possibly once used for meetings. The restoration work carried out by IsMEO patiently brought back to light a series of splendid and wholly unexpected paintings of great iconographic and stylistic interest calling for careful study.

The room is divided into two chambers by columns and lintels and the wooden ceiling is painted to simulate a single leopard-skin 'tent'. A symbolic element was uncovered in the centre of each chamber: a severely damaged lotus flower in the southern and a labyrinth inscribed in a square measuring 71 × 71 cm in the northern. Set against a dark background is a red figure in the shape of four lotus petals expanding at the corners, upon which the labyrinth is traced in yellow.

The labyrinth can certainly be described as *sui generis*, being composed of a central swastika the spokes of which join up with an irregular M-shaped segment occupying the corner petals. The sinuous outlines of the petals join up to form a cross, the arms of which end in three defensive turrets. From the single entrance to the labyrinth, a tortuous path defended by warriors, war chariots, and soldiers mounted on horses or elephants winds its obligatory course beneath numerous defensive turrets until it reaches the last petal, which is adjacent to the entrance and constitutes the point of greatest safety.

The principle underlying this labyrinth is the same as that seen in the drawing of the walls of Simraongarh, but here the path follows a circular course rather than broken straight lines. In both cases there is a weak point, identification of which makes it easy to penetrate what is supposed to be the best protected part. This point is located precisely at the beginning of the path and consists of a wall located adjacent to the innermost part of the labyrinth. By 'demolishing' this wall it is possible to penetrate directly into the heart of the labyrinth, avoiding the difficult path and the defence systems placed along the route.

According to the legend, it was precisely the demolition of this wall, pointed out to the enemy by a traitor, that brought about the fall of Simraongarh.

The painting on the ceiling of the Pujari Math contains twelve turrets of simple cylindrical form crowned with a shallow dome and placed, as mentioned above, at the ends of the arms of the four crosses. Along the path there are eight soldiers with long swords, eight war chariots with horse and driver, four riders mounted on horses and four on elephants, probably representing all the different types of corps found in the traditional armies of the day.

The presence of the labyrinth in the Pujari Math suggests no reference to any city, either real or legendary. It should be remembered that al-Biruni describes the city of Ravana on the island of Lanka as a labyrinth, possibly referring to a lost text, and gives a drawing of it in the 'Cretan' form.

Our painting is instead linked to the figure of a *mandala* or a *yantra* and hence assumes both a magical, protective function and a religious, spiritual significance. While its form can in fact easily be taken to represent man's difficult path towards spiritual victory, its geometrical shape could also function as an aid to meditation. At the same time, however, its position on the ceiling raises some doubts as to the practical possibility of its use in meditation, which is normally practised in the sitting position.

It is thus more likely to have an 'auspicial' significance, also in view of the symmetrical position it occupies with respect to the lotus flower — the symbol *par excellence* of purity and spiritual fulfilment for Buddhists and Hindus alike — found in the adjacent chamber.

Similar labyrinth-like shapes, known as *rangoli* or *kolam*, are still traced with flowers and coloured powder on the thresholds of houses on the occasion of festivities and weddings. A labyrinth of this type, recalling a tortuous path composed of intersecting swastikas, is represented in an 18th-century Rajasthani miniature, where the Maharana Amar Singh of Mewar is depicted during the games for the festival of Holi. (See Pl. VII, 19b and Selection).

APPENDIX C (with reference to § 5.3)

OBSERVATIONS ON INDIGENOUS AND NATURALIZED PLANTS AND SOME OF THE MAIN CROPS IN NEPAL

by M. Catalano

Nature itself is art. The plant kingdom builds structures open to the external world that can last for centuries. And the matching of colours is masterly from the pictorial viewpoint. For these and many other reasons, it is no wonder that pictorial art often draws inspiration and vital sustenance from natural vegetation.

It therefore appears appropriate to begin this brief *excursus* in the verdant Kathmandu Valley, in the centre of which the homonymous capital of Nepal is situated. It is rare to find such an intensely green valley, the only rival being perhaps the Kyoto Valley in Japan.

1. Notes on Nepalese Nature

By virtue of its position on the southern slopes of the Himalayas, the world's greatest range of mountains, Nepal presents an extraordinary variety of characteristics. The territory spreads over 141,000 sq. km with borders forming a roughly rectangular shape measuring approximately 800 km by 180 km. It stretches from the plain of the Ganges in the south to the Himalayas in the north.

The fertile alluvial soil of the Terai or lowland — a narrow strip of southern Nepal — combines with abundant rainfall and high temperatures throughout the year to make this plain a prime agricultural region producing a number of crops per year. The forests are equally precious, being full of such valuable trees as the *Karma*, which is used to make furniture. The foothills of Churia (see Pl. XI, 30) grow an abundance of *Shorea robusta*, locally known as *sal*, one of the prime sources of timber in Nepal and used above all for intricate carved fittings set in brick, but equally sought after as structural material for building purposes.

2. The Vegetation in the Valley

We shall now describe the taxa of trees and bushes most commonly found in the avenues and parks of the capital's green area. Visitors are struck above all by the beautiful *Grevillea robusta*, the canopy of which can reach a height of over 20 m. These trees belong to the family of Proteaceae, which is indigenous to the Himalayas, and in summer display a mass of yellow blossoms with equally beautiful foliage.

The *Callistemon linearis*, locally known as the 'bottle brush tree', was introduced from its native Australia and has ornamental blossom and foliage. This small and very common tree blossoms in August with beautiful red flower.

It is interesting to note that many of the exotic plants that we now admire in Nepal were introduced towards the end of the last century by the Maharajas of the Rana family (see note 18 of main text), who also became keen and expert gardeners.

The jacaranda, a type of palisander, is also abundant in the city of Kathmandu.

The species in question is the *Jacaranda mimosaefolia* (or *Iacaranda ovalifolia*), a member of the Leguminosae family with large, handsome flowers of purplish lilac. It blossoms in August and has also been observed to bear abundant fruit. Purely as a curiosity, also in view of the latitude of Kathmandu, it might be mentioned that this species grows well outdoors in Naples, where it bears abundant fruit, and can also be grown outdoors in Rome, with a few precautions.

The numerous gardens and parks, including the park of the new royal palace, also contain a large number of gigantic specimens of Araucaria (e.g. *Araucaria bidwillii*), native to the Andes in South America but acclimatized well in Nepal.

There are also various types of pine, some of which reaching a height of over 30 m. Attention should be drawn to at least two species: *Pinus wallichiana*, locally known as 'blue pine', and *Pinus roxburghii*, known here as 'chir pine'. The former grows high up on the mountain slopes while the latter is found at lower altitudes. The Himalayan cedar (*Cedrus deodara*) is found everywhere.

Particular mention should be made of the pipal (*Ficus religiosa*), a plant commonly found

throughout India but known all over the world for its spectacular ability to attach its air-borne roots to buildings and envelop them completely. Its seeds are deliberately inserted into small temples, for example, in such a way that it becomes practically impossible in time to distinguish between construction and natural growth.

As regards the flora of the hilly central regions, attention should be drawn to the large *Rhododendron* group, whose beauty and large-scale diffusion make it the national flower of Nepal. Rhododendrons are found more or less at altitudes of between 1,500 and 4,300 m. The particular beauty of the plant even seems to be emphasized by its Nepalese name, *laliguras*.

Very common species include the poinsettia (*Euphorbia pulcherrima*), which grows here as a small tree. There is also a vast range of very beautiful orchids and daturas, including *Datura stramonium*, a plant consecrated to Shiva.

The fungi (macromycetes) range from *Amanita* and *Cantharellus* to *Russula* and *Marasmius*, also including *Boletus* and other types unknown in Europe. Many are comestible and are sold in the large urban markets.

3. Main Crops

The main herbaceous crops of prime agricultural importance include rice (*Orzya sativa*) and sorghum (*Sorgum vulgare*), locally known as *junelo* and *zunelli makai*, millet, which is known as *kodo* and grown in great quantities in the Trisuli highlands, *Themeda*, a herbaceous plant of the lowlands, *Thysanolaena maxima*, used to make brooms, and finally wheat and barley, the latter grown particularly in the Langtang Valley.

Given their great social and economic importance, attention should also be drawn to two species of Brassicaceae. The first is *Sinapis alba*, L., an annual plant native to Eurasia and grown on terraces at altitudes of up to 2,500 m. The second is *Brassica campestris*, L., again native to Eurasia. Both are grown to produce mustard oil, which is used at different levels of refinement for a whole variety of purposes.

Fodder is also produced by cutting the young foliage of certain trees and transporting it to the farms in large baskets.

Of all the species mentioned, mustard unquestionably predominates in the highlands and rice throughout the broad Valley of Kathmandu as well as the Arun Valley and the far better known Pokhara Valley in Central Nepal. It should also be added that sugar cane provides the country's main source of sugar. Cane plantations can often be seen together with tall poinsettias and their abundant, resplendent blossoms. Many vegetables have been developed from related plants in the wild state, as in the case of cucumbers, some of which reach very large sizes. Among the wild varieties, attention should be drawn to *Kukur kankro*.

As regards useful and interesting Solanaceae, the following should be mentioned: *Datura suaveolens*, beautiful and highly scented but poisonous; very abundant red chili peppers; different varieties of tiny potatoes; tobacco (*Nicotiana tabacum*); and *Physalis peruviana*, locally known as the 'lantern plant' due to the shape of its fruit. (See Pl. XI, 31a, b for some of the plants described here).

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