A GENERAL STUDY OF MINOAN FRESCOES
with particular reference to
unpublished wall paintings
from Knossos

VOLUME IV: SUPPLEMENTARY PAPERS
to
a thesis submitted for the degree
of Ph.D. from the University of
Newcastle upon Tyne by
M.A.S. Cameron

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ZEITSCHRIFT
FÜR VOR- UND FRÜHGRIECHISCHE
EPGRAPHIK

IN VERBINDUNG MIT:
EMMETT L. BENNETT-MADISON · WILLIAM C. BRICE-MANCHESTER
PORPHYRIOS DIKAIOS-WALTHAM · KONSTANTINOS D. KTISTOPOULOS
ATHEN · OLIVIER MASSON-PARIS · PIERO MERIGGI-PAVIA · FRITZ
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VERLAGSBUCHEHANDLUNG · GEORG REIMER · KARL J. TRÜBNER · VEIT & COMP.
1965
MARK A. S. CAMERON
FOUR FRAGMENTS OF WALL PAINTINGS
WITH LINEAR A INSCRIPTIONS

The purpose of this article is to describe, assign a date to, and briefly discuss, three fragments of wall paintings with incised inscriptions (Nos. 1–3) from Hagia Triada and a fourth with a single painted sign (No. 4) from Knossos. These fragments have already been published but examination of the actual material leads the present writer to suggest tentative new readings of certain signs on the fragments from Hagia Triada. Technical descriptions of the material, which have not previously been published, are given at the end of this article.

Nos. 1–3; The Fragments from Hagia Triada: Pls. 1–9, and Tables 1–3

The script

There can be little doubt that these inscribed fragments are contemporary for both technical and calligraphical reasons. The graffiti contain at least one sign, L 95, which is known to occur only on Linear A documents. This is a sufficient reason alone for believing that our graffiti are written in Linear A, as indeed all previous publishers of the fragments have assumed.

1 The author wishes to thank the Director and Managing Committee of the British School of Archaeology at Athens for permission to publish here some of the results of his work as a student of the School; also Dr. A. Alexiou, Ephor of Crete and Director of Herakleion Museum, for permission to study this material; to Mr. M. R. Popham who has read and improved this article in draft form, and to Mr. G. Xylouris who supplied the photographs.

Professor E. Grumach, who suggested that this material should be republished, kindly checked Pls. 1–9 in Herakleion Museum, but for the commentaries on the signs on the Hagia Triada fragments the present writer is alone responsible.

2 No. 1: HM 52. G. Pugliese Carratelli, Monumenti Antichi... della Reale Accademia d'Italia, XL (1945), Le iscrizioni preelleniche di Haghia Triada in Creta etc. (hereafter abbreviated to PC 1), 590, Pl. XX (HT 155); W. C. Brice, Inscriptions in the Minoan Linear Script of Class A, Oxford 1961, (hereafter abbreviated to Brice), 23, V 7, Pl. XXX V 7; G. Pugliese Carratelli, Le epigrafi di Haghia Triada...
The find-place
They were found at a short distance above the floor level on the walls of a small three columned portico situated in the N. W. corner of the W. wing of the Villa. In nearby rooms were found Linear A tablets, clay sealings (some of which were countersigned with Linear A signs) which had fallen from the upper storeys, the famous “Park” and “Seated Goddess” frescoes, other fragments of equally fine wall paintings, and a number of vases, two of which bore Linear A graffiti.

The date
The destruction of Hagia Triada is generally believed to have taken place in the LM I B period on the evidence of pottery, Linear A tablets, and clay sealings. Our fragments belonged to the same destruction level and are therefore LM I B or earlier in date. No documents in Linear A have been found in stratified deposits of a later date.

The readings
The buckled, cracked and worn surfaces of the fragments make the task of reading the graffiti extremely difficult. The lines on

1. In Lineare A, Supplement to Minos No. 3, Salamanca 1963, (hereafter abbreviated to PC 2), 67 (HT 156)
2. No. 2: HM 53. PC 1, 590, Fig. 229, and Pl. XXI (HT 156); Brice, 23, V 8, Pl. XXX V 8; PC 2, 76 (HT 156)
3. No. 3: HM 64. A. J. Evans, The Palace of Minos at Knossos, (hereafter abbreviated to PM), Vol. I, (1921), 69-76, Fig. 473; PC 1, 590, Pl. XXII (HT 157); Brice 23, V 9, Pl. XXX V 9; PC 2, 76 (HT 157)
4. No. 4: references given on p. 12
5. PC 1, 430-433, Fig. 1e
6. Ibid., loc. cit.
7. Linear A tablets have been found at Zakro, Palaikastro and Tylissos in LM I B destruction levels.
8. The sealings are comparable in style to others found in LM I B destruction levels at Zakro (House A), Sklavokambos and Gournia, and some sealings from these sites may be from the same ring, as S. Marinatos has pointed out; Archaeologiki Ephemeris, (1939–41), 89 No. 8; see too V. E. G. Kenna, Archaeology in Greece, 1960–61, 30.
No. 2. Detail of signs 14-17
Plate 10

No. 4. Scale nearly full size

Scale full size
Four Fragments of wall paintings

which we base our new readings are very fine and, for the most part, they occur in very mutilated areas of the fragments. Consequently our new readings should be clearly understood to be tentative suggestions. In general, our readings are closer to those of Carratelli than to those of Brice.

In Tables 1—3 previously published drawings of the fragments have been arranged in chronological order. To facilitate reference to individual signs a number has been given above each character, whilst the numbers below the signs refer to Carratelli's L corpus of signs and their occurrences; some of the numbers are bracketed ( ) indicating that the particular transcription can be identified according to Carratelli's corpus of signs although the individual author did not mention the L number. Lines which could be either part of a sign or the result of damage suffered in antiquity have been dotted. In Pls. 7 and 8 the major cracks are denoted by black lines, but in Fig. 9 it was found necessary to make a greater distinction between characters and major cracks by dotted instead of black lines.

The following are commentaries on the more illegible or controversial signs.

No. 1. HT 155. Pl. 1, 4, 7 and Table 1

Sign 2; not included in Carratelli's corpus of occurrences, but Brice transcribes it as L 96 (= L 68).

Sign 3; Carratelli proposes L 67? Brice reads it as a single unit.

Sign 5; the present writer agrees with Carratelli's identification, L 95.

Sign 6; this sign has the same outer form as sign 5 and three faint, minute, lines below the horizontal crack suggest the eyes and tip of nose of the "cat's head" sign, L 95, rather than Brice's L76?: see Pl. 4.

There is general agreement on the identification of the other signs. A short vertical stroke appears at the beginning and end of the graffito as seems to be the case on No. 3.

No. 2. HT 156. Pl. 2, 5, 8 and Table 2

Sign 1 and 14 are transcribed by Carratelli (PC 1, 590) and Brice as L 14 and L 14?, and sign 16 by Brice as L 14?

Sign 2; a definite stroke, not simply a crack, although cracks run from it.

* PC 1, 484—489, Figs., 45—53 and 60
Sign 4; transcribed by Brice as a crack, but it is a definite stroke. Only the lower part of this stroke is reproduced in Table 2: see Pl. 2 for its full length.

Sign 8; the vertical lines appear to be definite strokes. Brice may be right in transcribing these as separated strokes but it is difficult to decide whether the horizontal "stroke" which joins the two vertical lines is damage suffered in antiquity rather than an incised stroke: at this point a small hole goes down into the plaster.

Sign 11; the horizontal line below the two upper strokes seems to have been deeply incised; certainly incised is a vertical line (from which extends a crack) below the left upper stroke.

Sign 15; on the right of the stroke recorded by Carratelli another stroke (or strokes?) is visible through which a major crack runs vertically: see Pl. 5. Alternative readings: L 32, 59, 74, or number(s)?

Sign 17; doubtfully a sign.
There is general agreement on the forms of the other signs. It has
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been suggested that this inscription reads $1: 1\frac{1}{2} : 2\frac{1}{4} : 3\frac{3}{4} \ldots$, and may even be a "ready reckoner".11

No. 3. HT 157. Pl. 3, 6, 9 and Table 3
Sign 1; the horizontal crack half way up the vertical stroke lacks incised marks along its edges; the transcriptions of Evans and Brice could be mistaken.
Sign 2; L 28 (as Evans and Brice) rather than L 56 (Carratelli)?
Sign 5; a fine line curving downwards to the right is visible between the two major cracks which pass through this sign, the right side of which is very badly damaged. The remaining elements of the sign appear to correspond in form to signs 5 and 6 of No. 1 (HT 156). The last four signs of the latter and the present graffito could be identical, as Brice suggested, although the leading sign of the two groups could be interpreted as L 95 rather than his L 76. See Pl. 6, and compare Brice, IV, 5 "line 6". Below the present sign is at least one certainly incised vertical stroke and possibly a further vertical and two curved strokes which could perhaps be interpreted as L 68?: see Pl. 6 and Table 3.

There is general agreement on the identification of signs 3 (L 32), 4 (L 59?), 6 and 7 (L 78) and 8 (L 14). A short vertical stroke appears in front of sign 1 and another below sign 8: similar marks are found on No. 1.

No. 4. The Fragment from Knossos. Pl. 10
This fragment was discussed briefly by Evans in PM I, 637, and by Brice who illustrated it with a drawing: Brice, V, 10, and Pl. XXX.

General description
The drawing13 on Pl. 10 is life size; the scale was unknown to Brice. His drawing "regularises" the shape of the sign whose vertical strokes are in fact more untidy and the "feet" more shapeless.

10 G. P. Goold and M. W. M. Pope, Preliminary Investigations into the Cretan Linear A Script, Cape Town 1955, ix
11 M. W. M. Pope, in a paper to the University of London Institute of Classical Studies, Minoan Linear B Seminar, Minutes of the Meeting of 30. 10. 1957, paragraph 3, and in BSA 55, (1960), 264; see too Brice, 8
12 Brice, Vocabulary, V 9 and V 7 listed under L 76
13 Only the painted surface is given in this drawing. Broken edges and the surface below the slip may be appreciated from Pl. 10.
The sign, painted in black on a yellowish white ground, stands above a chocolate brown area, perhaps of a border band.

The script

The sign is common to both the Linear A and B scripts (L 64 and "pu" respectively). It is normally written with its "crest" pointing to the right. Here, however, the sign has been reversed\textsuperscript{14}. This is characteristic of writings in Linear A but does not occur in Linear B. This sign may therefore be accepted as belonging to an inscription in Linear A.

The provenance and the date

The fragment was found in the "Area of the Taureador Frescoes"\textsuperscript{16}; further details of its stratigraphical context are unknown, but a date can be assigned on the evidence of (1) a general conclusion concerning the dating of all Linear A documents, and (2) technical considerations.

(1) Evans suggested, on the grounds that the sign was common to the Linear B script and because the fragment had been found in the same area as the Toreador frescoes, that the fragment could be referred to the time when Linear B was coming into vogue\textsuperscript{16}. However, our sign is considered to belong to Linear A for the reason already given above. There is as yet no evidence to suggest that Linear Script A continued in use after the LM I B period\textsuperscript{17}.

(2) Evans described this fragment as belonging to the "finest style of painted plaster technique"\textsuperscript{18}. The quality of the plaster, the use of a fine slip of plaster in preparation of the surface for painting, the surface sheen, good preservation of the black and brown paints, and even the attention to details of the sign, justify this statement. The absence of a highly polished surface and the use of black paint for a small detail of what must once have been a painting of some importance is more in accordance with Late Minoan than Middle

\textsuperscript{14} Similarly reversed signs: L 87, on a stone ladle from Troullos, (PM IV, 680 and 683; Brice, I 16; E. Grumach, Gnomon, 35, (1961), 737); L 53, on a fragment of a stone cup from Palaikastro, (PM I, 631, Fig. 469; BSA Suppl. Paper No. 1, (1923), 144; Brice, I 12: compare Brice, I 1, I 8a and I 16).

\textsuperscript{16} PM I, 637

\textsuperscript{16} Ibid., loc. cit.

\textsuperscript{17} The date at which Linear B was created is placed by M. W. M. Pope as early as MM III A, at Knossos: Kretika Chronika, 1E—1ΣΓ', (1961—62), Part I, 318.

\textsuperscript{18} PM I, 637
Minoan paintings at Knossos. It should be noted that the first group of “signs” on some fresco fragments from the House of the Frescoes (which was destroyed in LM I A) were painted in a sepia colour; a similar colour was used for the area below our sign. This colour is not found on Minoan frescoes which for stylistic or stratigraphical reasons may be assigned to periods later than LM I B.

This evidence suggests that the fragment was painted sometime during the LM I period.

Technical Descriptions

Nos. 1—3, from Hagia Triada.

Common Features. All the fragments are backed in gypsum, buckled and heavily cracked. A rust coloured paint once covered the surfaces but this is badly worn. The paint did not sink deeply into the plaster and “buon fresco” technique may be ruled out.

The plaster is uniform: thin, hard but broken into small pieces at the edges, dirty white in colour, and in general fine grained.

There is variation in the thickness of the strokes. The fine strokes were made with a sharp-pointed or sharp-edged instrument. The thicker strokes may have been executed with a blunter point or edge of the same or another instrument leaving ragged sides to the strokes. This suggests that the graffiti were made after the plaster had hardened.

No. 1. HM 52. HT 155. 19.1 x 12.5 x ? 0.8—1.0 cm. Major vertical cracks appear between or through parts of signs 2, 3, 5, 8 and 9. Medium sized cracks pass through signs 1, 3, and 6. This graffito is the neatest of the three inscriptions. The rust paint still remains over the inscribed area.

19 Evans regarded highly polished white surfaces on fresco fragments as an indication of an MM III date (PM II, 680). Much of the significant MM III B fresco material from the Royal Road excavations of M. S. F. Hood at Knossos, which the present writer has examined, shows a high polish over the entire painted surface. The polish of LM paintings is less fine, as in the present case.

20 PM II, 440, Fig. 257

21 Ibid., 436—437; Furumark, op. cit., 79f.

22 To this period Evans was inclined to assign the Toreador frescoes which he had found in the same area (PM III, 210). The present writer hopes to show elsewhere that this series of paintings may be dated later than LM I B, and, since only one fragment bearing a painted sign was found in an area containing many fragments of the Toreador frescoes, the present fragment may have been a remnant of an earlier system of decoration; thus there is no compelling reason why we should associate chronologically the present fragment with the Toreador frescoes.
No. 2. HM 53. HT 156. About 23.9 × 12.0 × about 0.8 cm. Major vertical cracks appear between or through signs 10, 14–17, and medium sized cracks through signs 8 and 11, and between signs 10 and 11. Brushmarks are visible below signs 8–12.

Above sign 14 the straight edge of the plaster bears an impression from a horizontal feature but the line of this impression seems to pass very slightly below the two highest points of the plaster to the left. If the fragment had originally abutted against some architectural feature such as a horizontal beam or slat the inscription would be inclined a little downwards to the right, and the original height of the fragment in situ may have been roughly at the eye-level of a standing figure, or, since the fragment was found "at a short distance from the floor level", at the eye-level of a seated person.

No. 3. HM 54. HT 157. 17.2 × 13.4 × ? not more than 1.0 cm. Major cracks are visible through signs 4–8 and below signs 4 and 5. Medium sized cracks pass through signs 1–3. Small pieces of plaster are missing at the top of sign 2 and around sign 5. Below the latter there is at least one certainly incised vertical stroke, and, less certainly incised, one vertical and two curved lines in front of it. Above sign 7 is a dark ring which could be a mark from fire.

No. 4. from Knossos.

HM Box Gamma XVII in fresco store room. From the "Area of the Taureador Frescoes" (PM, I 637). 3.5 × 2.5 × 1.0 cm. The sign is painted in black on a yellowish white ground. The paints hold well to the surface but are shallow in depth (not more than 0.3–0.4 mm.). Below the sign is a chocolate brown area that may have been part of a horizontal band. On the right side of this area black paint underlies the brown.

The plaster is hard, fine grained, white and in a single layer over which the sign was painted on a fine slip. This has a granular surface which bears a glossy sheen, perhaps because of the quality of the paint rather than from polishing. The surface below the slip, exposed on the left side of the fragment, may have been given a thin wash of yellow paint.

The vertical strokes and "feet" of the sign are somewhat irregular in shape. At the tip of the "crest" some paint is missing.
INHALTSVERZEICHNIS

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Sonderdruck aus: Nicht im Handel

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ZEITSCHRIFT
FÜR VOR- UND FRÜHGREICHISCHE EPIGRAPHIK

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HERAUSGEGEBEN VON
ERNST GRUMACH

BAND IV

WALTER DE GRUYTER & CO. / BERLIN
VORMALS G. J. GÖSCHEN'SCHE VERLAGSHANDLUNG • J. GUTTENTAG,
VERLAGSBUCHHANDLUNG • GEORG REIMER • KARL J. TRÜBNER • VEIT & COMP.

1965
The fresco fragments with painted linear signs from the “House of the Frescoes” at Knossos, which were not to be found either at the Herakleion Museum or at the Ashmolean Museum, Oxford1, were located by me in June 1965 in the new Stratigraphical Museum at Knossos.

The fresco pieces, some of which were in a broken state, have been cleaned and, where possible, mended. Some of the pieces of Evans’s Group A (PM II, 440, Fig. 257) are at present still missing, but it is possible that these may turn up in the Stratigraphical Museum in other trays of very broken and mutilated fresco fragments, apparently also from the “House of the Frescoes”, which I was not able to investigate. Two new joins were made to one of the pieces of Group A, and there are two further pieces which Evans may well have considered to be “pictorial”; these, on technical considerations, would seem to belong with Group A.

The three fragments published by Evans as Group B (PM II, 441, Fig. 258) are virtually intact, and in addition there are one large and

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1 Cf. E. Grumach, Kadmos IV, 1 (1965) 49 and note 21
four small fragments, all unpublished, which must be considered to belong with Group B.

I hope to publish in a future issue of *KADMOS* a short note describing the available fresco pieces of both groups, together with photographs and a Catalogue, with brief comments on the accuracy of Evan's illustrations of the material.

A correction: In my article for *KADMOS* IV, 1 (1965), p. 14, I followed Evans's description of the colour of the signs of Group A as "sepia", and I compared this colour with that of a chocolate brown area on a fresco fragment with a single painted sign from the "Area of the Taureador Frescoes" (No. 4 in my article). But the colour of the signs of Group A is a metallic grey rather than a sepia. Consequently, the colours on the fragments in question are not in fact similar.

M. A. S. CAMERON
**INHALTSVERZEICHNIS**

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AN ADDITION TO "LA PARISIENNE"
AN ADDITION TO «LA PARISIENNE»

In the course of studying the fresco material from the excavations of Sir Arthur Evans at Knossos¹ in Herakleion Museum, the writer came across an unpublished fragment whose style and colour scheme showed that it belonged to the «Camp Stool» series of fresco fragments². Further, he noticed that it would join a fragment of this series which shows the upper part of a female figure—well known as «la Parisienne»³.

The new fragment (Pl. A' Fig. 1) was found in an unlabelled tray in the fresco store-room of Herakleion Museum⁴. The length

³) I should like to thank the Director and the Managing Committee of the British School of Archaeology for permitting me to study and publish material from the excavations of Sir Arthur Evans at Knossos, and to thank Dr. S. Alexiou, Ephor of Antiquities for Crete and Director of Herakleion Museum, and Mr. J. Sakellarakis for going to some trouble to enable me to study the material during a busy autumn in the museum. The Director of the British School has kindly read and considerably improved this article when it was in draft form, and Mr. M. R. Popham and Mr. M. S. F. Hood kindly discussed the problems raised here and made valuable suggestions. The photographs here published were taken by Mr. G. Xylouris. Fig. 2 is reproduced from that illustrated in Kretika Chronika II" (1959), 323, fig. 2.


⁴) HM fresco catalogue no 21. BSA VII, fig. 17; PM IV, pl. XXXI E, and fig. 319; Knossian Atlas (an unpublished monograph by Evans), pl. F, fig. I and pl. VII, fig. 3; N. Platon, Kretika Chronika, II" (1959), pl. opp. p. 336; H. R. Hall, Aegean Archaeology, (1914), 190, fig. 72; F. Matz, Kreta, Mykene, Troia, Stuttgart 1956, pl. 32; J. Vercoutter, L' Egypte et le monde égéen préhellénique, Cairo 1956, 388, fig. 158b; S. Marinatos, Crete and Mycenae, (1960), pl. XVI; The Dawn of Civilization, (1961), 205 (top plate); F. Matz, Crete and Early Greece, (1962), pl. 26: (the measurement given should read about 22 cm.); P. Demargne, Aegean Art, (1964), pl. 183; F. Schachermeyr, Die minoische Kultur des alten Kreta, Stuttgart 1964, pl. 23; C. Zervos, L'art de la Crête, Paris 1956, pl. VI.

¹) From an unlabelled wooden tray on the south side of the fresco store room in Herakleion Museum, below Box 86 Gamma III: (on one side of the pencilled number, «T 415»; it is irrelevant to the fresco catalogue system). 8.8 x 8.3 cm. including unpainted edges: maximum depth 2.3
of the «Parisienne» is now increased by about 7.2 cm. making her total preserved height 20.0 cm. Our fragment shows the continuation of the robe of the «Parisienne» at a point below the line of her shoulder and breast, and virtually completes the sacral knot at the back of her neck (Pl. A' Fig. 2 and Fig. 1). About half the number of blue and red lines which hang downwards from the loops at the border of her dress are almost entire and each ends with three or four short horizontal lines, summarily executed. The remaining blue and red lines and what seems to have been a fourth loop (indicated by a curved blue area in the upper right corner of the new fragment) have been cut short by a modern break on the right hand side. The rest of the surface is the natural colour of the plaster.

Fig. 1.— The new fragment joined to «la Parisienne».

We include here drawings of two fragments of the Camp Stool series which are important for the discussion which follows. These were first published by Dr. N. Platon in 1959 in this periodical.

cm. Including the new piece the whole fragment is now 26.15 cm. high. The lime plaster is medium to fine grained, off white, noticeably hard, and is in a single layer. There is no evidence that a slip of fine white lime was applied to the surface before painting. The fragment consists of eight joining pieces, perhaps reconstructed at the time Evans and his assistants were working on the Knossian material: (the type of glue used and pieces of straw adhering to the crevices at the back of the fragment make this possible). Mr. K. Vitorakis, a technician of the museum, fitted the fragment to «la Parisienne».

Maximum penetration of the blue paint seen in cross-section is about 0.2 mm, whilst the black and red paints scarcely penetrate the plaster at all; but all paints have bound well to the surface. This is smooth, the natural colour of the plaster in unpainted places, and may have been polished
The first fragment (Pl. B' Fig. 1, Fig. 3 left), shows two feet pointing to the left, male because they are red in colour, and the lower part of a robe reaching to the ankles; below the feet are parts of white and red border stripes. This fragment was joined by Platon to an unpublished border fragment which in turn was joined by him to the border below a seated figure on another fragment.

The second fragment (Pl. B' Fig. 2, Fig. 4) was identified by Platon as belonging to a figure wearing a dress similar in decoration to that of «la Parisienne» with a sacral knot over the shoulder. It was painted by the same hand as «la Parisienne»; it is executed in the same neat style and depicts the same subject. There are reasons for believing that all the fragments under discussion belong to the same composition or system of decoration.

A History of the Camp Stool Fragments and the Restorations of Evans and Platon.

The Camp Stool fragments were found by Evans in 1901 on or although now it has a fine matt appearance. Guiding lines and signs of burning are absent.

Our fragment had broken off from the «Parisienne» fragment in antiquity, but along the whole left side and on the lower half of the right fresh breaks were noticed: these could have been due to earthquake or war damage. A search throughout the boxes of frescoes from Knossos failed to produce more joining pieces.

6) There are further new breaks: see note 4 above. Platon has described in what poor state he found the Camp Stool fragments after the Second World War (Kretika Chronika II* (1959), 321 and note 5). Some fresco fragments were badly damaged by the earthquake in 1926: (see reports by Evans in PM III, 50 notes 1 and 2).

7) Mentioned by Evans, PM IV, 384, note 2.
8) «La Parisienne» was found in the same area of the Palace as the main series of the Camp Stool fragments published by Evans and Platon: (PM IV, 379ff, and 390 note 2). The same technical characteristics may be seen on all fragments, except for impressions from architectural features. The border stripes above the head of «la Parisienne» are in the same arrangement and colours as on other fragments of this series. There is a division of background colours, blue and yellow, on the «Parisienne» fragment and on two other fragments of the male series: (the former is, however, the only fragment of the series which shows a vertical division of the background colours). The manner of painting «la Parisienne» and the other human figures follows similar stylistic trends.
1. The new fragment; width 8.3 cm.
2. The new fragment joined to "La Parisienne"; scale 1/2.
1. The lower part of a seated male figure (6) as restored by Dr. N. Platon

2. Part of a figure's robe, similar to that of a Parisienne.
Fig 2. - The restoration proposed by Evans, after Dr. N. Platon.
near the walls of the West Magazines XV and XVI at Knossos. They were published in a preliminary report of the excavations of that year in BSA VII (1900-01), 55 f. Here Evans outlined the essential character of the painting to which they had belonged and he gave a brief description of the subject matter.

Evans planned to publish eleven fragments of the series in a corpus of coloured illustrations of many fresco fragments from Knossos to which he referred as the «Knossian Atlas». The Atlas, however, remained unpublished, and it was not until 1935 that Evans was able to publish a partial restoration of the fresco and to suggest ways for completing a future restoration of the whole material.

**Evans’s Restoration: Fig. 2.**

Evans assumed that the fragments were arranged in two bands,

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9) BSA VII, (1900-91), 55f. J. Boardman, On the Knossos Tablets; The Date of the Knossos Tablets, Oxford 1963, 36 and note 4.

10) PM I, 536 note 2, 538 note 3 and 539 note 1; PM IV, 381 note 2.

11) In collaboration with Mr. M. S. F. Hood, the present writer is preparing this monograph for publication.

12) PM IV, 381 - 396.
each with two zones which were considered to be about 32 cm. high on the evidence of the relative positions of fragments A and C. In each band the two zones were divided vertically into fields of different background colour; blue and yellow alternating in a counterchange arrangement. Evans thought at least twelve people were represented, nine apparently seated and the others standing.

Of the top zone of the upper band only a small part remained, including the foot of a seated male figure on a blue ground (fragment A). A section of the lower zone, yellow at this point, (the main part of Evans's restoration), was supplied by the same fragment, showing a hand holding a cup, towards which a second hand is reaching; the latter was assumed to belong to the seated male figure of fragment C. A blue area to the front of this figure's dress was interpreted as part of the robe of another male figure holding the cup (figure B) who was similarly seated; his head was supplied by two small fragments. Thus restored, the scene represented the passing of a «loving cup» between two seated figures partaking in a sacramental ritual, perhaps associated with the worship of the great Mother Goddess.

The lower band was divided from the upper by a series of horizontal stripes, five in number to judge by the apparent join between the fragment C and another, assigned to the lower band, showing the heads of two male figures on a blue ground (F). To the same zone was also assigned «la Parisienne», who was considered to be seated (E), and the vertical yellow area behind her was assumed to mark the vertical division of blue and yellow backgrounds. Accordingly, the seated figure of a youth or boy (D) was placed in the yellow field of the same zone. The lower parts of these figures

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19) Ibid. 381 - 383.
14) Ibid. 384.
15) Ibid. 389.
16) Ibid. 385.
were not restored and the remaining fragments of this series were not brought into connection with this restoration. Evans also refrained from restoring any part of the lower zone of this band but he may perhaps have thought that the lower figures of PM IV, Fig. 318 belonged there.

Except for the sacral knot of «la Parisienne» and the «wings» of the youth D, Evans thought there was a close similarity between the robes of both sexes: long garments reaching down to the ankles, with short sleeves and with simple bands at the waist instead of tight belts as seen on other Minoan figure frescoes. Consequently, on the analogy of the robes of the male figures, the dress of «la Parisienne» was restored with decoration of vertical and horizontal parallel lines in black from her waist bands downwards.

Evans thought the small fragment H was unique in this series of fresco fragments because the figure on that fragment was apparently dressed in a flounced skirt and seated on a «solid throne or altar base». A restoration of this figure was given in PM IV, 394, Fig. 330.

During the Second World War the Camp Stool fragments were stored away in the basement of Herakleion Museum. At the end of the war, Platon, at that time Ephor of Antiquities for Crete and Director of Herakleion Museum, brought out the fragments. They were in poor condition through war damage, and Platon immediately authorised a search for all the broken and missing pieces and supervised their mending. In the process of this search he discovered some unpublished fragments of this series, of such significance that they warranted a new publication of the material as a whole. Platon published the results of his study in this periodical in 1959.

Platon's Objections to the Restoration proposed by Evans.

Platon pointed out that an impression from a horizontal architectural feature marked the upper edge of the black stripe at the top of fragment F, which, therefore, could not have joined the broken lower edge of fragment C. The fragment F must conse-

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17) Ibid. 385f.
18) Platon, Kretika Chronika, II” (1959), 321 and note 5.
19) Ibid. 319 - 345.
20) Ibid. 336f.
quently have belonged to the top part of a panel. Fragment C showed signs of a similar impression at the lower edge: it belonged therefore to the bottom part of the fresco. Similar architectural impressions were found at the top of the «Parisienne» fragment and on two further unpublished fragments showing similar border stripes. Thus there was no evidence for the total of four zones suggested by Evans, and restoration would now involve only two zones.

Platon also rejected Evans's idea that the scene included pairs of male figures seated opposite one another, engaged in passing a «loving cup», his main reasons being:

1. The blue area to the left of the dress of C could be part of the dress of a standing figure or part of another band of the robe of C.

2. The cup fragment A may be linked more reasonably with the fragment D showing a seated youth or boy since his right elbow is raised. If figure B was seated we should need to suppose that he had raised the cup before handing it to figure C; the position of the hand of B is better explained if that figure had been standing since his wrist in Evans's restoration is shown bent in an unnatural way.

3. Since there were standing figures in the composition it would be more reasonable to assume that one of these was bringing a cup to the seated figure. If both figures were seated, the composition would be broken up into unconnected elements; for the backs of the men would be turned towards the other figures: this would be aesthetically displeasing if the panel was in fact wider than Evans made it.

4. Evans's arrangement is unparalleled in Minoan - Mycenaean art.

On these grounds Platon rejected Evans's restoration almost in toto; he tentatively proposed a new one.

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21) Ibid. 324 and 328.
22) Ibid. 324 - 328.
23) Platon was inclined to reject the possibility that the blue area could have been part of a blue background because it would disturb the unity of the group, (op. cit., 325 note 13); such a possibility is, rather, ruled out because the blue does not continue to the border stripes below the feet of the seated figure.

As Platon had shown, only two zones were required for the restoration. Analysis of all the material showed that only three figures were certainly seated but perhaps three others were also seated. Two pairs of figures were standing and the figure shown holding the cup on fragment A would be in a more natural position if standing than seated. The height of the registers is established by the position of fragment A in relation either to fragment C or to fragment D. Since the right elbow of the youth on D is definitely raised, Platon logically associated fragment A with this figure, but admitted that it could be associated with fragment C or with another figure of which we no longer have any evidence. The height of this zone is about 31 cm, instead of 32 cm, as arranged by Evans.

Platon observed that the head of «la Parisienne» was larger than those of the other figures, one of whom (D) was thought to represent a youth or boy. This raised the questions whether or not standing and seated male figures could be placed side by side, and whether «la Parisienne» could be fitted at all into a single zone. The heads of the seated men fall short of the top of the zones but those of the processional men (fragment F and PM IV, Fig. 318) are at a higher level, almost touching the tops of the zones. Platon assumed that a single zone was sufficiently high for «la Parisienne» to be placed alongside male figures, provided she was seated. Unlike the seated men or the youth, her whole body would be contained within the full height of a single zone. Two different scales of figure, such as appear on the fresco, are found on clay sealings. If, however, «la Parisienne» had been depicted standing, it would be impossible to fit her alongside the standing male figures. Accordingly, «la Parisienne» was placed in the same zone as fragment F whose pair of figures was restored in attendance on her. Her counterpart, first recognised by Platon from the fragment here

46 M. A. S. Cameron: An addition to «la Parisienne»

Platon, op. cit., 324f and 327f.
Ibid. 327f.
Ibid. 325.
Ibid. 327.
See Ibid. 326 note 16 where references are given.
Ibid. 327.
reproduced in Fig. 4, was placed in an antithetic position at the other end of the same blue section of the upper zone. Both she and the seated male figures in the yellow sections of both zones were restored with a single standing male figure in attendance. Platon restored the blue area to the front of the dress of the seated figure C as an additional band of that garment. The two B fragments showing parts of a head (or heads) were assigned to the seated figure in the yellow section of the upper zone.

Platon followed Evans in restoring the robes of «la Parisienne» and her «twin» with sleeves, decorated with frills, waist bands, and with simple linear decoration below the waist, but he made the sacral knot of «la Parisienne» more complete than in Evans’s restoration.

In addition to vessels of the types seen on fragments A and G, Platon introduced a third type for which there is no evidence from the fresco fragments, but which appears on a gold signet ring from Tiryns showing a ritual scene of offerings to a seated goddess or priestess.  

Discussion.

The addition of the new fragment to «la Parisienne» permits a more accurate restoration of the upper part of this figure. Platon’s restoration was in any case questionable because there the distance between the shoulder of «la Parisienne» and the stool on which he seats her is not in accordance with human proportions, nor with the proportions commonly found in Minoan figure painting. If

30) PM IV, 393, fig. 329a and 460, fig. 385.
31) The top of the head to the shoulder of standing figures on Minoan frescoes is commonly 1:5 the total length of the body; from head to waist the ratio is usually 2:5 the total length of the body. These general ratios of proportion occur on the following frescoes: the standing women of the miniature «Temple» fresco (PM III, pl. XVI); the women dancers, men and boys of the miniature «Sacred Dance» fresco (PM III, pl. XVIII); the «Woman on the Balcony» miniature fragment (PM III, 59, fig. 35); a male miniature figure (PM III, 83, fig. 46); the «Cupbearer» and other Processional Figures (PM II, pl. XII, fig. 443 and Suppl. pl. XXVII); the man holding a lyre on a fresco from Hagia Triada: note that his head is virtually the same size as that of «la Parisienne» (perhaps the former is 2-3 mm longer) and his total length cannot be much less than 43.5 cm. (R. Paribeni, Monumenti Antichi, XIX, (1908), 70, fig. 21, right); some of the figures of the Hagia Triada painted sarcophagus, (Paribeni, op. cit., pl. I); the «Captain of the Blacks» (PM II; pl. XIII); the «Priest-King» relief
these proportions were applied, she would become even larger than Platon allows, so much larger that this will entail some revision of the general scheme he proposed for the composition. One feature of his scheme must in any case be retained: its two-zone arrangement. For Platon has effectively disposed of Evans's arrangement of four zones. In other respects, however, Evans's restoration may not be so wide of the mark as Platon argued.

Although Platon joined two more fragments to the seated figure C, one of which shows the feet and continuation of the robe of that figure, there is no conclusive evidence to disprove Evans's restoration of the blue area in front of the robe of C as belonging to the robe of a figure seated opposite (B).

The cup fragment A may be more reasonably connected with the youth D whose elbow is raised, as in Platon's restoration, but, as the fragments do not in fact join, the association of fragment A with the seated figure C is equally possible, as Platon admitted. When people plight a troth involving the use of vessels it is usual that the vessel should be raised, and one may suppose that this is the case on the fresco. Experiment shows that the wrist of the seated figure who holds the cup (B) is not in fact bent in an unnatural way as was claimed by Platon.

Evans's restoration of figure B as seated does not convince Platon for aesthetic reasons: the backs of figures B and C are turned upon the other people in the fresco, and this would break up the composition into unconnected elements if the panel was wider than Evans made it; besides there appears no reason why both figures fresco, including his crown, (as restored and exhibited in Herakleion Museum).

There are a few exceptions to the ratio 2:5 for standing figures: some figures on the Hagia Triada sarcophagos (Paribeni, op. cit., pl. 1) and the athletes on the «Toreador» frescoes (PM III, 203 - 232), but the distance from top of head to shoulder is virtually the same as from shoulder to waist in all the figures listed here.

\( ^{32} \) The black horizontal line going left at the bottom of the dress of C seems to be worn away or at least stops short of the edge of the painted surface (see Plate 3 and Fig. 3). The forward ankle does not pass beyond a hypothetical downward continuation of the vertical black line at this point in a way which would suggest that the blue area beyond the latter black line still belonged to the same garment.

\( ^{33} \) Platon, op. cit., 327f.

\( ^{34} \) Ibid. 327.
should be seated. Similar objections could, however, be made to Platon's restoration which shows the composition broken up into pairs of one standing and one seated figure (instead of two seated figures) also with their backs turned upon their fellows. In any case this objection is weak because the grouping of human figures with backs turned upon each other occurs on the Miniature «Temple» fresco from Knossos. Platon complained that Evans did not bring the processional figures into relation with the seated figures; but there is not enough evidence to show that he ought to have done so, and no clear evidence that single standing male figures were depicted. It is, however, tempting to believe that some of the processional figures supplied the seated men with the cups as Platon suggested but this would not preclude Evans's arrangement with the two figures seated opposite each other. It is true that such an arrangement lacks, at present, a parallel in Minoan or Mycenaean representational art, but so does Platon's arrangement of successive pairs of one standing and one seated figure. We are clearly dealing with a fresco which is unusual in several ways, and for that reason alone the present writer prefers to reserve judgement on the validity of Evans's restoration.

Points for a Future Restoration.

In addition to the problems discussed above, the new addition to «la Parisienne» raises further points which must be kept in mind in any future restoration.

The upper part of the dress of «la Parisienne» is now seen to consist of a border whose inner edge has four loops; from these hang blue and red ribbons, the former making a diagonal pattern downwards to the front of the robe and falling lower than had been hitherto supposed. On the new fragment there is evidence neither for a belt nor for waist bands, nor for a sleeve, nor yet for the line of her back. Apart from the ribbons there is no decoration in the centre of the garment which is, basically, white. Her robe, therefore, seems to be different from those of the male figures, and her posture is still unknown.

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85) PM III, 47ff., pls. XVI, XVII and fig. 28.
86) It is reminiscent of the robe of the «dead» man on the Hagia Triada sarcophagos, (R. Peribeni, op. cit., pl. I), but this garment is without ribbons.
Platon observed that the head of «la Parisienne» was larger than those of the other figures. A restoration showing her in a standing position is given in Fig. 5 where her total height is about 42 cm. It is clear that she cannot be fitted into a single zone 31 or 32 cm. high. Measurement and drawings show that, if she was depicted seated, on normal proportions her feet would extend below the «base line» of a single zone by about 3 cm. If we accept the height for the zones suggested by Platon (31 cm.) or by about 2 cm. if we choose the height of the zones proposed by Evans (32 cm.). If one or the other of the heights suggested for the zones is correct, we are left with three possibilities: (1). «la Parisienne» was contained within two zones, but seated or standing on some high object in the lower zone; (2). she belonged to a different panel from the other figures of this group, or (3) she was seated either in a squatting position as seen on miniature figure paintings, or in some posi-
tion unknown to Minoan art. Whatever her position, the addition of the new fragment brings her waist so far below the position shown in Platon's restoration that this restoration is no longer acceptable.

Platon identified a fragment of another figure dressed in a garment similar to that of «la Parisienne», who faces in the opposite direction (Plate 4 fig. 4). This figure may reasonably be supposed to be female and she seems to be on the same scale as «la Parisienne» despite some differences in detail. There is no direct evidence to which zone this figure belonged because no part of the background colour appears on the fragment.

There are other matters which may be worth considering for a future restoration. Let us assume that the two «Parisiennes» should be restored with the other figures of the series, leaving aside the small fragment H, which shows part of a figure in a flounced skirt seated on a «solid throne or altar base», because it could be argued that it did not belong to the same panel as the other fragments of the series.

1. The two «Parisiennes» are larger in scale than the other figures and are more finely painted. This suggests that they may have been the more significant of the figures, and as such would have been placed in important or prominent positions in the composition. Their location in Platon's restoration does not suggest that these figures were predominant.

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37) Platon, op. cit., 325. Her head is 16/11.5 larger than any head restored by Platon.

38) See note 31 above, and compare in particular the size of the man holding a lyre (references given in the same foot note).

39) For example, PM III, pl. XVII.

40) The curve of the border is about the same as that on the «Parisiennes» fragment. The loops on the present fragment appear to be bigger but the sacral knot is closer to the border of the dress. There are fewer ribbons.
2. We have evidence of two sections of double-zone fresco which, as arranged in Platon's restoration, are next to each other in a single panel, the connecting fragment being the «Parisienne» fragment (E), whose background is considered to mark the division between the upper blue and yellow zones. It is noticeable that the left side of this fragment is moderately straight, straighter than most broken edges of fresco fragments, and this could indicate that the fragment had broken off from near a strong part of the panel such as the thickened edge of a border. If this was the case, the yellow area of fragment E could be interpreted as a vertical border stripe, perhaps the innermost of a series of such stripes. That is to say, the fragment E showing «la Parisienne» could have belonged to the upper left hand corner of a panel which continued only to the right.

3. In the same restoration, the fragments fall naturally into two groups: (a) those fragments to the left of «la Parisienne», and (b) those to her right. The background colours are reversed in the two groups. «La Parisienne» dominates the right hand group, the second «Parisienne» apart.

4. The second «Parisienne» faces in the opposite direction. Since we do not have direct evidence as to the background colour of this figure, for the sake of symmetry (or repetition), she could equally well be placed on a yellow background, in the upper right hand corner of a panel proceeding further to the left.

5. In the latter case we should have two panels (each with a «Parisienne»), not necessarily in immediate spacial connection with each other, but possibly divided by a continuation of the enigmatic gap in the lower part of Platon's restoration.

41) A fragment of a border with a straight broken edge almost parallel to the border shows that an area near the limit of a composition could fracture in this way when a fresco fell from a wall (HM Box 51 Lambda I, 14 joined by the writer to a fragment from Box 68 Gamma XII).

42) Compared to horizontal border stripes, little is known of vertical border stripes, which are much more difficult to identify: certain vertical stripes occur on the Hagia Triada sarcophagos, the Toreador fresco (PM III, fig. 144), and on the fresco with a scene similar to one on the Hagia Triada sarcophagos (Paribeni, op. cit., fig. 21). In the present case the white inner stripe of the upper border does not continue down the side of «la Parisienne»: nor would one expect a white stripe next to a white dress whose lower hem may have overlapped the stripe in the same way as does the sacral knot.

6. That there may have been two or more panels of the Camp Stool series in a uniform system of decoration in a single room or suite of rooms would not be unusual: several panels of the «Toreador» frescoes are known and Evans found large pieces of «Griffin» frescoes in situ on at least two walls of the Throne Room.

Enough has been said on the possible lines on which a future restoration of the Camp Stool fragments could be based. Within such a restoration, which after further study the present writer plans to undertake, there would still be room for elements to be incorporated from both the previous restorations.

Technical Note on the «La Parisienne» Fragment as Previously Known.

The fragment has been mended from several pieces. Breaks are detectable in the black stripe, between it and the red stripe, from the forelock to the sacral knot passing through the eye, from the back of the head to the chin passing through the ear, half way across the sacral knot, and across the yellow area below the knot. Restored parts are: the black and red stripes, the upper part of the forelock, the central part of the eye, the hair at the back of the head together with the blue ground there and the yellow area, and parts of the blue ground on the right of the face.

Because the black paint has worn away in the middle of two locks of hair at the back of her neck, it is not clear from some illustrations of «La Parisienne» (e.g. PM IV, Pl. XXXI E) that she has four locks of hair. Similarly, areas of black paint have flaked from the crown of her head exposing blue paint below, (the background colour), which give the mistaken impression that distinct tufts of hair stand out from the crown, as illustrated in PM IV, Fig. 319. The black paint immediately above the forelock is worn too.

Except for the restorations at the back of her head and the forelock, these details have not been made explicit in Fig. 1 for the sake of clarity. This drawing was taken directly from the original fragment; it does not include some of the worn, paintless, edges of the fragment.

M. A. S. Cameron

44) PM III, 203 - 232, figs. 144, 146, 148, and pl. XXI.
45) PM IV, fig. 877 opp. p 902.
CATALOGUE OF PLATES

in Sir Arthur Evans' Knossos Fresco Atlas

by Mark Cameron & Sinclair Hood

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CATALOGUE OF PLATES

in Sir Arthur Evans' Knossos Fresco Atlas
BACK COVER

The photograph on the back cover, reproduced by kind permission of the Director, Herakleion Museum, Crete, is of the fresco LA PARISIENNE, complete with the join discovered by Mark Cameron in 1964. The scale is approximately 2/3. (Kretika Kronika 18, 1964.)
CATALOGUE OF PLATES

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Mark Cameron  
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Mark Cameron

Mr. Cameron has been studying Minoan frescoes since 1962 as a research student of the University of Liverpool, and presently as a Sir James Knott Fellow of the University of Newcastle-upon-Tyne. He has recognised joins and additions to several fresco panels exhibited in the Herakleion Museum, and has made special studies of unpublished Late Minoan frescoes from Sir Arthur Evans’ excavations at Knossos. He is now in the course of preparing a general study of Minoan mural painting, with particular reference to chronology, and to further unpublished material including the frescoes from the recent excavations undertaken at Knossos by the British School of Archaeology at Athens between 1957 and 1961.

Sinclair Hood

Mr. Hood has been working in Crete since 1948. He has specialised in the study of the Minoan Bronze Age of the island, and has carried out various excavations at Knossos, in the first instance as a student, and from 1954–1962 as Director of the British School of Archaeology in Athens. His publications include The Home of the Heroes: the Aegean before the Greeks (Thames & Hudson, Library of the Early Civilisations, 1967), numerous excavation reports, and articles in learned journals.
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42 Map of the Palace of Knossos with location of provenances
Abbreviations

AA Archäologischer Anzeiger
AJA American Journal of Archaeology
AM Ashmolean Museum
BSA Annual of the British School at Athens
HM Herakleion Museum
JRIBA Journal of the Royal Institute of British Architects
PM Evans, Sir Arthur, The Palace of Minos at Knossos,
Vol. I (1921)
Vol. II (1928)
Vol. III (1930)
Vol. IV (1935)
Index (1935)

It is suggested that the Knossos Fresco Atlas and Catalogue be abbreviated 'KFA'.

The Knossos Fresco Atlas

Sir Arthur Evans completed the main series of his excavations in the Bronze Age Palace at Knossos and its surroundings between 1900 and 1906. Thereafter, work at Knossos was continued intermittently under his direction until 1932. In the early excavation reports and in the four volumes of *The Palace of Minos* Evans describes and illustrates many of the surviving fragments of the fresco paintings which had adorned the walls, and in some cases, as he thought, the ceilings, of the Palace and its dependencies.

Evans published a general account of his Knossos excavations against the background of the Minoan Bronze Age civilisation of Crete in *The Palace of Minos*. In addition to this, however, he had intended to collect the Bronze Age inscriptions of Crete, both those from Knossos and those from other sites, into three volumes, and to issue an Atlas of illustrations of all the other finds from his Knossos excavations in several sections, of which this of Wall Paintings was evidently to have been the first.

When Evans died in 1940, five hundred sets of plates with colour reproductions of frescoes together with some 175 box files to contain them, were in store with his publishers, Messrs. Macmillan & Co. In 1942 this material was transferred to Oxford, where it was housed at first in the Ashmolean Museum, and later in the New Bodleian Library. Dr. Donald Harden, then Director of the Department of Antiquities in the Ashmolean Museum, in 1953 invited Mr. Sinclair Hood to look into the question of releasing these plates of fresco reproductions to the public. There was, however, no draft for an accompanying text, and no catalogue of the frescoes illustrated. An intimate knowledge of the fresco material found at Knossos was necessary before the task of preparing a text could be undertaken. Since 1962 Mr. Mark Cameron has been engaged in making a comprehensive study of the Knossos frescoes, and has been able to identify most of the pieces illustrated here. The accompanying Catalogue is based upon his work.

The title on the box files which had been made ready to hold this series of plates runs:

KOSSIAN ATLAS

VOL. I

Edited by

ARTHUR J. EVANS

WALL PAINTINGS (I)
This suggests that at least one other volume of *Wall Paintings* was contemplated, yet no preparations appear to have been made for a second or any subsequent sections of the Knossian Atlas.

The plates which were printed for issuing with *Wall Paintings (I)* are all in colour. They are in two series:

**SERIES ONE**

Six small plates with reproductions from photographs, distinguished by letters from A to F (see p. 14).

**SERIES TWO**

Thirteen larger plates of reproductions from hand-painted copies. These have Roman numbers from I to XIIa and XIIIb. Plate III was apparently never printed for publication, and there are two versions of Plate IX (the Taureador Fresco), with one un-numbered plate (the Bull’s Head Plate), showing a detail from it (see p. 14).

In several cases the same fragments are illustrated in both series of plates (see p. 14). The quality of the colour photographs of SERIES ONE may not be high by modern standards, but some of the reproductions from copies of SERIES TWO are remarkably accurate, although others leave much to be desired.

The original painted copies appear to have been made by E. Gilliéron, père, and H. Bagge. Many of them are preserved in the Knossos archive at the Ashmolean Museum, Oxford. The colours of the original copies, as might be expected, are often more accurate than those of the reproductions made from them, especially in the case of the blues.

There are also proof copies of the plates of SERIES TWO in the Knossos archive at the Ashmolean. Pencil markings round some of the Figures on these proof copies, and comments written against others, show that they were photographed for reproduction in *The Palace of Minos*. It seems that in most, if not in all, cases where the illustration of a fresco in *The Palace of Minos* is the same as that which appears in the plates of SERIES TWO the photograph was taken from one of these plates and not from the original painted copy.

Notes, criticisms and corrections, made by Evans in pencil appear on many of the proof copies of the plates of SERIES TWO. The three fragments from the Camp Stool Fresco on the proof of PLATE V, Figs. 3–5, were cancelled with a line through each of them. These and the other reproductions of pieces from the Camp Stool Fresco (PLATE VI, Figs. 1–7; PLATE VII, Fig. 3) were from copies by E. Gilliéron, père, while those eventually published in *The Palace of Minos* were from other copies by his son (PM IV, 1935, 381 f., col. plate XXXI).

The proof copy of the early version of PLATE IX (the Taureador Fresco) was studded by Evans with critical comments and corrections. This is the version published in “The Palace of Minos” (PM III, 1930, figs. 144 – 5). But a second and more accurate copy of the Taureador
Fresco was also printed for the Atlas as PLATE IX; this copy has not hitherto been published. Where the notes and comments written by Evans on the proof copies of SERIES TWO seem of interest they are quoted in the Catalogue.

PLATE III with the fresco of the Sacred Grove and Dance is missing from this series. It exists among the proof copies in the Ashmolean, but does not appear to have been printed in bulk for use in Wall Paintings (I). Evans may have been dissatisfied with the reproduction. There are only three pencilled corrections in the margin of the proof; but the version of the Sacred Grove and Dance published in The Palace of Minos (PM III, 1930, col. plate XVIII opposite p. 67), while it appears to be taken from the same painted copy as the proof, was only reproduced from it after several alterations in detail had been made to it.

In the first volume of The Palace of Minos published in 1921 Evans makes several references to reproductions of frescoes in the forthcoming Volume I of the Knossian Atlas. In some of these references the actual numbers of the plates and figures of the reproductions in the Atlas are correctly given, as if the publication of Wall Paintings (I) was imminent. This also implies that the plates for it had already been prepared, if not actually printed. But after 1921 there are no further references to the Knossian Atlas of frescoes until Volume IV (1935), where it is implied that the whole project of an Atlas had been abandoned. Evans was dissatisfied with some of the reproductions, as his pencilled comments on the proof copies of SERIES TWO show. This may have helped to decide him against the idea of publishing the plates which had been printed in the form of an Atlas. But some of the colour plates of SERIES ONE were used in The Palace of Minos, and many of the black-and-white illustrations of frescoes there are taken from photographs of coloured plates of SERIES TWO. The frescoes reproduced in the plates of Wall Paintings (I) include pictures of people, animals, flowers, buildings and scenes from life. They range from the earliest of this type of picture fresco, such as the Saffron Gatherer and the Ladies in Blue (PLATES I, XIIa), to some of the latest, like the Camp Stool Fresco (PLATES F, Fig. 1; V, Figs. 3-5; VI, Figs. 1-7; VII, Fig. 3). There are, however, no examples of non-pictorial frescoes, such as spiral friezes and dadoes. The fragments which at first sight appear to show designs of a non-pictorial, merely decorative character, are in fact from the elaborately ornamented dresses of life-size or nearly life-size figures of men and women (e.g. PLATE E, Figs. 1-3a, 3c-k, and PLATE IV, Figs. 4-7, 11-14, 17, 19). The largest of the surviving frescoes with life-size figures of men or animals, such as the Procession Fresco (including the Cup-bearer), the Griffin Fresco from the Throne Room, and the Dolphin Fresco from the Queen’s Megaron, are not covered by this series of plates. The House of the Frescoes, with its fine paintings of flowers and animals, was only discovered in 1923 after these plates had been organised, if not printed.

Six of the pieces illustrated in these plates are on view in the Ashmolean Museum, Oxford, but the majority are kept in the Museum at Herakleion in Crete, some on public exhibition, others in the Fresco Storeroom there. Seven of the fragments cannot now be traced, and may have been irrevocably lost or destroyed, while others (e.g. PLATE XIIb, the largest fragment...
at the top) have suffered serious damage since the time when the copies of them were made.\textsuperscript{13} Twenty-three of the pieces illustrated here were published in colour, and thirty-eight others in black and white photographs or drawings, in the preliminary reports of the excavations or in \textit{The Palace of Minos}. Two others over and above these were reproduced in sketches by Theodore Fyfe in the Journal of the Royal Institute of British Architects.\textsuperscript{14} Twenty-eight of the fragments which appear in these plates for \textit{Wall Paintings (I)} have not hitherto been illustrated, and three of these are among the seven fragments which cannot now be traced.\textsuperscript{15}

References

3. To what extent the technique of painting on a plaster surface in Bronze Age Crete and elsewhere in the Aegean area approached that of "true fresco" is debated.
4. There is no evidence as yet from Knossos for decorated floors such as that of the Late Minoan shrine at Ayia Triadha in Crete (Hutchinson, \textit{Prehistoric Crete}, 1962, 290), or those of the Mainland palaces at Mycenae, Tiryns and Pylos.
5. Scripta Minoa I with the earliest systems of writing was published in 1909. Vol. II with the inscriptions of the latest system (Linear B) appeared posthumously in 1932 (edited by J. L. Myres), Vol. III with those of the intermediate system (Linear A) in 1961 (edited by W. C. Brice).
6. See under PLATES I, V, Figs. 3–5, and VIII, Fig. 1, in the Catalogue. During the first year of the excavations in 1900 T. Fyfe made water-colour drawings of some of the frescoes (BSA \textit{VI} (1899–1900), 130). A few of these were reproduced in an article by Fyfe in \textit{JRIBA X} (1902), 129, Figs. 71, 74; but none of them appear to have been used in making the plates for \textit{Wall Paintings (I)}.
7. See under PLATE IV and passim in the Catalogue.
8. PM I, 538 note 3 (PLATE D, Fig. 2), 539 note 1 (PLATE D, Fig. 1), 433 note 2 (PLATE F, Fig. 1), 445 note 1 (PLATE IV, Fig. 15), 527 note 3 (PLATE VI, Fig. 12).
9. A letter in the Ashmolean Museum from W. Griggs and Sons Ltd., dated 1st March, 1935, may perhaps refer to the printing of the colour plates.
10. PM IV, 381 note 2.
11. See under PLATE IV and passim in the Catalogue.
12. PLATE C, Fig. 5 (PLATE VI, Fig. 6); PLATE E, Fig. 38; PLATE IV, Figs. 10 and 15; PLATE X, Figs. 3, 6 and 7.
13. Some may have suffered during the earthquake of 1926 like the \textit{Ladies in Blue} (PLATE XIIb, top), (PM III, 50 note 1; IV, 285 note 1), and the \textit{Jewel Fresco} (PLATE B, Fig. 2), (PM II, 682 note 2; III, 50 note 2).
14. JRIBA \textit{X} (1902), 129, Figs. 71 and 74 (PLATE E, Fig. 1; PLATE C, Fig. 2).
15. PLATE IV, Fig. 10; PLATE X, Figs. 3, 7: these 2 fragments may have been broken into unrecognisable pieces, now in an un-numbered tray on the north side of the Fresco Storeroom in Herakleion Museum.
CATALOGUE OF PLATES
List of Plates

SERIES I  6 plates.
Plate A, Fig. 1, 2
   B  1a, 1b, 2, 3
   C  1, 2, 3, 4, 5, 6
   D  1, 2, 3, 4, 5, 6
   E  1, 2, 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3k
   F  1, 2

SERIES II  13 plates.
I
II
IIA
IV  1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
V  1, 2, 3, 4, 5
VI  1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
VII 1, 2, 3
VIII 1, 2, 3
IX
IX  second version
   Bull's Head Plate
   X  1, 2, 3, 4, 5, 6, 7, 8
   XIIA and XIB

Equivalent Plates

SERIES I  SERIES II
Plate A, Fig. 2  = Plate X, Fig. 4
   B  1a, 1b  =  II, IIA
   C  5  =  VI.6
   E  3a  =  IV.11
   E  3d  =  IV.5
   E  3g  =  IV.4
   E  3h  =  IV.16
   E  3k  =  IV.17
   F  1  =  VII.3
   F  2  =  VII.2
System of the Catalogue

After the Plate or Figure number there is a description of the piece, as far as possible following the description given by Evans. The name of the Museum where the piece is housed is shown next (Herakleion in Crete: (HM), or the Ashmolean, Oxford: (AM)) together with its Museum Catalogue number, if it has one. All of those illustrated from the Ashmolean, and many of those from Herakleion, have been catalogued.

Most of the catalogued fragments in Herakleion are on public exhibition, but some are in trays in the Fresco Storeroom there. The trays in the Storeroom are marked with a Greek letter for the shelf followed by a Roman tray number. A few of the uncatalogued fragments in the trays are distinguished by an Arabic number (e.g. PLATE E, Fig. 3c, P X, 21: where P refers to the shelf, X to the individual tray, and 21 is actually marked on the fragment).

The scales in the Catalogue are approximate.

Remarks include comments on the quality of the reproduction, together with a report on the present condition of the fragment, and, in the case of the plates of SERIES TWO, the comments by Evans on the proof copies kept in the Ashmolean Museum where these appear to be of interest. At the end are references to the original publication of the piece, and the dates which Evans assigned to it.

Dating of the Frescoes

Most of these frescoes were attributed by Evans to the period of the “Last Palace”, dating, as he believed, from the end of Middle Minoan IIIb (after a great earthquake) to Late Minoan II (about 1580–1400 B.C.). It now seems likely that the destruction of the “Last Palace” took place rather later than Evans thought, in Late Minoan IIIa, sometime after 1400 B.C. During the period of the Early Palaces, in Middle Minoan I and II (about 2000 to 1700 B.C.), walls were plastered and painted red, or decorated with simple geometrical designs in red and white; but there is as yet no evidence that actual pictures were painted on the walls of palaces or houses in Crete before the time of the Later Palaces in Middle Minoan III from about 1700 B.C. onwards. The early date suggested by Evans for the Saffron Gatherer (PLATE I) has been challenged, and his dating of some of the other frescoes illustrated here may come to be modified in the light of further study of the frescoes themselves and of the deposits in which they were found.
**Miniature Frescoes**

The term “Miniature Fresco” was used by Evans to cover both scenes with buildings and people on a miniature scale, and miniature figures when they appeared as part of the decoration on the richly ornamented dresses of life-size or near life-size figures of men and women. Thus for example PLATE IV, Figs. 1-3 with miniature scenes, and Figs. 11, 16 and 17, on the same plate, with miniature figures of a bull’s head, a griffin and a sphinx, coming from the ornamented dresses of life-size pictures of men and women, were all classified by Evans as “Miniature Frescoes”. In the Catalogue the term has been confined to actual scenes in miniature, such as PLATE IV, Figs. 1-3.
SERIES ONE
PLATES A-F.
Photographs taken from the original pieces.

Plate A

FIG. 1.
Taureador Frescoes: Male Taureador in the Act of Alighting.
AM, AE 1707.
Scale 1/3.
Provenance From the Court of the Stone Spout (11).
As restored by E. J. Lambert.
BSA VII (1900-1901), 94 f.; VIII (1901-2), 9.
PM III, 216 f., Fig. 148 (probably traced from PLATE A, Fig. 1; PM III, 216 note 1).
PM IV, 892.
Date (1) End of L.M.I a, shortly before 1500 B.C. (PM III, 210); (2) L.M.I a and L.M.I b (PM Index Vol., 53);
(3) L.M.II (PM II, Supplementary Plate XIII, d and e).

FIG. 2.
Taureador Frescoes: Leaping Girl. cf. PLATE X, Fig. 4.
AM, AE 1708.
Scale 1/3.
Provenance From the Court of the Stone Spout (11).
As restored by E. J. Lambert.
BSA VII (1900-1901), 94 f.; VIII (1901-2), 9.
PM III, 216 f., col. plate XXI (identical to PLATE A; Fig. 2).
Date As for PLATE A, Fig. 1.
Plate B

FIGS. 1a, 1b.

Fragments from Panel of “Miniature Fresco” showing Central Pillar Shrine (cf. PLATES II, IIa): Seated Ladies on Grand Stand, and “Superposed Pillars” of Grand Stand.

HM, No. 10.

Scale just over 1/1

Provenance From the Room of the Spiral Cornice (9).

These photographs are from the original pieces; but there is a colour drawing of the top fragment of Fig. 1b in AM.

BSA VI (1899-1900), 10, 46 f.

PM III, 46 f., col. plates XVI and XVII, Figs. 30, 36 (which appears to be a black and white version of the same photograph as PLATE B, Fig. 1b).

Date M.M.III b (PM III, 50; Index Vol., 52).

FIG. 2.

The Jewel Relief Fresco.

HM, No. 36.

Scale just over 1/1

Provenance From the Magazine of the Vase Tablets (s).

The fingers and thumb are in relief. A man is holding one end of a necklace of gold beads, some globular, others pendants in the shape of heads which Evans thought to be of negroid type; they are wearing large triple ear-rings. The man (red) may be fastening the necklace upon the breast of a woman (white). Evans suggested that the fragment might come from a scene of a wedding ceremony, perhaps of a sacral character, a ἱερός γάμος (PM I, 526); but he later rejected the idea that the scene had any special sacral function (PM III, 50 note 2). “This fragment was unfortunately pulverised by the earthquake of 1926” (PM II, 682 note 2; III, 50 note 2). Only the two fingers of the original survive; the rest has been restored. The photograph from which PLATE B, Fig. 2, is reproduced was clearly taken before the damage suffered in 1926. The illustration in PM I, Fig. 383, is from a colour drawing now in AM.

BSA VII (1900-1), 26.

PM I, 525 f., fig. 383, cf. 312, fig. 231; II, 682, 817 f.; III, 50, 483 f.; IV, 285, 518.

Date M.M.IIIb (PM Index Vol., 52).

FIG. 3.

Profile of a Lady’s Face.

AM, AE 1706.

Scale 6/7

Provenance Unknown.

Hitherto unpublished.

18
Plate C

FIG. 1.

Fragment from the Palanquin Fresco: Priestly Figures.
HM, No. 59.
Scale 3/2
Provenance From the Room of the Forged Clay Seal (or Clay Matrix) (2).

The position is wrongly given in PM II, 762, fig. 490A, and Plan A, as in the adjacent room to the South. The angle of the illustration is incorrect; the pillar on the right should be vertical. The drawings in black ink, from which the illustrations in PM II, fig. 502 were taken, are in AM. PM II, fig. 502C, shows features which do not appear in this photograph, although they are visible on the original piece.

BSA VII (1900–1), 19 f.
PM II, 770 f., fig. 502A; IV, 398 f., fig. 3326.

Date (1) L.M.I (PM II, 770)
(2) L.M.I a (PM Index Vol., 53).

FIG. 2.

Rows of Butterflies: detail of ornamented dress, c.f. PLATE E, Figs. 1–3, below.
AM, AE 1710.
Scale 5/6
Provenance Unknown.

JRIBA X (1902), 129, fig. 74.

FIG. 3.

Fragment from the Palanquin Fresco: Priestly Figure seated on Stool.
HM, No. 59.
Scale 6/5
Provenance as PLATE C, Fig. 1, above.

The scene was reconstructed by Evans as showing a priestly figure, perhaps the king, seated in a palanquin with four bearers. Platon indicated that the figure was not sitting in a palanquin but on a simple folding stool like those of the Camp Stool Fresco (Kretika Khronika 13, 1959, 332). Cameron suggests that the figure may have been wearing a dagger and seated aloft in a shrine, which formed part of a scene with one or more chariots. A fragment of fresco with a chariot scene was recovered in 1955 in cleaning the south wall of the Lapidary’s Workshop which adjoins the Room of the Forged Clay Seal (2) on the east. This has been published by Alexiou together with a couple of other fragments which belong to the same scene (AA 1964, 785–804). The blue of the
background of these fragments is of a different shade from that of the Palanquin Fresco, and they may therefore belong to another although similar picture.

PM II, 771, fig. 502C; IV, 399, fig. 332A.
For other references and the date, see PLATE C, Fig. 1, above.

FIG. 4.
Boys Playing Pavement Game.
HM, tray PX.
Scale 3/2.
Provenance From the North-West Fresco Heap (7).

Evans recognised in this "Miniature" fresco "parts, apparently, of four boyish figures, depicted in the red hue of the male sex on a white ground. Below are visible two of the horizontal thread marks used by the Minoan artists as a guide for the brush. The figures are so simply executed that they can only be those of children, and they do not even seem to have arrived at the age when the belt was first worn. Their action is lively, as if they were engaged in play, and the central figure is shown half kneeling with the arm that is visible resting on the ground. To the right of this is seen the lower part of another boy squatting, but beyond this the indications are insufficient. From the attitude of the principal figure the interest would appear to centre on the pavement below. Here surely we have a sketch of a Minoan pavement game by a contemporary artist". It does not seem necessary to accept Alexiou's suggestion that the "boys" are really just pictures of leaves (Kharisterion eis A. K. Orlandon, Athens (1964), Vol. II, 116 note 4).

PM III, 396 and col. plate XXV where the scale is incorrectly given as 1/1 (identical to PLATE C, Fig. 4).
Date M.M. III b (PM Index Vol., 52, under "Miniature class").

FIG. 5.
Fragment from the Camp Stool Fresco. Cf. PLATE VI, Fig. 6.
HM, No. 11.
Scale about 1/1.
Provenance From the area of the West Outside Wall of the Palace (5): assumed to have fallen from the "North-West Sanctuary", either above Magazines 11-13, or, as Evans originally suggested, above the whole square of Magazines 11-16 (BSA X, 39).

The fragments of the Camp Stool Fresco were recovered from both sides of the West Outside Wall of the Palace; some at the west ends of Magazines 13, and 14 (PM IV, 396), 15 and 16, according to Boardman (OTKT, 36). On the plan (BSA X, 38 fig. 13) the position is indicated as outside the wall opposite the west ends of Magazines 15-16.

BSA VII (1900-1), 55 f.; X (1903-4), 39 f.
PM II, 605; IV, 359, 379 f., col. plate XXXI H.
Date early in L.M.I b (PM IV, 396. Cf. Index Vol., 53). But the style, and the shape of the two-handled goblet (PM IV, 365, fig. 305c; 389, fig. 324, and col. plate XXXI A) suggest a date in L.M.II-III a. See discussion under PLATE V.
FIG. 6.

Bull’s Head and Back of a Chariot: apparently by the same school of painters as the fragments assigned to the Palanquin Fresco.
HM, tray Σ VI.
Scale 5/6.
Provenance According to a label in the tray, confirmed by Evans’ Fresco Notebook, this comes from “Area of Stone Amphora”, i.e. the Lapidary’s Workshop (12) on the east side of the palace (Palmer, OTKT, 181).
Against the sketch in his Fresco Notebook Evans wrote: “Rodenbach” (i.e. Rodenwaldt) “thinks may be hind part of chariot.” Another small sketch of the fragment has “Colour-Photo” written beside it. A vertical black line is visible on the extreme right edge of the original fragment.
Hitherto unpublished.

Plate D

FIG. 1.

Reeds.
HM, No. 41.
Scale 3/2.
Provenance From the South-East House (15).
Described by Evans as “spikelets of reeds or grasses, round one of which is coiled the tail of what appears to be a small harvest mouse”.
PM I, 537, fig. 390, 339 and note 1 (with reference to Knossian Atlas, i, Pl. D. 1).
Cf. BSA VIII (1903-2), 110; IX (1902-3), 5.
Date M.M.III b (PM Index Vol., 32, wrongly placed under “S.W. House”).

FIG. 2.

Flowering Olive Shoot.
AM, AE 1711.
Scale just over 2/3.
Provenance From a Basement West of the Stepped Portico (1).
A pull of this plate in AM with notes by Evans on it is sharper and better in tone than PLATE D, Fig. 2. The illustration in PM I, fig. 389, appears to have been taken from it.
PM I, 536 f., fig. 389, and 538 note 3 (with reference to Knossian Atlas, i, Pl. D. 2).
Date M.M. III b (PM Index Vol., 52).
FIG. 3.

Olive Spray.
HM, tray P X.
Scale 3/2.
Provenance This fragment is sketched in a notebook of fresco drawings by Evans with the provenance: “Chamber NE of Excavated Area” (16). A photograph in AM shows it together with the next two fragments, Figs. 4, 5 and PLATE D, Fig. 1, from the South-East House.

Only the right half of the fragment now survives. This is much darker than shown in the reproduction, as if stained by smoke.

Hitherto unpublished.

FIG. 4.

Plant.
HM, tray 29, O I, with label: “North Threshing Floor Area” i.e. North-west Fresco Heap (7).
Scale about 1/1.

Two more fragments have since been joined to that illustrated here. The colours of the reproduction are misleading: the plant is a dark mustard brown, not green, and the unpainted background a creamy white.

Hitherto-unpublished.

FIG. 5.

Wheat?
HM, tray without number on N. side of Fresco Storeroom.
Scale 2/1.
Provenance Unknown.

This is now broken into three small pieces. The colours of the reproduction are very faithful.

Hitherto unpublished.

FIG. 6.

Pheasant’s Wing.
HM, No. 37.
Scale 3/4.
Provenance From the North-West Fresco Heap (7).

There is a fine colour drawing of this piece in AM. The right-hand fragment with part of the tail is now missing from the original. Evans suggested that the bird was being stalked by a cat, as on the fresco from Ayia Triadha.
But Cameron notes that, although this fragment with a bird and that of the cat were apparently found in the same area, they are not by the same hand nor in the same style, and may therefore come from different pictures.

BSA VII (1900–1), 59.
PM I, 540 f., Fig. 392 A; III, 114.
Date M.M.III b (PM Index Vol., 52).

Plate E

These fragments, with the possible exceptions of Figs. 3b and 3g, appear to come from the richly ornamented dresses of life-size or nearly life-size figures of men or women.

FIG. 1.
Bands of Ivy Leaves and Dotted Spirals.
AM, AE 1714.
Scale just over 2/3.
Provenance Unknown.
The fragment was published by Fyfe, JRIBA X (1902), 129, fig. 71. His drawing omits the pair of lines between the ivy, and the trace of an ivy stem on the left.

FIG. 2.
Embosed Band (c), and fragments (a, b) connected with it.
HM, No. 51, in tray P III, marked respectively 3 (c), 5 (a) and 6 (b); a fourth fragment belonging to this group is marked 4.
Scale about 3/4.
Provenance From the North-West Fresco Heap (7).

BSA VII (1900–1), 59.
PM III, 37, fig. 20 (Fig. 2c).
Fyfe, JRIBA X (1902), 117, figs. 34 and 36 (Figs. 2b and c).
Fig. 2a in unpublished, but there is an ink drawing of it in AM.
Date M.M. III b (PM Index, Vol. 52, under "Miniature class").

FIG. 3a.
Ox-head with Elephants' Tusks. Cf. PLATE IV, Fig. 11.
HM, No. 51.
Scale just under 1/1.
Provenance From the North-West Fresco Heap (7).
The blue and yellow in the reproduction are too bright. The white blob below the bull's eye was a rosette like those shown on PLATE E, Fig. 3d, cf. 3k.
BSA VI (1899–1900), 48.

PM II, 742, fig. 473; III, 40, fig. 25 a.

Date M.M. III b (PM Index Vol., 52, under “Miniature class”).

FIG. 3b.

Bull’s Horn and Ear.
HM, tray labelled “No. 36”.
Scale 1/1.
Provenance From the “Ivory Deposit” below the later floor in the Treasury (13).

The fragment is now broken into two pieces.

BSA VIII (1901–2), 70.
PM III, 207 f., fig. 142.

Date M.M. III b (PM Index Vol., 52, under “Miniature class”).

FIG. 3c.

Griffin or Sphinx.
HM, tray P X, 21.
Scale just under 1/1.
Provenance From the North-West Fresco Heap (7).

The white in the reproduction is too bright, while the blue of the background and the red and yellow of the striped border at the bottom are too dark.

BSA VI (1899–1900), 48.
PM III, 40, fig. 25 f.

Date M.M. III b (PM Index Vol., 52, under “Miniature class”).

FIG. 3d.

Rosettes. Cf. PLATE IV, Fig. 5.
HM, tray P X, 15.
Scale 1/1.
Provenance Possibly from the North-West Fresco Heap (7).

Hitherto unpublished.

FIG. 3e, 3f.

Embroidered Band with Flutes.
Scale 1/1.
HM, tray $P_X$, 19 and 20.

Provenance  From area of the North-West Threshing Floor (7).

BSA VII (1900–1), 59.
PM III, 39, fig. 23.
A rosette like those on PLATE E, Fig. 3d (cf. 3a and 3k), appears on a third fragment with flutes, on the right in PM III, fig. 23. This is in HM, tray $P_X$, 18.

FIG. 3g.

Part of Shrine with Frieze of Double Axes and Bull's Neck in Field Below. Cf. PLATE IV, Fig. 4.
Not identified in HM.
Scale  just over 2/3.
Provenance  From the "Ivory Deposit" below the later floor in the Treasury (13), cf. Fig. 3b.

BSA VIII (1901–2), 70.
PM III, 207, fig. 14t.

Date  M.M.III b (PM Index Vol., 52, under "Theatral Sport on fragments from Deposit of Ivories").

FIG. 3h.

Seated Griffin. Cf. PLATE IV, Fig. 16.
HM, un-numbered.
Scale  1/1.
Provenance  From the North-West Fresco Heap (7).
The colours of the original are lighter in shade than they appear in the reproduction.

BSA VI (1899–1900), 48.
PM III, 40, fig. 25 e.

Date  M.M.III b (PM Index Vol., 52, under "Miniature class").

FIG. 3k.

Sphinx, probably one of a pair flanking Bull's Head. Cf. PLATE IV, Fig. 17.
HM, No. 51, tray $P_III$, 1.
Scale  1/1.
Provenance  From the North-West Fresco Heap (7).
The white blobs to the left of the sphinx were rosettes like those on PLATE E, Fig. 3d, cf. 3a.

BSA VI (1899–1900), 48.
PM III, 40, fig. 25 d.

Date  M.M.III b (PM Index Vol., 52, under "Miniature class").
**Plate F**

FIG. 1.

"La Parisienne", from the Camp Stool Fresco, cf. PLATE VII, Fig. 3.

HM, No. 11.

*Scale* just over 1/2.

*Provenance* From the area of the West Outside Wall of the Palace (5): assumed to have fallen from the "North-West Sanctuary" above Magazines 11-13. Cf. PLATE C, Fig. 5.

The black border band at the top above the red in PLATE VII, Fig. 3, is here omitted. The vertical band on the left is really yellow, not white; but there is no yellow on the dress as here. Cameron has recently joined a new fragment with part of the robe to "La Parisienne" (Kretika Khronika i 8, 1964, 38-53, plates A' and B'). See also back cover.

BSA VII (1900-1), 55 ff.

PM I, 433, fig. 311, and note 2 (with reference to Knossian Atlas, I); II, 605; IV, 339, 379 ff., fig. 319, and col. plate XXXI E.

*Date* see PLATE C, Fig. 5, and PLATE V, Figs. 3-5.

FIG. 2.

Dancing Girl. Cf. PLATE VII, Fig. 2.

HM, No. 19.

*Scale* just over 1/2.

*Provenance* From the Light Area East of the Queen's Megaron (14). The colours of the original are lighter in shade.

BSA VIII (1901-2), 55 ff., fig. 28.

PM III, 70 f., fig. 40; 369 f. and col. Plate XXV (the same as PLATE F, Fig. 2).

*Date* L.M.I a (PM III, 71. Cf. Index Vol., 53).
SERIES TWO
PLATES I-XII

Reproductions from drawings.

The drawings from which these reproductions are taken were mostly the work of E. Gilliéron, père, as Evans called him. The originals of many of the drawings are in AM. His son, E. Gilliéron, fils, also worked for Evans and made improved versions of some of the drawings after his father’s death (e.g. PM III, 54, note 1, referring to PLATE II; PM IV, 381, note 2, in reference to the Camp Stool Fresco, PLATES V, Figs. 3-5; VI, Figs. 1-7).

Plate I

The Saffron Gatherer.
HM, No. 20.
Scale 1/1.
Provenance From the Room of the Saffron Gatherer (or Flower Gatherer) (8).
From a drawing by Gilliéron, père, now in AM (PM I, 265, note 2). The colours of the original are darker in tone. Evans restored the figure as a blue boy as shown here. But it was interpreted as a monkey by Pendlebury (The Archaeology of Crete, 1939, 131). Platon has regrouped the fragments as a monkey (Kretika Khronikai 1', f.; 14 (1960), 504). The monkey must be a pet; it is wearing a harness, and is engaged in pulling flowers out of pots in the gardens of the Palace. For an alternative scheme of restoration with a monkey, see W. Stevenson Smith, Interconnections in the Ancient Near East 1965, 75f, fig. 103. Platon has since recognised the muzzle of a second monkey, which has been incorporated in the panel as now restored in HM.

BSA VI (1899-1900), 45.
PM I, 265 f., col. plate IV (evidently from this reproduction for the Atlas, and not from the original drawing which does not appear to be in AM); II, 354, 452, 728; III, 21 f.; IV, 718, 895.

Date according to Evans.
(1) M.M.II (PM 1, 266),
(2) M.M.II b (PM II, 728; IV, 718),
(3) perhaps earlier than M.M.II b (PM III, 22),
(4) M.M.I (PM Index Vol., 52).

Assigned by Snidjer (Kretische Kunst, 1936, 28), Pendlebury and Platon, to M.M.III.
Plate II

"Miniature Fresco" showing Central Pillar Shrine. Cf. PLATE B, Figs. 1a, 1b.
HM, No. 10.
Scale just under 2/3.
Provenance From the Room of the Spiral Cornice (9).
From a drawing by Gilliéron, père (PM III, 83 note 3). This drawing and a subsequent one by his son are in AM. Details of outline, and the colours, are unreliable. The fragment shown at the top of the central part of the shrine, although found in the same area, does not belong here: the blobs restored as the capital of a column were later recognised to be the heads of women (PM III, 83 note 3, 84, figs. 47, 48d).
BSA VI (1899-1900), 10, 46 f.
PM III, 46 f. col. plates XVI, XVII, taken from the subsequent drawing by Gilliéron, fils. An additional piece with a third figure had been joined to the right end of the fragment reproduced in PM III, plate XVII A, before the new drawing was made.
Date M.M. III b (PM III, 30).

Plate IIa

Enlargement of the central part of PLATE II.
Scale 1/1.
The drawing from which this is taken appears to be the same one by Gilliéron, père, but altered and corrected in places since the making of PLATE II.

Plate IV

A Proof Copy of this plate in AM has pencil markings and comments by Evans which show that the black and white photographs of Figs. 1, 2, 3, 4, 15, 16, 17, below in The Palace of Minos were taken from it. All the known pieces on PLATE IV are 1/1 in scale, except Fig. 12 which is 2/3.
FIGS. 1, 2.
Warriors Hurling Javelins.
HM, No. 63, tray P III.
Provenance From the "Miniature Deposit" (Room of the Spiral Cornice) (9).
The two fragments from this scene which Evans reported as missing have been found again (PM III, 82 note 3). The spears are now very difficult to distinguish. An ink drawing in AM shows three more fragments of this scene with many spears. The fragments are in HM, and two of them join on to the left side of PLATE IV, Fig. 1.
BSA VI (1899-1900), 48.
PM III, 81 ff., fig. 45a and b (which are evidently from these reproductions for the Atlas, and not from the original drawings).

Date M.M.III b (PM Index Vol., 32, under "Miniature class").

FIG. 3.
Youthful Officer.
HM, tray Y VI.
Provenance From the "Miniature Deposit", like Figs. 1 and 2 above.
The colour of the background is pale blue, not so green. The spear is now hard to trace. The black marks at the top right on the original fragment (cf. PM III, fig. 46) have been omitted.

BSA VI (1899-1900), 48.
PM III, 83, fig. 46 (from an ink drawing now in AM).

Date as Figs. 1 and 2 above.

FIG. 4.
Part of Shrine with Frieze of Double Axes and Bull's Neck in Field Below. Cf. PLATE E, Fig. 3g.

FIG. 5.
Rosettes.
Cf. PLATE E, Fig. 3d, which is clearly a more faithful reproduction. The three white blobs on the original piece have traces of red lines suggesting that they are rosettes like the pair above.
Hitherto unpublished.

FIGS. 6, 7.
Lilies, perhaps from the ornamented dress of a large figure.
HM, trays P X, Y VI.
Provenance Unknown. On a photograph in AM these fragments appear together with PLATE IV, Fig. 4, which is from the "Ivory Deposit" in the Treasury (13); but there is no reason to suppose that they are from the same area.
The pale blue of Fig. 7 is not so green as in the reproduction; the clarity of the details is exaggerated here.
Hitherto unpublished.

FIG. 8.
Plant design, perhaps a palm tree.
HM, tray Y VI.
Provenance Unknown.
Reproduction good.
Hitherto unpublished.

FIG. 9.
"Miniature Fresco" of Architectural Subject.
HM, tray P VI.
Provenance Unknown.
Reproduction poor: the light blue is not so green. The guide lines are not well indicated.
Hitherto unpublished.

FIG. 10.
"Miniature Fresco": Woman's Head.
Not identified in HM.
Provenance Unknown.
Hitherto unpublished.

FIG. 11.
Ox-Head with Elephants' Tusks. Cf. PLATE E, Fig. 3a.
The colours are too vivid in this reproduction.

FIG. 12.
Row of Lilies, apparently from the ornamented dress of a large figure.
HM, tray Y VI, 5.
Scale 2/3, not 1/1.
Provenance From the North-West Fresco Heap (7).
Presumably one of the fragments which "showed a succession of white lilies with red stamens on a blue ground" (BSA VI (1899-1900), 48). Illustrated in PM III, 130, fig. 85, but the fragment is upside down, and the colours in the key have been reversed. The ink drawing for this in AM is the same way round as PLATE IV, Fig. 12, and the key for the colours is correct. The paints on the original fragment are poorly preserved.
Date M.M.III b (PM Index Vol., 52, under "Miniature class").

FIG. 13.
Spiral Band, evidently from the dress of a large figure.
HM, tray P X, 2.
Provenance Unknown.
The colours in the reproduction are misleading; the background is pale blue, not so green.
Hitherto unpublished.
FIG. 14.
Rosette Band, apparently from the ornamented dress of a large figure.
HM, tray PX, 16.
Provenance Unknown.
Hitherto unpublished.

FIG. 15.
"Miniature Fresco": Standing Figures of Ladies looking out of Casements.
Not identified in HM.
Provenance From the North-West Fresco Heap (?).
This is very different in detail from the apparently later drawing by Gilliéron, fils, published in PM II, fig. 375.
BSA VI (1899-1900), 47.
PM I, 445 note 1 (with reference to Knossian Atlas, Pl. IV, Fig. 15); II, 602 f., fig. 375.
Date M.M.III b (PM Index Vol., 52, under "Miniature class").

FIG. 16.
Seated Griffin, from the ornamented dress of a large figure. Cf. PLATE E, Fig. 3h.
The blue in the original is duller and lacks the greenish tint; the red markings on the crest of the griffin do not appear in this reproduction.

FIG. 17.
Sphinx, probably one of a pair flanking Bull’s Head: from the ornamented dress of a large figure. Cf. PLATE E, Fig. 3k.

FIG. 18.
Papyrus.
HM, tray PX.
Provenance Unknown.
The colours in the original are much duller. They have been painted over a red ground.
Hitherto unpublished.

FIG. 19.
Belt and Part of Kilt of a Large Figure, presumably male.
HM, tray PX, 4.
Provenance Unknown.
The fragment is illustrated upside down. The colours of the reproduction are misleading; the brown should be Venetian red. The yellow of the original is perhaps deeper in tone.

**Plate V**

**FIG. 1.**
Pillar Shrine with Horns of Consecration and Double Axes Stuck into Columns.
HM, No. 21.

*Scale* 1/1.

*Provenance* From the lower cists in West Magazine 13 (a), cf. PLATE V, Fig. 2; PLATE VI, Fig. 12; PLATE VII, Fig. 1. The cists were Nos. 2, 3 and 4, from the west end (PM I, 443 note 1).

Two additional pieces which join the lower left corner of this one are omitted in the reproduction. The top right-hand pillar is now broken into small fragments. Notes by Evans on the Proof Copy in AM:

1. At the bottom: “very crude workmanship? earlier or later”.
2. Against the rosettes: “inscribed circles”.
3. Between the hatched bands above the rosettes: “inscribed lines”.

BSA X (1903-4), 47.
PM I, 443 f., 527, fig. 319 (which may be from a photograph of this reproduction, rather than from the original drawing).

*Date* M.M.III b (PM I, 527).

**FIG. 2.**
Pillar Shrine with Double Axes stuck into Column and Imitation Stone Inlays.
HM, No. 59

*Scale* 1/1.

*Provenance* From the lower cists in Magazine 13 (a), as for Fig. 1 above.

The small fragment which appears joined to that above at the lower left is in the wrong place; it has now been correctly joined to the right-hand side of the façade. The reproduction is untrustworthy in colour and other details.

On the Proof Copy in AM Evans criticised the representation of the guide lines, etc.:

1. Above and below the circles of the entablature, and below the horns of consecration: “line incised” is repeated three times
2. To the right of the green patch: “plaster very fine & white 2·5 cm.”
3. In reference to the chequer board design and the wooden beam above it: “The incised lines in this are not completed & are just set out on one side to give a start to the design”
4. In reference to the border between the chequer board and the wooden beam above it: “this incised line peters out in a wavy trail”

32
BSA X (1903-4), 41 f., fig. 24 (a photograph of the same original drawing as that reproduced in PLATE V, Fig. 2).

PM I, 445, fig. 321 (which appears to be from a photograph of this reproduction rather than from the original drawing).

Date M.M.III b (PM I, 527).

FIGS. 3, 4 and 5.

(The following data also apply to PLATE VI, Figs. 1-7.)

Fragments from the Camp Stool Fresco. Cf. PLATE F, Fig. 1, and PLATE VII, Fig. 3.

HM, No. 11.

Scale 1/1.

Provenance From the area of the West Outside Wall of the Palace (s): assumed to have fallen from the "North-West Sanctuary" above Magazines 11-13 (see under PLATE C, Fig. 5).

These reproductions, and that on PLATE VII, Fig. 3, are from drawings made by E. Gilliéron, père. The drawings published in PM IV, col. plate XXXI, were by his son "in accordance with the present scheme of partial restoration" (PM IV, 385 note a). The Camp Stool Fresco has been restored by Platon on a different scheme with standing figures between the seated ones (Kretika Khronika 13, 1959, 319 f.). All the fragments illustrated here, except PLATE VI, Fig. 6, which has not been identified in HM, are incorporated in this restoration; but it appears to be untenable in the light of the new fragment recently joined to "La Parisienne" by Cameron (Kretika Khronika 18, 1964, 38 f.).

Platon has recognised traces of a second large figure, similar to "La Parisienne", but facing in the opposite direction. Evans must have been aware of her existence since she is included in several unpublished sketches for restoration of the scene now in AM.

On the Proof Copy in AM, PLATE V, Figs. 3-5 were cancelled with a pencil line through each of them. But there are ticks of (approval?) on the Proof Copy of PLATE VI against Figs. 1, 4 and 5.

BSA VII (1900-1), 55 f., fig. 17.

PM IV, 381 f., figs. 318-9, 323-5, col. plate XXXI.

Date early in L.M.I according to Evans (PM IV, 396. Cf. Index Vol., 53), but the cup of PLATE VI, Fig. 1, seems to be a kylix, which suggests a date in L.M.II-III a (Mackeprang, AJA XLII, 1938, 546).

Evans restored PLATE VI, Fig. 2, as a goblet similar to the "Cup of Nestor" (L.M.I) (PM IV, 390 f., figs. 125-7), but the tall stem is more reminiscent of a kylix, and the high-footed kylix did not come into fashion until L.M.III a.

**ADDITIONAL COMMENT**

FIG. 3: the blue is untrustworthy. See the comments by Evans on the Proof Copy of PLATE VI, Fig. 1,

FIG. 4: the blue is not so green; the red in the reproduction is too strong.

PM IV, 384, fig. 318.

33
FIG. 5: the nose on the original is shown by a yellowish line, not by a black one as here.
PM IV, col. plate XXXI F.

Plate VI

(Additional data on Figs. 1–7 appear under PLATE V, Figs. 3, 4 and 5.)

FIG. 1.
The colours in the reproduction are too bright, as noted by Evans on the Proof Copy in AM:
1 against the cup: “blue very pale”
2 referring to Figs. 1, 3, 6, 7 in general: “technique the same—very pale blue”
PM IV, col. plate XXXI A.

FIG. 2.
The yellow part of the dress is now missing on the original fragment, which has been broken into two bits. On the Proof Copy in AM Evans wrote against the arm: “? does blue underlay here”.
PM IV, col. plate XXXI G.

FIG. 3.
The angle of the reproduction is wrong; the white seat should be horizontal. The colours of the original are pale. This fragment joins PLATE V, Fig. 3, and has been combined with it in Platon’s new reconstruction.
PM IV, col. plate XXXI C.

FIGS. 4, 5.
PM IV, col. plate XXXI B.

FIG. 6.
Cf. PLATE C, Fig. 5.
This fragment has not been identified in HM.
PM IV, col. plate XXXI H.

34
FIG. 7.
The colours in the reproduction are too bright.
PM IV, col. plate XXXI D.

FIG. 8.
Head of a Man.
HM, tray Y VI.
Scale 1/1.
Provenance Unknown.
Only the brow and the crown of the head of the original are left now. A note by Evans on the Proof Copy reads: "? does blue underlie the red here". The colour drawings for this and PLATE VI, Figs. 9 and 10, are in AM.
Hitherto unpublished. This or PLATE VI, Fig. 9, may be the "small male head" found in Magazine 1 (BSA VI, 1899-1900, 21).

FIG. 9.
Head of a Man.
HM, tray Y VI.
Scale 1/1.
Provenance Unknown.
The reproduction is excellent. The colours on the original are slightly obscured by a film of lime deposit.
Hitherto unpublished.

FIG. 10.
Head and Shoulders of a Man.
HM, No. 59.
Scale 1/1.
Provenance Unknown.
The reproduction is good, but the shape of the ear is not quite correct. There is a pencilled tick (of approval?) against this picture in the Proof Copy in AM.
Hitherto unpublished.

FIG. 11.
Bust of a Man.
HM, No. 75.
Scale 1/1.
Provenance Unknown.
The reproduction is excellent. The left hand on the original is not so clearly visible now. The colour drawing for this is in AM.

Hitherto unpublished.

FIG. 12

"Miniature Fresco" of Spectators.
HM, No. 58.
Scale 1/1.
Provenance From one of the lower cists in Magazine 13 (a), as is PLATE V, Figs. 1, 2 and PLATE VII, Fig. 1.
The character of the painting is well reproduced; but the yellow of the background is not so bright in the original. There is a pencilled tick (of approval?) against this picture on the Proof Copy in AM.

BSA X (1903-4), 40 f.
PM I, 527, fig. 384, and note 3 (with reference to Knossian Atlas, i, Pl, VI, Fig. 12).
Date M.M.II b (PM I, 527).

Plate VII

FIG. 1

Bull's Head.
HM, No. 57.
Scale 1/1.
Provenance From one of the lower cists in Magazine 13 (a), as is PLATE V, Figs. 1, 2 and PLATE VI, Fig. 12.
It was found in the second cist from the west end (BSA X 1903-4, 40, Cf. PM I, 443, note 1). Cf. PLATE V, Fig. 1.
In the reproduction there is a slight crudening of the character of the original; the hide of the bull is too brown. Evans thought that this fragment might have formed part of the same picture as the others from Magazine 13, and interpreted it as a bull-leaping scene before crowds of spectators (PLATE VI, Fig. 12) and a shrine (PLATE V, Figs. 1, 2). The wavy lines below the bull's horns he described as "the ends of the flying locks of some acrobatic figure". The original colour drawing for this is in AM.

BSA X (1903-4), 40 f.
PM I, 528, fig. 385 (which appears to be from this reproduction for the Atlas, and not from the original drawing).
Date M.M.II b (PM I, 527)
FIG. 2.
Dancing Girl. Cf. PLATE F, Fig. 2.
HM, No. 19.
Scale 1/1.
Provenance From the Light Area East of the Queen's Megaron (14).
In the reproduction there is a slight crudening of the character of the original; the blue is too bright, and the hand and ear are not entirely accurate.
BSA VIII (1901-2), 55 f., fig. 28.
PM III, 70 fig. 40, 369 f. and col. plate XXV.
Date "about the close of" L.M.I a (PM III, 369; Index Vol., 53).

FIG. 3.
"La Parisienne," from the Camp Stool Fresco. Cf. PLATE F, Fig. 1, and other fragments of the Camp Stool Fresco on PLATE V, Figs. 3-5, PLATE VI, Figs. 1-7.
Scale 1/1.
A better reproduction than PLATE F, Fig. 1. But there is a slight crudening of the character of the original; the bridge of the nose is too high, and the blue is too green.

Plate VIII

FIG. 1.
Lily Sprays.
HM, No. 40.
Scale 1/1.
Provenance From the South-East House (15).
The drawing for this was by H. Bagge. Later the fragment "was broken up in the course of transport to the Candia Museum and is now a botch-work" (PM I, 537 note 1). The small piece at the bottom left has now been placed on the upper left side in the original, and at least four further fragments have been added. Notes by Evans on the Proof Copy in AM: (1) against the leaf at top left: "Should be much greener"; (2) against that at top right: "Is the green here mixture of blue and yellow".
BSA VII (1901-2), 92; IX (1902-3), 5.
PM I, 537, and col. plate VI (evidently from the same original drawing as PLATE VIII, Fig. 1).
Date (1) M.M.III a (PM I, 604), (2) M.M.III b (PM Index Vol., 52).
FIG. 2.

Tree and Part of Bull-grappling Scene.
HM, tray on S. side of Fresco Storeroom.
Scale 3/4.
Provenance From the North-West Treasury (6).

The bull’s feet are difficult to trace on the original. On the Proof Copy in AM Evans wrote: “Plaster of normal LM character. Green is mixture of yellow and blue.” The colour drawing for this in AM appears to be 1/1.

PM II, 620, fig. 389 (evidently from the drawing, and not from this reproduction for the Atlas).

Date L.M.II. Evans describes it as “in a late style... This eclectic representation may well belong to the close of the Palace period” (PM II, 620).

FIG. 3.

Olive or Myrtle.
HM, No. 39, tray Σ VIII.
Scale 1/1.
Provenance Unknown.

The colour drawing for this in AM has “VIII. Fig. 3” in pencil on it. The colours are misleading, as are the details of the stems and leaves. About thirteen other fragments have been added to the original since the drawing for this reproduction was made. A note on the Proof Copy in AM against the thin stalk at the bottom right reads: “blue mixed with yellow and black”.

Hitherto unpublished.

Plate IX

Plate IX - Second Version

Bull’s Head Plate

Taureador Fresco.
HM, No. 18.
Scale about 1/2.
Provenance From the Court of the Stone Spout (11).

There are two versions of this, both numbered PLATE IX; together with an enlargement from the first version of the figure seizing the bull’s horns on a Plate which has no number (i.e. the Bull’s Head Plate). The first version, from which the un-numbered enlargement is taken, shows the restored part of the border completed
in detail. The second version has the restored areas of the border merely indicated in outline. This version varies from the first in many details, and is much more accurate and sensitive. But the first version is the one reproduced in PM III, figs. 144–5.

Evans wrote many comments and corrections on the Proof Copy of the first version in AM. The Proof Copy of the un-numbered enlargement is marked in pencil "Plate XI". The area of PM III, fig. 145, is outlined on it, indicating that the illustration there was taken from this reproduction.

BSA VII (1900–1), 94 f.; VIII (1901–2), 9.
PM III, 203 f., figs. 144–5; IV, 892.

Date Evans thought that some of this series of Taureador Frescoes, which included PLATE IX and PLATES X, XII a below, were painted earlier (L.M.I a) than others (L.M.I b). The more finely executed he assigned to the end of L.M.I. a (PM III, 210), but later regarded them L.M. II (PM II, Supplementary Plate XIII, d and e), or as probably L.M.I b (PM Index Vol., 53).

Plate X

FIGS. 1–8.

The fragments shown in Figs. 1–8 belong to the series of the Taureador Frescoes and were found together with the pieces incorporated in the main Taureador scene (PLATE IX) in the Court of the Stone Spout (11). PLATE X, Fig. 8 is the head of the right-hand figure in PLATE IX.

Scale 1/1.

Date see under PLATE IX above.

ADDITIONAL COMMENT

FIG. 1.

Head of Female Taureador.
HM, No. 33.
The head on the original has almost entirely crumbled away.

PM III, 212, 232 fig. 164 B (taken from this reproduction, as is clear from notes on the Proof Copy in AM).

FIG. 2.

Waist of Female Taureador.
HM, No. 33.
The originals of this and of Fig. 1 above are now in a small un-numbered tray on the N. side of the Fresco Store-room.

Hitherto unpublished.
FIG. 3.
Legs of Female Taureador.
Not identified in HM.
Hitherto unpublished.

FIG. 4.
Leaping Girl. Cf. PLATE A, Fig. 2.

FIG. 5.
Hand of Female Taureador.
HM, tray H XII.
A good reproduction.
Hitherto unpublished.

FIG. 6.
Face of the figure in PLATE XIIA

FIG. 7.
Head of Female Taureador.
Not identified in HM.
Hitherto unpublished.

FIG. 8.
Head of the right-hand figure in PLATE IX.

Plate XIIa and XIIb

XIIa

Female Taureador Seizing Bull's Horn. Cf. PLATE X, Fig. 6.
HM, No. 34, tray H XXII.
Scale 1/1.
Provenance From the Court of the Stone Spout (11).
The drawing for this reproduction was by Gilliéron, père. The fragments on the right-hand side are now missing. On the Proof Copy in AM, PLATE XII a has been altered to XI, and PLATE XII b to XII.

PM III, 215, fig. 146 (evidently from a photograph of this reproduction).

\[\text{XII} b\]

Three fragments of the Ladies in Blue Fresco.

HM, No. 7.

Scale 1/1.

Provenance From a deposit outside the North Wall of the Royal Magazines (Corridor of the Bays and Magazine of the Medallion Pithoi, etc.) (so).

Evans thought that this fresco might have formed part of the decorations of the great "East Hall" of the M.M.III Palace above the Magazines. But the top fragment is mentioned in the original excavation report as coming from "near the north portico" (BSA VII, 1900-1, 26). The North Portico is the area of the North-West Fresco Heap (?). But "north portico" here may be a slip for the "North-East Hall" which lay just to the North of the Corridor of the Bays, etc. (10). The largest of the three fragments was much damaged by the earthquake of 1926 (PM III, 50 note 1; IV, 285 note 1), and only the central part of the hand now survives. The reproduction of it here is set on its side (contrast PM I, figs. 397-8; IV, fig. 219).

On one of the Proof Copies in AM Evans noted:

1 Above the largest fragment: "darkening is mark of smoke from which hand portion protected evidently";
2 To the right of the largest fragment: "plaster same as I-III—very much impregnated with smoke";
3 To the right of the smallest fragment: "large piece with another similar hand belong to this composition".
4 In the bottom right corner of the Plate is written "? M.M.II", which is presumably a speculative date for the fragments.

PM I, 545-7, figs. 397-8; II, 730-4; IV, 284-5, 518, fig. 219.

The ink drawing for PM I, fig. 397, is in AM.

Date M.M.III b (PM I, 547; Index Vol., 52).
KEY TO PROVENANCES AND ASSOCIATED PLATES

1. BASEMENT WEST OF STEPPED PORTICO
   Plate D, Fig. 2

2. ROOM OF THE FORGED CLAY SEAL
   Plate C, Figs. 1, 3

3. MAGAZINE OF THE VASE TABLETS
   Plate B, Fig. 2

4. LOWER CISTS IN MAGAZINE 13
   Plate V, Figs. 1, 2
   Plate VI, Fig. 12
   Plate VII, Fig. 1

5. WEST OUTSIDE WALL OF PALACE
   Plate C, Fig. 5 (= Plate VI, Fig. 6)
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   Plate V, Figs. 3, 4, 5
   Plate VII, Figs. 1, 2, 3, 4, 5, 6, 7

6. NORTH-WEST TREASURY
   Plate VIII, Fig. 2

7. NORTH-WEST FRESCO HEAP
   Plate C, Fig. 4
   Plate D, Figs. 4, 6
   Plate E, Figs. 2, 3a (= Plate IV, Fig. 11)
   3c, 3d (= Plate IV, Fig. 5)
   3e, 3f, 3h (= Plate IV, Fig. 16)
   3k (= Plate IV, Fig. 17)
   Plate IV, Figs. 12, 15

8. ROOM OF THE SAFFRON (or Flower) GATHERER
   Plate I

9. ROOM OF THE SPIRAL CORNICE
   Plate B, Figs. 1a, 1b (= Plates II, IIa)
   Plate IV, Figs. 1, 2, 3

10. DEPOSIT OUTSIDE NORTH WALL OF ROYAL MAGAZINES
    (Corridor of the Bays and Magazine of the Medallion Pithoi, etc.)
    Plate XIIb

11. COURT OF THE STONE SPOUT
    Plate A, Figs. 1, 2 (= Plate X, Fig. 4)
    Plate IX (both versions)
    Bull's Head Plate
    Plate X, Figs. 1, 2, 3, 4, 5, 6, 7, 8
    Plate XIIa

12. AREA OF STONE AMPHORA, or, LAPIDARY'S WORKSHOP
    Plate C, Fig. 6

13. IVORY DEPOSIT (below the later floor in the Treasury)
    Plate E, Figs. 3b, 3g (= Plate IV, Fig. 4)

14. LIGHT AREA EAST OF THE QUEEN'S MEGARON
    Plate F, Fig. 2 (= Plate VII, Fig. 2)

15. SOUTH-EAST HOUSE
    Plate D, Fig. 1
    Plate VIII, Fig. 1

16. CHAMBER NORTH-EAST OF EXCAVATED AREA
    Plate D, Fig. 3

II. PROVENANCE UNKNOWN
    Plate B, Fig. 3
    Plate C, Fig. 2
    Plate D, Fig. 5
    Plate E, Fig. 1
    Plate IV, Figs. 6, 7, 8, 9, 10, 13, 14, 18, 19
    Plate VI, Figs. 8, 9, 10, 11
    Plate VIII, Fig. 3
EUROPA

STUDIEN ZUR GESCHICHTE UND EPIGRAPHIK
DER FRÜHEN AEGAEIS

FESTSCHRIFT FÜR ERNST GRUMACH

HERAUSGEGEBEN VON
WILLIAM C. BRICE

WALTER DE GRYTER & CO
BERLIN 1967
INHALT

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NOTES ON SOME NEW JOINS AND ADDITIONS TO WELL KNOWN FRESCOES FROM KNOSOS

As a tribute to Professor Ernst Grumach, it is a pleasure to illustrate here, and to discuss briefly, some new joins and additions to well-known Minoan frescoes from the "House of the Frescoes" and from the Palace at Knossos. This contribution is divided into three sections.

Part I deals with some new additions to a "Monkey Panel" and to "Fountain" and "Myrtle" paintings from the "House of the Frescoes". The "Monkey Panel", reconstructed and restored some forty years ago, was enlarged in the early part of 1966 to well over twice its original length; to the enlarged panel, however, must be added further pieces whose place in that composition was recognised in July–September of that year.

Part II: new joins to two paintings in miniature — the "Sacred Dance and Grove" and the "Miniature Warriors".

Part III: a supplement to my article, in a forthcoming issue of Kretika Chronika—"An addition to 'La Parisienne'".

A Catalogue of the Material follows.

More detailed studies of the groups of frescoes to which the present pieces belong will be put forward with other results and unpublished fragments in forthcoming publications.

1 Thanks are due to the Director and Managing Committee of the British School of Archaeology at Athens for permission to publish material from Evans's excavations at Knossos, and to Mr. P. Petrakis, technician of BSA; to the Ephor of Crete and the Director of the Herakleion Museum, Dr. S. Alexiou, for help at all times during a very busy summer season and for putting at my disposal the services of the HM technicians, particularly of Mr. K. Nikakis. To Mr. B. Shefton and to Miss M. A. V. Gill (University of Newcastle upon Tyne) who read and improved the text, and to Dr. C. Cook (University of Liverpool) for botanical information. I alone am responsible for any errors of opinion or fact in this article, which was written during the tenure of a Sir James Knott Fellowship at the University of Newcastle upon Tyne. Thanks are due to the Fellowships Committee of that University; and to Mr. G. Xylouris for photographs reproduced in pl. II a, c and d and pl. IVc and d.

2 "Some Unpublished Fresco Fragments from Knossos", for BSA Annual; "The Painted Signs from the House of the Frescoes", for Kadmos. Where possible, their catalogue nos. will be cited.
Part I: Paintings from the "House of the Frescoes"

Preliminary note

Many fragments from this site were excavated with the help of gypsum paste ("plaster of Paris") applied to the backs and sides of the pieces. This paste hardens and so fresco pieces can be lifted from the ground without risk of further breakages. It also helps to preserve the edges from later wear and tear; but the difficulty of finding new joins is increased because the modern plaster must be removed from the edges to which it has been applied before a suspected join between two or more fragments can be verified.

The frescoes from this house are among the most delicate ever to have been found in Crete, for one reason especially. The painting was executed on top of a very thin, finely prepared and opaque layer of lime which is called "slip". The slip rests on top of the main body of plaster, of a coarser texture, and it has the same function as mud slips on clay pots. Unfortunately, the fresco slip here can flake away from the main body of plaster and thus takes away with it the painted subject matter: this has happened on many fragments as a result of damage suffered in antiquity, and those places have been denoted in the line drawings by stippling.

A. An Enlargement of a "Monkey Panel"

In 1923 Sir Arthur Evans discovered a large stack of broken fresco fragments in Room E of a small house to the N. W. of the Palace at Knossos. From some of the fragments, his Swiss draughtsman and restorer, M. E. Gilliéron, fils, reconstructed and restored a fresco panel which shows on a white (unpainted) ground a blue monkey amid a papyrus thicket; the original pieces showing the feet and right hand of the animal appeared to be missing (PM II, 451, fig. 264: hereafter called "Gilliéron's panel").

This restoration, mounted in a gypsum panel, was evidently exhibited in the Herakleion Museum until the outbreak of World War II at which time it was put into store for safe protection. There it remained until 1966. In 1961 Dr. Helga Reusch devoted much time to cataloguing and labelling fresco material from Evans's excavations at Knossos, including some pieces from this house which she set out together with Gilliéron's panel in preparation

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9 PM II, 445.
4 Ibid. 404 (plan); 444—447.
Notes on some new Joins and Additions to well known Frescoes

for a future restoration. Those fragments, with others, were incor- 

corporated into an enlargement of Gilliéron’s panel early in 1966 

by the joint work of Mr. T. Phanourakis of the Herakleion Museum 

(who painted the restoration of missing parts) and Mr. A. Caravella 

of the Italian School of Archaeology in Greece (who dealt with the 

technical side of the reconstruction). Gilliéron’s panel had evidently 

suffered slight war-damage⁴; its reparation initiated further work 

in reconstruction.

The Enlarged Panel: Plate IIa

The exciting discovery was made of the fragment, previously 

unrecognised, which shows the right hand of the monkey clutching 

a papyrus stem in a manner which confirmed, in principle, that 

part of Gilliéron’s restoration (no. 1, pl. IIb and fig. 1A).

To the left of Gilliéron’s panel was added a new section which 

includes two fragments of a clump of five papyrus flowers on a 

buff-yellow ground (nos. 6 and 7); their leafless stems were restored 

on analogy with those held by Gilliéron’s monkey. A fragment on 

which appears an undulating blue band that vertically divides a 

buff field on the right from a pale blue-green field on the left (no. 4, 

fig. 2A) was placed on the left side of the buff area with the five 

papyrus flowers: this addition is important because it shows how 

these Minoan painters changed the background colours of adjacent 

sections of the composition—by concealing with an undulating 

band in a third colour the “line of demarcation” which would 

otherwise appear.

To the right of Gilliéron’s panel was added another new section 

with a group of six papyrus flowers on grass-like stems against an 

unpainted ground (no. 5, pl. II d); towards the base of some of 

the stems is seen the tip of another blue monkey’s tail (no. 2, pl. 

II c, fig. 1B). The body of this animal was restored in right 

profile, his blue head provided by an original piece (no. 3, fig. 1 C). 

A small fragment with a curved blue area against a white ground 

was considered to belong to the left ankle of this monkey (see 

pl. II a). On analogy with surviving fragments showing on a red 

ground a blue monkey’s head and raised paw⁶, the present animal

⁴ Some chips in the modern gypsum backing. Dr. N. Platon, at that time Ephor 
of Crete and Director of Herakleion Museum, has described how other fresco pieces 
were damaged during the war (Kretika Chronika I Γ', 1959, 321 and note 5). 
⁶ PM II, Pl. X, opp. p. 447
Fig. 1
Fig. 2

- **A**: Black stain, not paint.
- **B**: Flaked paint or slip.
- **Red**: [Symbol]
- **Pale Blue-Green**: [Symbol]
- **Buff**: [Symbol]
- **Pale Blue**: [Symbol]
- **Vivid Blue**: [Symbol]
- **Orange**: [Symbol]
- **Vivid Blue**: [Symbol]
- **Light Blue**: [Symbol]
- **Light Grey**: [Symbol]
- **Darker Grey**: [Symbol]
- **Flaked Paint or Slip**: [Symbol]
- **Broken/Worn Edge**: [Symbol]
—the fourth monkey to be identified in this series of paintings—was restored with left paw raised, as if to poke a small clump of papyrus flowers in front of him. Other fragments added to the enlarged panel include parts of rockwork, upper border stripes and a crocus plant with sky-blue flowers.

The new sections were mounted on a black wax base, covered by a thin layer of gypsum in order to provide a suitable surface for painting areas in which the original fragments were missing. The enlarged panel (about 1.9 metres), with Gilliéron's forming the central section of it, was placed on exhibition. Phanourakis and Caravella performed their respective tasks with great skill, and their attempt to enlarge upon a past restoration is welcome. However, continuation of the traditional method of reconstructing frescoes by setting original pieces into panels causes concern.

In view of later additions which have been made to the enlarged “Monkey Panel” and to other frescoes whose original pieces have been set into gypsum panels—both old and new—, serious questions arise as to the value of this practice.

Three other monkeys illustrated in PM II, loc. cit; 447, fig. 262, and 451, fig. 264 (Gilliéron’s panel).

New joins have recently been discovered by me to the following panels: to the enlarged “Monkey Panel”; to the “Sacred Dance and Grove” fresco (see Part II below); to “La Parisienne”, and therefore to the large reconstruction of the “Camp Stool” fresco which embodies a replica of “La Parisienne” (see Part III below). A list of some twelve gypsum panels could be given from which original pieces are known to have been excluded: more joins could turn up.

The method of reconstruction in question has been widely used over the last sixty years and has now become established practice; my criticisms are directed against this method only.

1. The setting of original pieces in such panels seriously impedes any subsequent attempt to find new joins by using material previously omitted, and therefore in effect puts an end to the primary way of validly recreating the original compositions.

2. If original pieces are to be extracted from their gypsum mountings the risks of further damage to the frescoes are perhaps greater than at any time during the routine and necessary cleaning, mending, drawing and photographing of individual fragments.

3. Substances other than gypsum should be found which might to be much kinder to fresco fragments to be set into panels, and which would make extraction of pieces easier and safer work; wax is certainly one. Are there others, kinder still?

4. The study of frescoes is very much the study of shattered remains. Mistakes in their understanding are almost inevitable, and so every precaution must be taken to avoid putting mistakes into the most irreversible physical forms. This alone casts doubt on the value of gypsum restoration, which is nil in the case of a charioteer from Tiryns who has been made to drive his chariot perpendicularly into
Additions

Unfortunately, the new sections on both sides of Gilliéron's panel appear to be mistakenly restored, in a number of details, in the light of joins and additions since recognised; these were checked with the technicians of the Herakleion Museum, whose services were kindly given me by Dr. S. Alexiou. The technicians effected all but the simplest joins which I myself made, using glue only, in the way taught me by the technician of the British School of Archaeology at Athens, Mr. Petros Petrakis. I am much indebted to them all.

To a fragment published by Evans, representing what he believed was grass, were made four new joins (no. 8, pl. IIIc). The seven stems now evident are a light rusty-brown colour, and between the top left stem and leaf is a small pale blue line. The same type of leafy stem in the same colour is attached to a large papyrus the ground, and that of a kaleidoscopic jumble of broken lily fragments from Phylakopi—as if flung in handfuls into a gypsum panel without any serious attempt to join the pieces.

5. It may be justifiable to use gypsum in supporting complete or nearly complete frescoes (e.g. the Griffin fresco from Knossos) or very large pieces which may otherwise disintegrate into smaller fragments (e.g. the Procession fresco from Knossos, and large pieces from Hagia Triada), or for straight-forward geometrical frescoes (e.g. Spiral friezes); similarly, it is invaluable for strengthening weak joins of small pieces. But at all times its use should be carefully controlled lest the progress of subsequent work be halted. This applies in particular to mending edges of broken fragments: liquid preservatives can now do the same work as gypsum, without the latter's after-effects.

Technical features of frescoes must be recorded prior to setting original pieces into gypsum, since their information, of architectural and chronological value, cannot be discovered afterwards. In the past, it has been thought sufficient in most cases simply to set the frescoes into gypsum panels, without recording or reporting technical features; as a result, that information has been wasted.

As an alternative to reconstruction in gypsum, a painted facsimile or restoration on paper, faithfully indicating what is original and what is not—with the most important, complex, or delightful original pieces laid out in a floor-case below such a restoration—seems both more helpful and reasonable. If shown to be mistaken (e.g. Evans's restoration of the Saffron Gatherer as a boy, of which a replica is still on view), it can be corrected or replaced with infinitely greater ease than can a panel in which are set original fragments.

The use of gypsum in the reconstruction of frescoes has undoubtedly hindered progress in their study. With perhaps few exceptions, it would be wrong nowadays to continue restoring frescoes in gypsum when other materials are available—if, indeed, panels incorporating original fragments must be created at all.

* Ibid. 465 and 469, with fig. 275 J; E. J. Fordyce, Minoan Art, 1929, Frontispiece 5*
flower—the second from the left—on the large piece (no. 5, pl. IIId) which has been placed to the right of Gilliéron's monkey in the enlarged panel (pl. IIa); between stem and leaf of the same flower there is a thin, pale blue line. These points alone suggest that no. 8 bears the stems of this group of papyrus flowers: indeed, there is no other place for that fragment, to judge from all the existing material from this house.

Only one flower was recognised on the extreme left lower edge of the large flower fragment (no. 5, pl. IIId); the area is badly preserved and obscure, but it seems to me that the "sepal" of one flower overlaps the inflorescence of another, so indicating the original presence of two flowers in that area. The overlapping of flowers is admittedly rare in these paintings but is not uncommon as regards the leaves of plants. The fragment under consideration may be understood to show seven flowers, in agreement with the number of stems remaining on no. 8. It is uncertain whether the latter may join no. 5 which is set into the panel—probably not. A restoration of the two pieces is given in fig. 3; the relative position of the two pieces is approximate but their association seems certain.

It is clear that the "new" monkey must now be moved elsewhere, but quite where is a moot point: it is not certain whether the fragment showing that monkey's tail and identical papyrus stems (no. 2, pl. IIc) should be placed on the right or left side of the whole papyrus clump. The fragment could join either side, but it is not possible to test that matter unless the piece be extracted from its mounting. The body and tail of the monkey may have been in profile to the left on the left side of the flowers, and the animal may have been looking over its shoulder—which would account for the head in right profile. But if that were so, the whole group of papyrus stems would need to be placed much further to the right in order to find space for the monkey to the immediate right of Gilliéron's panel. The association of the head and tail fragments as parts of the one animal is in fact arbitrary because the head fragment may have belonged to a different animal than that to which the tail belonged. Moreover, the small original

10 Overlapping flowers: PM II, 457, fig. 268, pancratium lily; other plants, Ibid. Pl. X, ivy; 458, fig. 270, myrtle; 465, fig. 275 H, and unpublished examples.

11 Unpublished parts of monkeys' bodies, including more heads, have been identified: Cameron (BSA, Cat. nos. 2—7).
piece at the left ankle of the restored monkey could as well be part of rockwork as part of a monkey's foot.  

A curved blue area appears on the stems fragment on the lower left side (no. 8, fig. 3); this feature requires alteration of the background schema in that part of the enlarged restoration.  

Further, the fragment showing smaller papyrus flowers—one of which is restored in such a way that the new monkey is somewhat unconvincingly made to pat it on the head—seems to have broken up since the time when Gilliéron made a line drawing of the more complete piece, which was published by Evans (PM II, 455, fig. 266 D). This drawing, with the outline of the fragment clearly denoted, shows the correct height and position of the flowers on the left side of the plant and no monkey's paw is seen to touch them. It is, in any case, an assumption to suppose—even on the basis of PM II, pl. X—that two or more monkeys were depicted in the same posture in these lively, naturalistic, and early paintings.  

In the new section to the left of Gilliéron's panel is a large clump of papyrus flowers whose stalks are leafless (pl. II a). On the small fragment at the right side of that clump (no. 7), a change in background colours from a buff-yellow to a very light bluish green went unnoticed and consequently no allowance for that feature and its continuation was made in the restoration of the background in that area. The same combination of colours is found on two joining pieces which also show plant stems of the same type and colour as those of the papyrus flowers already discussed (compare no. 9, pl. IIIa, with no. 8, pl. IIIc, fig. 3). In addition, a small fragment bears on the same buff-yellow ground the top part of one such  

12 The blue area is too small to show the complete width of a monkey's foot, thereby making P and C's identification uncertain. Blue rockwork abounds in these paintings; this piece could be rockwork without surviving traces of veining. Clumps of crocus flowers in these frescoes never seem to have had more than five flowers (the restored clump has six).  

13 Painted copy by Gilliéron, fils, reproduced in colour in Forsdyke's Minoan Art, Frontispiece f, but there with much of the upper left side missing (as the piece now appears). As Minoan Art was published sometime after 6 February 1929, the fragment had evidently broken up before that date. Evans and Gilliéron were working on the HOF frescoes in 1923—24 (PM II, 446), but whether Gilliéron made his painted copy at a later date, I cannot establish: perhaps it was executed after the earthquake of 1926 which certainly damaged other frescoes (PM III, 50 notes 1 and 2; and elsewhere). Alternatively, the accuracy of the line drawing might be questioned, but the left-hand edge seems a convincing copy of an edge of the plaster that once existed.
stem at a point where a "calyx-like" shape\textsuperscript{14} meets the true flower (no. 10, pl. III b): this part of the plant finds analogy with similar features below two of the heads of the right-hand clump of papyrus (compare pl. III b with fig. 3). There can be little doubt that the two fragments under consideration show parts of the stems of the papyrus flowers in the new left-hand section. One way in which the pieces concerned may be restored is illustrated in fig. 4; the fact that the pale blue-green band on the larger fragment slopes downwards to the right and upwards to the left suggest that the smaller flower fragment (no. 7) should be removed from its present position to be placed on the left side of the plant: this makes the linking of the two fragments possible. Since in reality the stems of papyrus are virtually leafless, both our new clumps must be considered examples of the Minoan genius for creating "impossible" floral hybrids\textsuperscript{15}.

A general objection to the enlarged panel concerns the entire lower part; there is too little evidence to justify the extent of the restoration.

Rushes and papyrus would in reality be found near water, and so water can reasonably be expected to appear in one form or another in the area below the plants and monkeys: there is in fact a representation of water, which Evans thought was a fountain, from the same deposit of frescoes\textsuperscript{16}. Perhaps the water from the fountain flowed off in the direction of the two groups of papyrus plants discussed above, at both of whose roots are sky-blue areas—as yet uninterpreted. But the entire lower side has been restored in the form of lengthy bands of rockwork, as indicated by the imitation of the conventional striations and veining of rockwork on original fragments: there is no room for water in any form in the enlarged panel (see pl. IIa, and also Addendum, p. 68f. below).

Conclusions

Despite the criticisms and corrections made above, the new restoration presents some notable achievements and raises new possibilities which deserve emphasis.

\textsuperscript{14} In reality diminutive leaves, not a "calyx", as Dr. Cook informs me.
\textsuperscript{15} PM II, 466. The papyrus in fact is leafless for much of its stem, as in ibid. 451, fig. 264 (and no. 1, fig. 1 A here)
\textsuperscript{16} PM II, 460f., fig. 372, and PM III, pl. XXII, opp. p. 254 (see below, pp. 57—63)
Notes on some new Joins and Additions to well known Frescoes

1. It has been shown that more could be done towards the reconstruction of fragments from this house, leading to a greater and surer understanding of the original form of the composition.

2. The new restoration seems to be on the right theoretical track: nowhere else in this fresco series may the two new groups of papyrus plants be more suitably placed than in some relationship with Gilliéron’s panel, as examination of all the surviving material would show.

3. It continues to support Evans’s claim that the frescoes formed in some way a unified system of decoration in that house, painted at the same time and by the same hands17.

4. The restoration of the buff left-hand section in such a way as to be linked with adjacent sections whose fields are in predominantly different colours—by incorporating no. 4 (fig. 2A)—undermines one of Evans’s objections to linking together his “panels” as parts of a continuous frieze, namely, his hesitation on the ground that the red background colour of one panel would aesthetically ‘kill’ another panel whose background is in a lighter colour18.

5. The addition of many fragments showing the one series of upper border stripes emphasises the possibility (implicit in 4. above) of linking the enlarged panel to the monkey panel with a red ground, whose border stripes are in the same sequence of colours19.

6. The discovery of hitherto unknown fragments of monkeys is important: these animals clearly play the main rôle in these compositions.

I hope shortly to publish20 further material and a hypothetical restoration of these frescoes in a study which attempts an answer to the question: “why do monkeys appear at all in these paintings?”

B. “Fountain Frescoes” Reconsidered

Evans published four fragments showing “jets d’eau” which he interpreted as fountains21. One piece was thought to show the base of a fountain below which was rockwork22; a join has been made

17 PM II, 446
18 Ibid. 450
19 Ibid. pl. X, opp. p. 447
20 “Some Unpublished Frescoes” (BSA)
21 PM II, 460ff., fig. 272, and PM III, colour plate XXII, opp. p. 254
22 PM II, 460, fig. 272, lowest fragment
which confirms Evans's interpretation of the area below the fountain (no. 11, pl. III d, and fig. 2B). The two halves of that piece had in fact been lifted from the ground as a single fragment by means of a thin layer of gypsum paste applied to the back; this gypsum backing had broken and the two halves had become separated before Gilliéron made a painted copy of the part showing the base of the fountain (PM, loc. cit., photographically reproduced).

Three new joins were found to the main evidence for a fountain, a coloured restoration of which appears in PM III, pl. XXII, opp. p. 254. The central piece there, when turned right round, joined the top side of the smallest fragment; the latter was thought to show the forked base of a fountain, but this part of the restoration was erroneous for two reasons.

1. On the right side of the smallest piece, the slip had long since flaked away and this alone made the restoration of the “forked base” possible.

2. The fountain continues on a very small fragment which joins the lower side of Evans's smallest piece. Plate IV a shows the new assembly of these three pieces (no. 12).

Another fragment, hitherto unknown, joins Evans's largest fragment whose slip has almost entirely disappeared since the time when Gilliéron made a painted copy of it (no. 13, pl. IV b compare PM III, p. XXII). The addition shows a few drops of blue water against a light grey ground which is terminated on its lower left side by a curved unpainted area of the field. A creamy-white and slightly undulating stripe thinly applied above the grey paint is visible on the right side. At that edge is a straight, flattened impression which continues on the right side of Evans's largest fragment. This impression clearly shows that these pieces (no. 13) once abutted against a vertical architectural feature, perhaps a wooden beam used in the construction of the wall, or the face of

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23 For a detailed photograph of these two pieces, see “Painted Signs: HOF” (Kadmos). The direction in which the spots were painted—thick at the top of the stroke where the brush first met the slip, but thinner at the lower end of the stroke where the brush was taken away from the surface—indicates that the drops of water were made to fall downwards, not equally up and down as in Gilliéron’s restoration. A spot of red paint which clearly fell downwards from the painter’s brush has the same shape on the “Festoon” fresco from the Royal Road Excavations of M. S. F. Hood.
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a second wall in a corner of a room\textsuperscript{24}. In the light of this technical feature, Gilliéron's restoration, and with it the interpretation of the main subject as a fountain, can no longer be maintained.

**Interpretation**

In order to make the fountain vertical, the uppermost fragment in that restoration has been tilted to the left. But the impression on the right side of the piece requires a vertical alignment of that edge, which makes the "fountain" unnaturally lop-sided. If a fountain, the water-column could be expected to be free-standing—but this is not the case.

The light grey paint to be seen on the addition to Evans's largest piece appears on the latter too, immediately to the right of the lowest part of the water-column. In between these two grey areas were once—according to Gilliéron's restoration—spots of blue water on an unpainted slip, now missing but for two small pieces still in situ. Evidently the grey area to the right of the water-column continued in curved or undulating contour, occasionally touched by the water-column.

The grey area may reasonably be interpreted as rockwork on analogy with other examples of rockwork in the same fresco series, as Evans in fact recognised\textsuperscript{25}. Over it the slanting column of water may be thought to be pouring, curving outwards to the left towards the bottom. These considerations alone suggest that the main subject may be a waterfall.

One restoration of these pieces is offered in fig. 5.

**Restoration**

The joining of the three fragments making up no. 12 indicates that the "drops of water" fall downwards (see footnote 23). The outline of the grey rockwork is here made to undulate after the

\textsuperscript{24} Minoan architecture is concerned with vertical and horizontal planes. For timber beams in walls, see PM III, 334 ff. figs. 221 and 222, and 339, fig. 225. In the present frescoes, a series of striped bands mark the upper borders of pictorial friezes (e.g. PM II, pl. X), and a broad monochrome dado—with or without a single black stripe—is found at lower borders (e.g. ibid. 453, fig. 270). See too remarks on brushstrokes in note 23 above. Only a vertical alignment, with the impression on the right-hand side, seems possible.

\textsuperscript{25} Ibid. 461. Compare no. 11, fig. 2 B; unpublished pieces with grey expanses of rockwork in HOF trays in HM store-room.
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fashion of rockwork in other scenes from this house. The total height of the new restoration, worked out to scale, is 44 cm: that given by Evans (PM III, pl. XXII) should read "about 33 cm".

On the left side of Evans's smallest piece is a "vertical" blue area which is no longer visible because the entire painted slip at that point has flaked away (see pl. IVa). This blue area—open to several interpretations, including its possible identification as a second branch of the same waterfall—has been left out of fig. 5 which shows the surfaces of the pieces as they now appear. The rosy-pink areas in Gilliéron's restoration seem intended to convey the idea of missing slip; that colour is not visible on the original fragments: its appearance in that restoration is potentially misleading.

It should perhaps be noted that no. 11, if part of a waterfall too (even the same waterfall), is perhaps more likely to have been the top of the fall than its base—unless the continuation of the water was hidden from sight by a rocky outcrop.

Points in support of the present interpretation

Paradoxically, Evans himself gave three good reasons against his interpretation of the water-column as an artificial fountain.

1. These paintings are concerned with Wild Nature only: there is nothing to indicate the presence of Man.

2. No representations of fountains are known in ancient art until Hellenistic or later times. This is still true, as far as I know.

3. The parabolic construction of the open drain at the side of the staircase of the East Bastion in the Palace at Knossos was cited as evidence to suggest or imply that the Minoans might have

26 Compare rockwork of PM II, pl. XI, opp. p. 454
27 Ibid. 446
28 Ibid. 461
29 Pace V. E. G. Kenna, Cretan Seals, 141, No. 382. Miss M. A. V. Gill suggests the subject is an octopus (cf. L. Delaporte, Catalogue des Cylindres Orientaux..., Musée du Louvre II, 1923, 209, A 1162, pl. 106 no. 14; now in Bibliotheque Nationale, Cabinet des Medailles: AM 1943). Schaeffer reports an "ornamental fountain" of the middle of the 2nd Millennium B. C. from Ugarit (Ugaritica IV, Paris 1962, reviewed by Hutchinson in JHS 86, 1966, 259 who mentions Evans's identification of the present subject as a fountain). At the time of writing, Schaeffer's study is not available to me; the report that part of the Ugarit fountain consisted of a basin with a bull's head astragalus seems to suggest an artificial cascade of water rather than a true fountain (i. e. water forced upwards in a jet from an outlet normally at ground level).
known how to construct fountains. To the contrary, it simply proves that the Minoans knew how to construct in miniature a series of artificial waterfalls.

Further considerations

If the interpretation proposed above is correct, fresh-water would certainly be intended. Waterfalls on the Cretan hillsides would have been familiar to the Minoans after periods of rain, and the appearance of one in these paintings fits in with the "countryside" scene. The water perhaps continued as a fresh-water stream below the waterside plants in the "panel" to which belong our two monkeys; the blue areas at the roots of the papyrus clumps could be parts of that stream, as already stated (p. 56).

Evans published three fragments as evidence that "marine elements" were present in these paintings (PM II, 500f., and fig. 305). The upper left fragment seems to me to be all rockwork—especially because the black blob which Evans compares with sea-weed and sponge-marks is a foreign, shiny, wax-like substance that has accumulated on the painted surface at some later date. The lower fragment in the same illustration could as well be dead leaves on the rocky bank of a dried-up stream as sea-weed on a sand-bank, (near which there is no expanse of blue that could identify the "sea", postulated by Evans). The upper right fragment, far from being an "argonaut shell", is in fact the best surviving example of the wing of a flying blue bird. It is true that some plants seen in these frescoes may in reality be found near the sea-shore or in brackish water (papyrus, pancratium lily, and ? convolvulus); but the painting of "impossible" floral hybrids in related compositions shows to what extent these Minoan artists ignored some realities and laws of Nature.

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30 PM II, 462
31 Ibid. 500 and PM III, 364f., fig. 241: correctly positioned with bands at top.
32 For a similar waxy substance in a place where paint has flaked, see no. 11, fig. 2B here; other examples could be given.
33 PM II, 500
34 Twelve feathers outlined in pale blue attached to blue wing-frame. Compare ibid. pl. XI, opp. p. 454; "Unpublished Frescoes" (BSA), cat. nos. 11—15; some connected with birds' tails.
35 PM II, 457, fig. 268, pancratium lily; 464f., fig. 275A, ? convolvulus. The pancratium lily still grows on the sea-coast east of Herakleion.
The connections here with “marine elements” have been exaggerated in the past, and need not be mentioned at all—with the possible exception of the convention by which the “leaves in rocks” were drawn on the lower piece in the illustration in question.

C. A JOIN TO A PAINTING OF MYRTLE SHOOTS

Evans published a restoration of a group of “myrtle shoots” based on five fragments of which painted copies were made by Gilliéron: the leaves in a lighter shade are restored (PM II, 458, fig. 270).

The small fragment in the centre joins the left side of the left-hand fragment in Gilliéron’s restoration (no. 14, pl. IIIe). On the former piece, two stems are clearly visible on the left side, but the lower stem and the tip of a leaf were missed out by Gilliéron. The dado below these stems was entirely restored: the new join shows that the black stripe of the dado had been put at too high a point—from which it may be deduced that the slip in that area was already missing when Gilliéron came to make his painted copy (see pl. IIIe). The piece showing the top of the highest stem also seems to have been copied incorrectly.

The red stem continues towards the edge of that fragment and the topmost leaf must be restored beyond that edge. In addition, a small area of slip, somewhat worn, remains in situ on the upper left side; on it are two small traces of olive-green paint, clearly once belonging to a myrtle leaf. This fragment, therefore, with slip largely missing now, once showed the upper parts of two shoots: but there seems to have been a third.

The lowest piece of slip, in situ on the lower right of the same fragment, bears parts of two leaves. The left-hand leaf in all probability would once have passed across the right-hand stem, so indicating that the leaf in question would have belonged to a third shoot to the left of the surviving stem. The slip is now missing in the place where the stem of our third shoot could be expected, but at that point on the uncovered main body of plaster there is an orange line which curves upwards to the right as far as the top edge of the fragment. This line, once hidden from sight by the fine

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36 For a photograph, see “Painted Signs: HOF” (Kadmos)
37 As on an unpublished fragment of a myrtle fresco from the Royal Road Excavations, leaves on the present myrtle fragment overlap stems (e. g. top right of no. 14 and on upper left of largest fragment in fig. 6 here).
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slip, seems to belong to a "preliminary sketch" indicating the general positions where the main stems of the plant were eventually to be painted (on top of the slip)\textsuperscript{a}. Our left-hand leaf, when restored, meets the orange line. These features may therefore be taken to indicate the original presence of a third stem or shoot on the one fragment, which consequently does not fit in where Gilliéron has put it. It is safer to consider that this piece belongs to an "extra" series of myrtle shoots.

Restoration

A tentative restoration is put forward in fig. 6. The new join and the evidence for more shoots has suggested a more compact and so less formal arrangement of the elements of the plant than that made by Gilliéron. As here restored, the composition measures 45 by 29.5 cm; the tallest shoot is 23.6 cm above the dado which may have reached not less than 19.5 cm below the pictorial frieze, as is the case on an unpublished fragment in HM tray 179 Epsilon IX.

Part II: Miniature Paintings

A. An Addition to the "Sacred Dance and Grove" Fresco

(AIII, plate XVIII, opp. p. 67)

A small fragment shows parts of the heads of three women who face to the left towards four horizontal and parallel lines (no. 15, pl. IVc, and fig. 7A). There is a minute area of sky-blue paint in the region of the ear of the lower right-hand woman; above her, a neighbour wears what appears to be an orange-yellow necklace or hem of a blouse.

This piece joins the top left side of the fragment showing the left-hand olive tree in the "Sacred Dance and Grove" fresco; the trace of blue paint is part of the edge of the blue ground on which the branches of that tree were painted. A drawing of this part of the composition is given in fig. 8. The addition entails minor alterations to the existing restoration\textsuperscript{b}.

Vertical parallel lines (impressed string-marks) on the left side of the "panel" have hitherto been made to continue up the whole of the left side, as if the lines indicated vertical plain bands or

\textsuperscript{a} Further on method of painting, see "Painted Signs: IIOP" (Kadmos).

\textsuperscript{b} HM Cat. no. 9. I was unable to discover whether nearby pieces set into the panel might join the new addition.
stripes which terminated that side of the composition\textsuperscript{40}; but it is not in fact certain whether the scene ended here. The horizontal lines on the new piece, perhaps parts of as many as seven "courses of masonry"\textsuperscript{41}, prevent the continuation of all but the innermost vertical line (see fig. 8). It is possible that some architectural feature may have been depicted to the left of the existing restoration.

\textsuperscript{40} Not present in PM III, pl. XVIII

\textsuperscript{41} Compare ibid. pl. XVI (p. 45, note 2); 47, fig. 28; 62—64 with fig. 36 and p. 63f., note 1
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in a continuation of the scene; the women may have been watching something within or beyond such a structure. The discovery of further joins here would clarify the significance of the lines in question, and would perhaps show whether or not the scene continued further to the left than has hitherto been supposed.

B. ADDITIONS TO THE "MINIATURE WARRIORS"
(PM III, 82f. figs. 45 and 46)

Evans published three fragments showing men holding yellow spears or sticks in their hands. He mentioned that two pieces of the scene were missing; these have now turned up.

The larger piece (no. 16, pl. IVd, centre, and fig. 7B) had already been located and joined to the fragment seen in PM III, 82, fig. 45a before I began my study of Knossian frescoes. In the blue field of this fragment is a black undulating band which recalls similar bands in different colours in the field of the "Spectators" fragment, also in miniature. The smaller piece (no. 17, pl. IVd, left, and fig. 7C) was located by me in 1963 in an unnumbered tray in the fresco store-room of the Herakleion Museum. It bears the head and five arms of miniature "warriors"; the fragment does not appear to join another of the group, all of which are now on display (HM, Room K, case 174).

The photograph reproduced in pl. IVd was taken before I had the opportunity to study the pieces: their order there (my arrangement) is clearly incorrect. The larger of the two left-hand fragments (PM III, 82, fig. 45b) may be placed to the right of the main group of men (ibid. fig. 45a, with new addition).

Part III:
A Supplement to "An Addition to 'La Parisienne'"

In 1964, a fresco fragment, previously unknown, was found to join that showing "La Parisienne". The addition is the subject of

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42 Miniature figures watching spectacles beyond, inside or from within architectural surroundings: "Spectators" fragment, PM I, 527, fig. 384, and PM III, 33, fig. 15B; women in building, ibid. 84, fig. 47, and 86, fig. 48d, e; in casements, PM II 602, fig. 375; man watching woman on balcony, PM III, 89, fig. 35

43 PM III, 89, note 8

44 BSA 6, 1899/1900, 48. Located in tray P III, HM Cat. no. 63. Colour illustrations of PM III, 82, fig. 45a and b in Knossian Atlas, pl. IV, fig. 1 and 2 (forthcoming).

45 Refs. under note 42 above

46 Below tray 169 on north side of fresco store-room, together with no. 15.

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a forthcoming article which also contains a review of work previously carried out by Evans and Platon on the "Camp Stool" fresco; "La Parisienne" evidently belongs to the same composition.

Three of the main objections raised by Platon to Evans's partial restoration of the "Camp Stool" fresco may be summed up as follows:

1. The arrangement of male figures as seated opposite one another was based on insufficient evidence.
2. The arrangement was unparalleled in Minoan or Mycenaean art.
3. The composition of the scene is aesthetically disrupted by such an arrangement of seated figures.

For these and other reasons, Platon rejected Evans's restoration and proposed a new one. However, it has been suggested that Evans's restoration may not have been so wide of the mark as Platon claimed, and that Platon's restoration may be held to be mistaken in the light of the new addition and for other reasons. New evidence from Pylos lends weight to that opinion.

In a clear reference to Evans's restoration of the "Camp Stool" fresco, Mrs. E. Vermeule has remarked that a genre scene on a wall painting from Pylos shows figures likewise sitting knee to knee. Further, in 1965, Dr. Mabel Lang kindly showed me a fresco fragment from such a scene; her publication of the material will undoubtedly throw light on problems concerning the restoration of the "Camp Stool" fresco from Knossos.

Addendum: a waterfall in the buff section of the enlarged "Monkey Panel"?

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47 Kretika Chronika IH' (vol. 18, 1964), 38—53. (The scale of pl. A', 2 is under $1/_{3}$ actual size (28.15 cm), not "about $1/_{4}$" as stated).
48 PM IV, 379—396
49 Kretika Chronika II', 1959, 319—345
50 Ibid. 324—328; (ibid. IH', 1964, 45)
51 Platon, op. cit. 322, 324 for convincing technical objections. Against myself (ibid. IH', 1964, 40 and 46f.), Evans was in fact aware of the existence of a "second" Parisienne, as drawings for restoration of that figure show; thanks are due to the Keeper at the Ashmolean Museum for permission to study Evans's fresco papers, and to Mr. H. Catling and Mrs. A. Brown for their assistance.
52 Platon, op. cit., IH' opp. p. 336; mounted in gypsum panel
53 Cameron, op. cit., IH' 47—51
54 Greece in the Bronze Age, 1964, 189
55 I should like to thank Dr. Lang for showing me fresco material from Pylos, now kept in the Chora Museum.
Quite unwittingly, I have omitted to mention above an unpublished fragment made up from two pieces, from HM tray 175 Epsilon V and tray 185 Epsilon XV.

It shows a blue column of water with blue drops at its sides, and white dashes along the inner edges; such features appear on the main waterfall too (PM III, pl. XXII, and fig. 5 here), but the present example is depicted against a buff-yellow ground and so may belong to the left-hand section of the enlarged "Monkey Panel". The blue water from this waterfall is more probably to be understood as flowing down to the roots of the papyrus clump in that section of the composition, than that from the waterfall against a white ground (as suggested, pp. 56 and 62 above).

CATALOGUE OF MATERIAL

From "House of the Frescoes": nos. 1—14.

General features: fragile, slip flaked in places; depth of plaster varies, usually between 0.3 and 1.0 (all measurements in cm). Plaster medium grained, crumbling at edges, light sandy-colour. Slip much whiter, usually 0.5—1.0 millimetres in depth. Pieces lifted from deposit with gypsum paste at backs and edges of fragments (noted here as "gb"). White ground is unpainted. Nos. 1—7 added to Gilliéron’s panel (PM II, fig. 264) by Phanourakis and Caravella; drawings and measurements of these pieces taken from enlarged panel, (approximately 1.9 metres in length). HOF frescoes evidently on wall with smoothed surface: PM II, 444f. HM = Herakleion Museum.

1. Right hand of monkey clutching stem of papyrus on white ground, pl. IIa and b, fig. 1A. 14.9 x 11.7.

Sky-blue hand with three black lines defining fingers. Seven green, leafless stems radiating from four blue leaves at base of plant. Slip missing on both sides of blue leaves. Added by Phanourakis and Caravella to blue monkey of PM II, fig. 264.

2. Blue tail of monkey, with light rusty-brown, leafy stems of papyrus on white ground, pl. IIa and c, and fig. 1B. In 1963, in HM tray Beta II but with label "189 HOF 20". 9.4 x 6.8.

Tail 1.0 in width, max. extant length 5.9. Red area on left side of fragment between plant stems, of uncertain significance — possibly rockwork. Tail: compare PM II, 451, fig. 264. Reeds: compare, ibid. loc. cit. blue rushes. Belongs with nos. 5 and 8 below, but on which side of papyrus clump is uncertain.
3. Blue head of monkey on white ground, muzzle and eye here restored, pl. IIa and fig. 1C. 9.0 × 7.7.
   Black line above ear; white band across forehead, and black triangular shape above eye, around which traces of light rusty-brown paint. A few blue spots detectable on muzzle. Compare: PM II, pl. X. opp. p. 447; loc. cit. fig. 262; ibid. 451, fig. 264.

4. Undulating pale blue band vertically dividing buff-yellow area on right from pale blue-green area on left, pl. IIa and fig. 2A. HM tray 175 Epsilon V, HOF. 11.7 × 11.5.
   Black and red blobs on blue band. To left, white area then damaged area (slip and paints worn), then pale blue-green, with? 5 or more white pebbles with sky-blue and black veinings. Placed on left side of new, buff section of enlarged panel. Buff paint underlies blue band and continues below blue-green area.

5. Parts of six or seven sky-blue papyrus flowers on white ground, pl. IIa and d, and fig. 3, upper fragment. HM tray 175 Epsilon V, HOF. 20.5 × 14.5.
   Black and red spots in rows on orange inflorescence; pale blue "sepal" with occasional black outlines. Orange "calyx" (in fact leaves). Stems light rusty-brown on white. Pale blue line between stem and leaf of second large papyrus head from left. Above, 13 stripes extant, in ascending order: white, red and yellow, white, black and blue. Slip flaked on right side of fragment.
   stem: no. 2 above and no. 8 below; PM II, 451, fig. 264, and 465, fig. 275 J, (no. 8).
   border stripes: PM II, pl. X, opp. p. 447; ibid. 451, fig. 264, and sequence of stripes in ibid., Supplementary Plate XX, B—D, and F.

6. Parts of four sky-blue papyrus flowers on buff-yellow ground, pl. IIa, and fig. 4, upper large fragment. 16.8 × 12.7.
   Inflorescence orange with black and white spots in rows; "sepal" white with black outlines. Sequence of stripes as no. 5 above, with comparisons. PM II, 477, fig. 285A, evidently from this fragment.
Notes on some new Joins and Additions to well known Frescoes

7. Papyrus flower (as on no. 6 above) on buff-yellow and pale blue-green areas, pl. II a, and fig. 4, top left. 8.2 x 4.3.
   Compare nos. 6, and 5 above (where comparisons noted).

8. Seven light rusty-brown, leafy stems of papyrus on white ground, pl. IIIc, and fig. 8, lower fragment. HM tray 175 Epsilon V, (HOF) 1 joining 4, joining three pieces from tray 196 Zeta IV, HOF. As squared, 14.6 x 10.5 x 0.6, gb.
   Sky-blue curved area at bottom left. Pale blue line between stem and leaf on top left stem. Slightly buckled, much broken in centre where areas of slip now missing. HM 175 E V, 1 previously published: PM II, 465, fig. 275 J; ibid., 469, mentioned as “grasses”; in colour, E. J. Forsdyke, Minoan Art, 1929, Frontispiece b. Comparisons under no. 5 above.

9. Six or seven papyrus stems of same type and colour as on nos. 5 and 8 above and no. 10 below, over buff-yellow, pale blue-green, and sky-blue areas, pl. IIIa, and fig. 4, large, centre. HM 175 Epsilon V (HOF) 2 joining 3 (by 3 mm of plaster: verified by HM technicians). Diagonally, 16.6 x 11.2 x 0.55, gb.
   Slip missing in centre of left-hand piece. No rockwork markings on pale blue-green or sky-blue areas. See no. 5 above for floral comparisons; colours of field as no. 7 above.

10. Top of stem with “calyx”, colours as nos. 5, 8, and 9 above, on buff-yellow field, pl. IIIb, and fig. 4, small, upper centre. HM tray 196 Zeta IV, HOF (which produced additions to no. 8 above). 2.6 x 2.0 x 0.55, no gb, flat back. Small area of white and minute black mark within “calyx”. Associated with no. 9 above. “Calyx”: compare those on no. 5 above, but perhaps of different overall shape (as restored in fig. 4).

11. “Base” of blue “jet-d’eau” above light grey and pale blue rockwork with black markings, pl. III d, and fig. 2 B. HM tray 127 Alpha XVI, 5 “Ohne Angabe” but certainly HOF: = PM II, 460 f, fig. 272, lowest fragment, joining tray 185 Epsilon XV, 2 (HOF). 10.5 x 11.4 x 0.6, gb (the join is in the gypsum backing).
   Dark waxy stain at top left below surface where paint missing: — a later accretion, as is large dark blob, hitherto thought to be paint, on PM II, 501, fig. 305 top left. Traces of orange lines, as if for “preliminary sketch”, on surface of slip: slip missing in places, and some areas of paint worn.

12. Three joining pieces of blue “jet d’eau”, bordered with blue drops of water on white field, pl. IV a, and fig. 5 lower frag-
ment. HM tray 127 Alpha XVI ("Ohne Angabe", but certainly HOF) 2 joining 3 joining 6. As squared, 17.8 x 10.8 x 0.5 to 1.05 max. Two larger pieces: PM II, 461, fig. 272 and PM III, pl. XXII, opp. p. 254, in colour.

Two slips: (1) upper bearing "jet d’eau", final painting; (2) lower of? coarser but powdery texture, bearing orange lines of "preliminary sketch" for "jet d’eau": visible on two lower pieces only. Both slips above main body of plaster, and much flaked on left lower side. Compare central fragment with Evans’s lower piece in PM III, pl. XXII where more slip is evident. Associated with no. 13 below; compare with no. 11 above, which lacks spots of water at sides of "column".

13. Two joining pieces of "jet d’eau", with grey rockwork on right, pl. IVb, and fig. 5, upper fragment. HM tray 127 Alpha XVI ("Ohne Angabe" = HOF) 1 published: PM II, 461, fig. 272, large, top fragment (and PM III, pl. XXII, top piece, with much more slip preserved: it has now flaked away); joining HM tray 185 Epsilon XV (HOF) 1, linked by 1.0 original plaster. The join appears unconvincing at first sight because the larger piece is badly buckled, making a flat alignment of the two pieces difficult: but join verified by HM technicians. As squared, 22.0 x 14.7 x 0.9 to at least 1.25 (gb) at right edge where impression in cross-section of plaster from vertical architectural feature against which plaster abutted. Thin creamy-white, slightly undulating, stripe at right edge: applied over grey paint — both worn and flaked. Two pieces of white slip in situ in centre of larger piece. No rose-pink visible.

On small addition, paints and impressed right edge better preserved; undulating grey area of rockwork on right (cf. PM II, 461); compare grey rockwork on no. 11 above. Three separated and two joined spots of blue water, some on rockwork.

14. Two joining fragments with olive-green leaves on red stems of myrtle plant against white ground, above rich rusty-brown dado with black stripe, pl. IIIe, fig. 6, left. Previously published PM II, 458, fig. 270, (HOF); located in unlabelled tray on east side of fresco store-room. As squared, 16.4 x 11.7 x about 0.7, gb.

Parts of five stems visible; the third, in centre, follows line of join. Much slip flaked, especially in area immediately above dado. Compare: PM II, fig. 270, other pieces of same group: (fig. 6, restoration). "Partridge" frieze, Knossos: PM II (Part I),
Frontispiece, and 112, fig. 51; 115, figs. 52, 54. “Seated Goddess” fresco, Hagia Triada: W. S. Smith, Interconnections in the Ancient Near East, 1965, fig. 106: LM I B or earlier (for associated objects, see summary: Kadmos 4, 1965, 8: under ‘find-place’ and ‘date’). A myrtle fresco, of superb technical standard, came from the Royal Road Excavations at Knossos: as yet unpublished, and provisionally considered to belong to MM III B. For a brief mention of the technique, see Kadmos, ibid. 14 note 9.

Miniature paintings: 15—17.

Indented backs of fragments and irregular depths of plaster suggest once attached to rubble or rubble and mud wall.

15. Three heads of women in left profile on unpainted ground, with “courses of masonry” (string impressions and black painted lines) on left, pl. IVc, and fig. 7A. HM unlabelled tray below tray 169 on north side of fresco store-room (with no. 17 below). As squared, $3.3 \times 3.9 \times 1.7$ max.

Heads in black with orange line at neck of one figure. Minute area of blue paint in region of ear of lower right-hand woman. Fragment joins left side of left-hand olive tree of “Sacred Dance and Grove” fresco: PM III, pl. XVIII. Blue trace clearly part of background of tree, (fig. 8 here: restoration).

Found by Evans, probably in “Room of Spiral Cornice and Miniature Frescoes”: BSA 6, 1899/1900, 44, and PM III, 30—32.

16. Row of eleven red arms and two heads of “warrior” men, holding spears or sticks: in blue field with undulating black band above (here copied from photograph only), pl. IVd, and fig. 7B. HM Cat. No. 63: located in tray P III. Joined to PM III, 82, fig. 45a (reported missing, ibid. 82, note 3). As squared, $8.1 \times 6.0 \times 1.8$, gb.

Black and red paints overlie blue; spots of white, paste-like paint applied above red for eyes and wrist-bands. Spears yellow, difficult to see clearly, for reasons stated in PM III, 82, note 3. Compare standing men and boys in “Sacred Dance and Grove” fresco (ibid., pl. XVIII), probably by same painter’s hand. Evidently found in same room as nos. 15 and 17 here: (PM III, 30—32, 81—83).

17. Five arms and one head of “warrior” (technique and provenance as nos. 15 and 16 above), pl. IVd, and fig. 7C. As squared, $2.9 \times 2.2 \times 1.2$ max. From same tray as no. 15 above.
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Tafel I—XXVIII
I. Introduction

The excavation of the 'House of the Frescoes', discovered in 1923 by Sir Arthur Evans to the north-west of the Palace at Knossos, revealed a large deposit of fresco fragments from floral and faunal compositions in Room E on the ground floor. From the broken pieces Evans's Swiss draughtsman, E. Gilliéron fils, was able to reconstruct three 'panels': these show a blue monkey on a red background in a rocky and floral setting (PM II, pl. x, opp. p. 447; here called 'panel A'); a blue monkey on an unpainted white ground in a papyrus thicket (ibid. 451, fig. 264, here 'panel B'); and a blue bird perched on a rocky outcrop surrounded by wild flowers (ibid., pl. xi, opp. p. 454, here 'panel C'). Evans thought panels A and B in particular contained Nilotic elements, and he suggested that the monkeys might have been depicted as hunting for birds' eggs, possibly of waterfowl. In addition, Evans published designs for the restoration of pancratium lily, myrtle and 'jet d'eau' compositions, and illustrations of fragments showing the head of a third monkey and part of a second 'jet d'eau'.

The 'House of the Frescoes' was constructed after the earthquake at the end of M.M. IIIB and was destroyed in L.M. IA, as shown by pottery of that period on the floors of the house. The paintings therefore belonged to a single period of occupation, and evidently formed in some way a unified system of decoration 'in the same style, by the same hands and executed at the same time'.

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1 PM II. 451-57 (434, fig. 251, for plan of house).
2 Ibid. 447-50.
3 Ibid. 446.
4 Ibid. 435-8.
5 Ibid. 446.
In the spring of 1966, Messrs. T. Phanourakis and A. Caravella were able to extend Gilliéron's panel B to over twice its length by adding on to it two new sections, one to the left, the other to the right of the monkey in the papyrus thicket. The new left-hand section contains a group of papyrus flowers on a buff ground; another monkey in a papyrus thicket is now to be seen in the new right-hand section. Further, Phanourakis and Caravella identified a fragment belonging to the monkey reconstructed by Gilliéron (which is now in the centre of the enlarged panel): it shows the stem of a papyrus in the monkey's clenched hand. In the summer of the same year, however, further additions were recognized which entail changes to the reconstruction and restoration of both the new sections of the enlarged panel B, and new joins were found to both the 'jet d’eau' compositions, depicting waterfalls, and to the group of myrtle fragments.

The main purpose of the present study is to put forward tentative restorations of the majority of the fresco pieces from this house, in the light of some fifty fragments previously unpublished, and to attempt an answer to the question: what are the monkeys doing in these paintings?

**Abbreviations**

AM: Ashmolean Museum.


CMS: Corpus der minoischen und mykenischen Siegel, Band I: Athen (Berlin, 1964).

Europa (MC): Europa: Studien zur Geschichte und Epigraphik der frühen Ägäis (Festschrift for Professor Ernst Grumach), M. A. S. Cameron, "Notes on some new joins and additions to well-known frescoes from Knossos".

Frauenfries: H. Reusch, Die zeichnerische Rekonstruktion des Frauenfrieses im Boiotischen Theben (Berlin, 1956).

HM: Herakleion Museum.

HT: Hagia Triadha.


KChr: Κούρσκα Χρώμια.


Phylakopi: JHS, Supplementary Paper No. 4.

Tiryn I: G. Rodenwaldt, Tiryn I: Die Fresken des Palastes (Berlin, 1912).

**Acknowledgements**

Thanks are due to the Committee of the British School of Archaeology at Athens and its Director, Mr. A. H. S. Megaw, for permission to study and publish fresco material from the excavations of Sir Arthur Evans at Knossos; to Dr. S. Alexiou, Director of the Herakleion Museum, for permission to study material in his charge and for putting at the author's disposal the services of the technicians of the Museum; to the Keeper of the Department of Antiquities at the Ashmolean Museum, Mr. R. W. Hamilton, for permission to study Evans's papers and the painted copies of Knossian frescoes executed by Messrs. Gilliéron, père and fils, and to Mr. H. W. Culling and Mrs. A. Brown for their assistance; to Dr. J. H. Crook and particularly Dr. J. S. Garland (University of Bristol) for information on cercopithecid monkeys.

Mr. A. H. S. Megaw, and Miss M. A. V. Gill (University of Newcastle upon Tyne), suggested many improvements to this article, initially drafted at the University of Liverpool and completed during tenure of a Sir James Knott Fellowship at the University of Newcastle upon Tyne. Special thanks are due to both universities for research awards, and to the Committee of the British School at Athens for undertaking the expense of the two Colour Plates accompanying this article. Mr. G. Xylouris kindly provided the photographs reproduced in Plates 4, 2–3, and 5, 1–2. The originals of the Colour Plates are pencil-coloured photocopies of line drawings of the original fresco pieces. The photographic illustrations are not to scale, and the colour-key for the line drawings does not apply to the large restoration reproduced as fig. 13, where the linear hatching denotes changes in colours, not the colours themselves.

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6 Europa (MC), pl. iia; compare PM II. 451, fig. 264.
7 Europa (MC), no. 1, pl. iib, and fig. 12.
8 Ibid., nos. 8–10, pl. iii–iv, and figs. 3–4.
9 Ibid., nos. 11–14, pls. iii–iv, iva–b, and figs. 2b, 5, and 6.
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

II. Technique

The chief stages of the painting process adopted for these compositions were as follows:\(^{10}\) (1) the application of some form of primary plaster (now missing) to the bare walls; (2) the application, over the primary plaster, of the main body of lime plaster on which the floral and faunal scenes were eventually painted; (3) the planning of the composition with rough 'preliminary sketches' or marks in orange paint; (4) the application of a thin, opaque slip of lime plaster which concealed the painted marks of stage 3 from view; (5) the painting on the slip of the pictorial scenes, and polishing.

The paints of stage 5 neither sink into nor stain the surface of the main body of lime plaster, but hold only to the very thin slip (0.5–1.0 mm. in depth) which, being of lime too, is porous.

The tenacity with which the paints on the present fragments hold to the lime slip may be sufficiently accounted for by (1) the porosity of the slip, by (2) the admixture of lime in the paints too: lime binds to lime; or possibly by (3) the presence of some other binding agent in the paints: painting in 'tempera' or 'fresco secco' seems indicated. An unpublished fragment showing a clump of crocus flowers does suggest that the paintings may have been executed whilst the slip was (in some places) still damp and malleable,\(^{11}\) as is necessary in the practice of the 'buon fresco' technique, one characteristic feature of which is the substantial penetration of paints into the plaster: but on this example impressions in the shapes of the flowers remain in the slip, whereas the paints themselves have fallen or worn away, indicating that the painting process is on this account doubtfully to be classified as true or 'buon' fresco.\(^{12}\)

Areas of slip have flaked from many fragments, exposing to view the surface of the main body of plaster with its orange lines as it would have appeared to the Minoan painters during stages 2 and 3. The extent to which the painted slip is missing now makes determination of subjects or details on many pieces problematical.

III. The Unpublished Material

(a) Heads of monkeys: nos.1–3 (colour plate A i and 2; plate 1, 1–2 and fig. 1a–b)

Three pieces show parts of the heads of three blue monkeys similar in scale and execution to heads of three other monkeys on frescoes already published from this house.\(^{11}\) A white band crosses the forehead to the ear, which is trefoil in shape and painted in 'lilac pink' with a wide black outline; rusty-coloured bands appear on the upper part of the muzzle, and on the lower jaw and cheek are seen black and blue whiskers; the eye is depicted in the same rust paint, the iris denoted by a black spot.

The eye of the monkey represented by no. 3, however, may have been surrounded by blue bands; in the region of the same animal's mouth is a curved orange area with a thin black line in contour above it (colour plate A 2). The suggestion that this animal may have been eating something will be discussed below after consideration of other points arising from the paintings as a whole.

There is now evidence for six monkeys, their heads all in right profile, the similar colouring of which suggests animals of the same species: *Cercopithecus callitrichus* (a synonym for *C.

\(^{10}\) For a brief account of the painting process, see Cameron 'The painted signs on fresco fragments from the "House of the Frescoes"'; \(^{11}\) Kadmos vii. 1 (1968).

\(^{11}\) In HM tray 162, Gamma VII 'Ohne Angabe der Fundstelle' (but certainly HOF).

\(^{12}\) For a description of this process as used in Renaissance times, see W. G. Constable, *The Painter's Workshop* (1954) 62. The word 'fresco' is retained throughout the present article since it has become the normal term of reference to Minoan wall paintings.

\(^{13}\) PM II, pl. x (panel A); ibid., fig. 264 (panel B); *Europa* (MC), no. 3, fig. 1c.
Fig. 1. (a-e) Monkey Fragments; (f) Bird's Neck Fragment
sabbaeus) according to Evans; but the representation of a white band on the forehead and indication of side-whiskers, absent on C. sabbaeus, points either to C. aethiops aethiops (Ethiopia) or to C. aethiops tantalus (south of the Sahara to Chad and Central West Africa) as the animal depicted on our frescoes.

(b) Tails of monkeys: nos. 4–5

The blue tail of a monkey appears among branches of a rose-bush, above blue rockwork and red crocus flowers, on no. 4 (COLOUR PLATE A 3). The direction of the tail suggests this animal was in left profile: but if one of the fragments showing a monkey’s head in right profile belonged to the same animal, it must have been looking over its shoulder. The tip of another monkey’s tail, perhaps that of the animal clutching papyrus stems (PM II. 451, fig. 264), can be made out on a badly damaged fragment of which a sketch is given in FIG. 1c (no. 5).

(c) Other parts of monkeys: no. 6–7

The stomachs, outlined with small diagonal blue dashes, and parts of the arms and legs of two blue monkeys in right profile are depicted on the pieces shown in PLATE 1, 3–4 and FIG. 1d–e. The limbs of the animal on the larger piece (no. 6) are positioned more closely together than are those of the monkey clutching papyrus stems (ibid., fig. 264: panel B); our monkey may have been depicted in an even more hunched posture.

(d) Heads and bodies of ‘blue birds’: nos. 8, 9, 21, and 22

Only two heads of ‘blue birds’ have as yet been identified, one in left profile on an unpainted ground (no. 8, COLOUR PLATE A 4), the other belonging to a bird flying to the left on a red background: the head of this bird is more fully preserved than the other, noticeable features being a white spot at the nostril, a curved black beak, and the eye in red and yellow (no. 21, COLOUR PLATE A 5; see too FIG. 3g, after Gilliéron). Around the necks of the ‘blue birds’ are collars of three or four rows of lilac-pink spots, as seen on nos. 9, 21, and 22 (PLATE 1, 5 and FIG 1f; COLOUR PLATE A 5, and B 1, respectively) and on the neck of the bird in panel C. The heads and bodies of the birds are in the same vivid blue paint.

(e) Wings of ‘blue birds’: nos. 10–14 and 22

Pale blue wing-feathers, up to twelve or thirteen in number, are depicted on an unpainted ground on four fragments, nos. 10-13 (PLATE 2, 1, 2, 4, 5 and FIG. 2a–d). The wing-tip of another bird shows light grey feathers with black outlines (no. 14, PLATE 2, 3 and FIG. 2e). The wings of ‘blue birds’ on red grounds, however, were painted light blue, to judge by no. 21 with a bird flying to the left (COLOUR PLATE A 5) and by no. 22 on which a bird is shown, in left profile, standing or seated with folded wings (COLOUR PLATE B 1).

On no. 13 can be seen part of a red stripe belonging to the upper border of a frieze; below the stripe appears the wing-tip of a ‘blue bird’ flying to the right. Represented to the lower left side of the same piece is part of the black tip of the same bird’s tail (compare nos. 15–20).

(f) Tails of ‘blue birds’: nos. 15–20 (PLATES 3, 1–5, and 4, 1; FIG. 3a–f)

The tails of flying ‘blue birds’ are ‘fan-shaped’, originally with from six to eight vivid blue feathers individually defined by thin black lines; a characteristic feature of these tails is a wide black terminal bar.

14 PM II. 448.
15 This fragment served as a model for the restored head of the bird in panel C (PM II. 454).
16 Thanks are due to Dr. J. S. Gartlan, who has made a special study of cercopithecid monkeys, for this information.
FIG. 2. WINGS OF 'BLUE BIRDS'
Four of the tail fragments show in addition what appears to be a 'white feather' defined by a black line (nos. 15, 16, 18, and 20). On comparison with a later fresco from Pylos, which shows two 'blue birds' flying to the left (reference in Catalogue, no. 15), such white feathers seem to belong only to that side of the tail nearest the top of the picture frieze; if this is generally so, the birds to which the four present fragments belonged must have been depicted as flying to the right. Evidence in support of this conclusion may be adduced from no. 17 (PLATE 3, FIG. 3). This piece shows the 'lower' part of a blue bird's tail—apparently not fully spread—below which are two grey objects, perhaps trailing feathers, that meet the underside of the bird's body at a point below the rump. Similar objects feature on the birds flying to the left on the Pylos fresco; but in the present case the grey feathers face the opposite way, indicating that our bird is moving to the right. No 'white feather' is attached to the 'lower' side of this tail; thus the 'white feathers' of nos. 15, 16, 18, and 20 belong to the 'upper' side of the tails of birds flying to the right.
The four pieces just mentioned and no. 13 (FIG. 2d) clearly belong to five different ‘blue birds’, all flying in right profile on unpainted grounds. The two birds on nos. 21 and 22 are in left profile on red grounds, and that in panel C is perched in a frontal position on an unpainted ground: to this bird may belong no. 8 showing part of a ‘blue bird’s’ head in left profile, also on an unpainted ground. We thus have evidence for eight birds, and three or four more may once have been represented on our frescoes: one flying perhaps to the left over red and white background colours (no. 10), another with grey wings (no. 14), and another possibly fluttering to the right (no. 17).

The ‘blue birds’ are approximately the same in size and are clearly of the same species. Evans thought they were ‘rollers’ (Coracias garrulus) and dismissed the speckling of their collars as an unwarranted feature (PM II. 454). But that feature, the white spot at the nostril, the wide ‘fan’ tail with characteristic black terminal bar, the short powerful wings and the colouring of the eye certainly indicate some kind of pigeon or dove, perhaps a relative of the ‘rock-dove’ (Columba livia), as the bird seen on our frescoes.

(g) ‘Birds’ nest’ fragments: nos. 23–6 (COLOUR PLATE B –; PLATE 4, 2–4; and FIG. 3b–i)

The shape and colouring of the cup-like objects seen on these four pieces, from the same fresco deposit as the bird fragments, suggest that nests are represented. If so, the circular orange objects portrayed inside and outside the nests must be eggs. Each nest seems capable of holding only two eggs.

Some support for this interpretation may be found in the picture of a nest (with griffin chicks!) on a L.H. IIIC pot from Lefkandi where one detail, a wavy line crossing the middle of the nest, bears a point of resemblance to the ragged rims of the nests on the present fragments. All these examples are treated very summarily: so, too, the red cup-like nests of mallard-like birds seen on a wall painting in the Tomb of Nacht at Thebes in Egypt (mid-XVIIIth Dynasty), the nests there containing a clutch of two eggs only.

If, as it seems, only one type of bird is present on our frescoes, it is reasonable to assume on a priori grounds that the nests are those of the doves. In average size the nests match the birds: the dove perched in a frontal position on panel C could fit comfortably inside one of the nests.

One might perhaps have expected a more naturalistic representation both of the doves’ nests, invariably a mere platform of twigs, and of their eggs which in reality are white and ovoid. But the inaccuracies in realism here need not disturb us unduly: the artists who executed the frieze in the Caravanserai at Knossos did not paint the rock-partridges and hoopoe in their true colours, and Egyptian, Mycenaean, and Geometric representations of nests are much the same in over-all shape—whatever the birds or creatures which accompany them. The correctness of the ‘nest’ interpretation is therefore assumed in the discussion which follows.

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18 The heads of other birds in left profile all may have been painted on red grounds (nos. 10, 21, 22) and the remaining birds for which there is certain evidence all appear to have been flying to the right, except for the bird in panel C whose head, on a white ground here, was probably depicted in left profile as indicated by its surviving shoulder and wing fragments.

19 That the wing-tip on no. 14 is represented in grey and black paints need not signify a different species of bird: the scale and conventions of brushwork match those features on other ‘wing fragments’ of ‘blue birds’ seen against a white background, and the colours on the present fragment seem from a realistic point of view more appropriate than bright blue, if, as is suggested, the birds on our frescoes are akin to the ‘rock-dove’. Moreover, the colour variations of Columbidae are considerable, no doubt because the wild sub-species and domesticated or semi-domesticated doves often interbreed.

20 References to this and other comparative objects cited here are given in the Catalogue (no. 23).

21 Measurements of the nests and bird support this conclusion.

22 PM II. 110 f. and Frontispiece (in colour).
(h) 'Agrimi' fragments: nos. 27-8 (PLATE 4, 5-6 and FIG. 4a-b)

These pieces show the black horns of two animals. The head of one animal, of which only the tips of its horns are known, was in right profile (no. 27); but that of the other, of which part of one horn is alone preserved, faced in the opposite direction (no. 28). The protuberances clearly denoted at the front of the horns are characteristic of the horns of the wild goat (Capra aegagrus) or of ibex (see comparisons listed under no. 27 in the Catalogue). That our animals may be identified with the Cretan wild goat seems preferable: the 'agrimi' was until recently common on the island. A few still survive, but on the island of Dia to the north-east of Hera-kleon.

The technical character of the slip on these two fragments seems best compared with that of no. 46 (PLATE 7, 5 and FIG. 7f), belonging to the same frieze or panel as the largest crocus fragment (PM II. 459, fig. 271).

23 The significance of the thin black line to the left of the horn (fig. 4b) is unknown.
FIG. 5. (a) Bush of Ivy growing from Blue Rockwork; (b) Shrub
(i) A waterfall fragment: no. 29 (Plate 5, 6 and Fig. 4c)

A bright blue ‘jet d’eau’ with white dashes at each side, comparable to the well known ‘Fountain Fresco’, is here depicted on a buff ground. It has been suggested elsewhere that such columns of water denote waterfalls.

(j) Plant fragments: nos. 30–7

A fine crocus plant with red buds and flowers appears below striated rockwork on no. 30 (Colour Plate B 2). Two other crocus plants, both with pink flowers and buds, can be distinguished by the forms of their red stamens, bifurcated in the one case (no. 32, Plate 5, 2 and Fig. 4e) but not so in the other (no. 31, Plate 5, 1 and Fig. 4d).

A small spray of blue papyrus flowers on a red ground below blue rockwork is seen on no. 33 (Colour Plate B 3). Similar rockwork, outlined by a broad band of white paint and also on a red field, is found on no. 22 (which shows a dove seated or standing in left profile), on no. 48 (Plate 8, 1 and Fig. 8b) whose left-hand edge had evidently once abutted against a vertical architectural feature terminating that side of the composition, and on no. 49 (Plate 8, 2 and Fig. 8c).

An attractive bush of ivy in a setting of blue rockwork is depicted on no. 34 (Plate 5, 3 and Fig. 5a). The leaves, alternately blue and green with rust-coloured ‘waz’ fillings lined with white spots, are attached by rust-coloured stalks to stems in the same colour.

On no. 35 (Plate 6, 1 and Fig. 5b) appears a white-stemmed shrub or bush with alternating yellow and white leaves whose shape and colouring recall the ‘Common Mallow’ (Malva sylvestris L.), abundant in the vicinity of Knossos; but our shrub is also depicted on other fresco fragments from this house (a) with blue, yellow, and greenish-blue leaves on greenish-blue stems, and (b) with pale blue leaves on pale blue stems against a red ground. Towards the centre of the right side of the fragment under discussion is a white elongated object (poorly preserved), possibly the bud of a madonna lily, which may have belonged to the left side of a spray of such flowers, restored in a drawing by Gilliéron (PM II. 455, fig. 266c). To the right of the same group of lilies may be added another flower seen on no. 36 (Plate 5, 4 and Fig. 6a) whose right-hand edge once abutted against a vertical architectural feature terminating the right side of a frieze or panel. If association of nos. 35 and 36 with Gilliéron’s group of lily flowers is acceptable, all once belonged to the right-hand side of a composition.

On no. 37 (Plate 5, 5 and Fig. 6b) appear leaves of a rose-bush, undoubtedly the finest to have survived.

(k) Plant and other fragments from the ‘Crocus Panel’ (PM II. 459, fig. 271); nos. 38–46

The brushwork, paints, and scale of the crocus plants seen on nos. 38–40 (Plate 6, 2–4 and Fig. 6e–e) and of the undulating bands on nos. 41 and 46 (Plate 6, 5 and Fig. 7f; Plate 7, 5 and Fig. 7f) clearly indicate that these five pieces once belonged to the same composition as a very large fragment, published by Evans, which shows crocus plants in a buff field above undulating black, blue, and white bands. Two of the new pieces are of particular interest.

In the buff field of no. 40, very poorly preserved, was once some feature in light grey, pale blue, and black paints—at a guess, perhaps rockwork. In situ in the mutilated field below the undulating coloured bands on the second piece (no. 41) is a small area of painted slip
(encircled in Plate 6, 5) that shows against a pale blue setting parts of two brownish-green leaves of an olive tree, four other pieces of which have also survived (nos. 42–5, Plate 7, 1–4 and

FIG. 6. (a) Madonna Lily; (b) Rose Leaves; (c–e) Crocuses from the 'Crocus Panel'

Fig. 7b–e). Nos. 38–46 may be assigned with confidence to the same painting as the largest crocus fragment, and the two 'agrimi' may have been portrayed in the extensive white field below the central bands of the same composition, for the technical reason already stated (p. 3).
Rockwork and border fragments: nos. 47-52

As mentioned above in connection with floral and rockwork representations, no. 36 (showing a lily flower) belongs to a right-hand vertical border; and no. 48 (with blue rockwork outlined in white on a red ground) belongs to a vertical border on the left. No. 50 (Plate 8, 3 and Fig. 8d), with blue and orange rockwork closely comparable in colours and execution to that on no. 20 (Plate 4, 1 and Fig. 3f), may also have belonged to the left side of a painting: the evidence for a dove, apparently in flight to the right, on no. 20 indicates that the painting continued in the
same direction, consequently leaving only the left side available for the vertical border edge on no. 50. Striped bands are absent at the vertical borders of these paintings, with the one exception of a creamy-white undulating stripe at the vertical edge of the largest surviving waterfall.27

Two examples of the striped bands from the horizontal upper borders are published here. No. 51 (Plate 8, 4 and Fig. 8e) has black, blue, white, red, and yellow stripes in descending order; the same series of stripes appears above the two monkey panels A and B, the stripe immediately above the picture frieze being white. This is missing on the present fragment, which was broken in antiquity. Above its bands, in an area painted in imitation of a wooden beam, can be seen a circular black-painted 'disc'—perhaps a knot or 'eye' in the beam. No. 52, however, represents a composition with a different series of red, yellow, and white upper border bands (Plate 8, 5 and Fig. 8f); on another piece of the same composition the red field below the broad white stripe extends to 22 cm. (HM tray 189, Epsilon XIX), but on both fragments pictorial representation is lacking.

The remaining border piece, no. 47 (Plate 7, 6 and Fig. 8a), shows part of a light rusty-coloured dado-band, probably imitating woodwork, which went below the picture frieze; above this part of the dado, the two different background colours of the field are divided 'vertically' by a blue undulating band, another original part of which can be seen on the left side of the new reconstruction of panel B.28

Six fragments from this house are known which show parts of a grey-black lower dado band, among them nos. 23-6; fragments of the rust-coloured dado, however, are well represented in the trays of unpublished fresco material.

IV. Panels or Continuous Frieze?

(a) The fresco 'stack' (PM II. 444-7) and the original positions of the paintings.

The large deposit of fresco fragments, 3.65 m. in length (north–south) by 1.5 m. broad and 1.0 m. high, was mainly contained in the small space E on the ground floor of the house. The pieces faced upwards or downwards indifferently in several layers—34 in number at one point. Some fragments, described as a fringe of the deposit, extended over the south wall of room E into room F, perhaps, as Evans surmised, because the heap against the south wall of room E had fallen forward on the collapse of the upper part of the masonry. No other pictorial fragments were found elsewhere in the house, apart from one piece of a much later date.29

To account for the formation of the deposit Evans thought the frescoes had been carefully removed by human agency from the walls of rooms in the better-lit upper storey of the house and then stacked in a heap in room E below: the delicate pieces would have been 'pulverised' had they simply been flung down. This account, however, seems open to question.

If the paintings were carefully removed from the walls of several upper rooms, their stacking in room E below must have been carried out equally carefully: the implication is that the upper rooms were still standing at the time. But there must have been some reason for removing the paintings: the question therefore arises as to the sort of damage they may have suffered beforehand. On this point we can only speculate; but whether or not the paintings were 'removed' by human agency, they were broken, in which case there would seem little point in treating them carefully. And why stack them within the house? The normal Minoan and Mycenaean practice

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27 Europa (MC), no. 13, pl. iv, and fig. 5.
28 Ibid., no. 4, pl. iii, and fig. 2a.
29 The 'Captain of the Blacks' fragment, found at a high level in the north-east area of the house (PM II. 755 f., pl. xiii). The height of the fresco stack is given in one of Evans's notebooks (1923/4) in the Knossos Archive at the Ashmolean Museum, Oxford.
Fig. 8. (a) Lower Border Fragment; (b-d) Rockwork; (e-f) Upper Border Stripes
was to throw unwanted fresco debris down the nearest slope or on to the nearest stretch of unused land outside the structures which had once contained the paintings. They could have belonged to a house reoccupied or rebuilt in L.M. IB? Evans seems not to have thought so, as he stated they belonged to the house destroyed in L.M. IA. An alternative explanation of the fresco 'stack', as formed under the circumstances in which the house collapsed, would avoid the difficulties raised by Evans's account, and might suggest some clue as to the original positions of the frescoes.

Evans published a photograph of the deposit which shows a number of fragments, particularly those in the upper layers of the 'stack', resting at a tilted angle alongside the east wall of room E (PM II. 445, fig. 261). The angle of the fragments to that wall suggests that the deposit as a whole had been precipitated into rooms E and F from at least one room, immediately above, on the collapse of the upper storey: this perhaps happened in the following manner.

When the upper part of the house began to collapse, the paintings in one or more decorated rooms above E and F slid in large pieces down the surfaces of the walls they decorated, to crumble into heaps of smaller fragments on the upper floors. These in turn collapsed, throwing the broken paintings into the places and positions in which Evans found them; the north–south partition wall between the lower rooms D and E may have helped to guide most of the fragments into room E. The deposit thus formed could have been protected from other falling debris by wooden beams from the upper floor or roof which lodged themselves on the stumps of the walls of room E. Evans, it is true, did not report any evidence for such beams: but these may have been removed in the subsequent plundering of the house (ibid. 432 f.). In conjunction with this explanation of the formation of the deposit, other considerations must be taken into account, namely, the architecture and importance of rooms on the upper floor (fig. 9).

On the basis of Evans's plan of the ground floor (PM II. 434, fig. 251), the walls of the lower rooms may be assumed to have supported the walls of rooms in the upper storey which would therefore have repeated the ground-floor plan in most details. If Evans rightly located the original site of the staircase in room C, the room above D (on the ground floor) would appear to have been the largest (and most central) upper room, and might therefore be regarded as the 'Main Hall' of the house, to whose walls the majority of the fresco pieces could reasonably be attributed. The present explanation of the collapse of the paintings and of the formation of the deposit as a whole had been precipitated into rooms E and F from at least one room, immediately above, on the collapse of the upper storey: this perhaps happened in the following manner.

The cause of the destruction of the HOF paintings seems best put down to seismic disturbance: firstly movable objects are thrown about (cf. the positions of the decorated pots in room H and of the 'fallen pithos' outside HOF); then walls and floors start to split and wall plaster is shaken down; finally, the main structures of the building collapse. The 'South House' at Knossos suffered some structural damage in L.M. IA, perhaps at the very same time; PM II. 379 f.; and Part VIII below.

30 For example, the 'North Threshing Floor Area' at Knossos; down the north-western scarp at Pylos (AJA livii (1964) 98, and see 96 for pots and other debris similarly dumped); over the west wall of the Palace at Tiryns (frescoes excavated by the late Dr. N. Verdelis).

31 PM II. 436 f.

32 In support of this 'reconstruction' of the collapse and 'stacking' of the paintings from the 'House of the Frescoes', mention must be made of the physical state of some twenty doric late-nineteenth century English houses, some partially gutted by fire, which the present writer visited. In well over half this number, the wall plaster had collapsed in the manner described above into 'stacks' at the bases of the ground-floor walls, the heaps matching in breadth and occasionally in height (but on average 0.5 m.) the size of the deposit in the 'House of the Frescoes'; the average size of the stucco fragments, facing upwards or downwards indifferently, was similar to that of our Minoan pieces (about 23 cm., as squared, according to Evans) and there was a similar ratio of larger and smaller fragments. In about five of these houses (all on the one street), wooden beams from the upper floors and roofs were lodged at an angle on the stumps of the ground-floor walls, protecting the areas at the bases of the walls.

The walls of 'Main Halls' in both palaces and private houses of the period generally seem to have been decorated: cf. the 'Jewel Fresco' and other stucco reliefs from the palace at Knossos; floral and faunal paintings from the upper floors of the South and South-east houses at Knossos; House A at Tylissos (J. W. Graham, The Palaces of Crete (1962) 61); and the reliefs from Pseira (R. B. Seager, Excavations on the Island of Pseira, 11 and 15), to cite a few examples.
of the 'stack' implies, however, that they may once have belonged chiefly to the east end of the Hall, perhaps as a continuous frieze on more than one wall (Fig. 9, Q); but Evans preferred to regard the paintings as a series of panels, for several reasons. These will now be considered.

(b) A review of objections to the concept of a continuous frieze

The foremost of the objections to the concept of a continuous frieze relates to the large number of upper border fragments, showing different series of stripes, found in the one deposit (PM II, Supplementary plate XX, and no. 52). It seems unlikely that they all belonged to the walls of one room only. The border stripes of the 'Crocus Panel' seem incompatible with those of the monkey panels;35 those on another pictorial fragment are again different,16 and the stripes on no. 52 perhaps belonged to yet another pictorial panel.

Most of the differently striped border pieces from this house cannot be shown at present to belong to pictorial panels,37 but they may well have decorated the area between a picture frieze and the ceiling, as Smith has already suggested.18 No. 52, with a monochrome red field, may have belonged to a similar area39 and so will be left out of account. This leaves only three different series of stripes which undoubtedly bordered pictorial paintings:

(i) the black, blue, white, red, and yellow stripes found in the same arrangement, colours, and scale on both the monkey panels, A and B;

PM II. 459, fig. 271.
16 Ibid. 501, fig. 305 upper left (upside-down: corrected, PM III. 365 f. fig. 241 Cl. Europa (MC) 6a f.).
17 PM II, Suppl. pl. xx a, b, e; c, d, f of the same illustration could perhaps have belonged to our main frieze whose border stripes in fact vary in width from place to place because they were largely painted 'by eye' without the help of many string-impressed guide-lines.
18 Interconnections 76.
35 As arranged in the L.M. II 'Throne Room' at Knossos (PM IV, Frontispiece, pl. xxxii).
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(ii) the black, blue, and white stripes of the 'Crocus Panel'; and
(iii) the red, yellow, and white stripes on a fragment showing rockwork (references in note 36).

What little evidence there is suggests that where two or more walls of a single Minoan room contained a continuous frieze, the one series of stripes usually passed from one wall to the other. We may, therefore, have paintings from not less than three upper rooms of the house.

The number of fragments certainly belonging to the 'Crocus Panel' comes to about 40 or a few more. The majority of the remaining pieces, perhaps over 500, show subject matter which would seem to be out of place in that composition (of which one possible restoration is given in FIG. 13). Some of these 500 pieces could certainly have belonged to the same painting as the fragment with the borders of type (iii): but this is the only border fragment of its kind, perhaps part of a painting much of which did not survive. The most numerous border fragments from the pictorial paintings are in fact of the type seen on the monkey panels, and for that reason alone it could be assumed that at least one long continuous frieze once existed. Consideration of the subject matter of the 500 pieces suggests that such a frieze would have contained the monkey panels A and B, the bird panel C, other monkey and bird fragments, flowers, and rockwork, and perhaps other representations, such as the waterfalls and myrtles.

It is true that upper border stripes are absent on the bird panel C as reconstructed by Gilliéron. Decisive proof that this composition was once bordered by the same series of stripes as found on the monkey panels—in the form of new joins to the bird panel—might well entail the dismantling of large parts of all three exhibited panels. One important fragment does suggest, however, that an attempt to find joins to the top of panel C may be worthwhile.

On no. 13 (PLATE 2, 2 and FIG. 2d) a red border stripe, in all probability once followed by other stripes, appears above a white field in which a dove is flying to the right.

If the present explanation for the formation of the fresco 'stack' is acceptable, a large composition incorporating the three panels A–C would seem to have belonged to the east end of the conjectured 'Main Hall' above E and D on the ground floor; the 'Crocus Panel', represented by some 40 pieces, may, however, have fallen from a wall of the upper room immediately to the south of our 'Main Hall' into room F on the ground floor directly below (FIG. 9, T), this may account in part for the occurrence of fresco fragments in that room. Both the present account and that given by Evans are hypothetical; unfortunately, it was not recorded which fragments came from what part of the entire deposit.

Another objection to the idea of a continuous frieze is that divisions of an architectural nature (e.g. beams from timber framing) may have separated the scenes into several panels. The evidence of no. 1, however, tells against this possibility: the upper of the two layers of plaster (showing a blue monkey's head) originally overlay one such architectural feature which caused an impression at the edge of the lower layer of coarser plaster, as shown in FIG. 1a. In addition, relatively few pieces from this house show similar impressions at their vertical edges and all such fragments could be accommodated, in a long continuous frieze, either at the places where the frieze was terminated, perhaps by doorways, or at the junction of two sections of the frieze in a corner of the room.

Throughout the 'West Magazines' at Knossos; in the 'Queen's Bathroom', and in the 'Throne Room' (PM IV, Frontispiece, pl. xxxiii: but note the different series of dado stripes (in situ) on the walls of the adjoining 'Lustral Basin'); and in the 'Caravanserai' (PM II. 108, fig. 49).

44 No lower white stripe (as found on panels A and B) is visible below the red stripe here. The lower side of the white stripe on the monkey panels was marked out with a string-impressed guide-line whilst the slip was still soft; but on some border fragments of the same frieze, and perhaps in this particular case, such impressions were worn away—evidently during the polishing process. So, too, on frescoes from the Royal Road excavations at Knossos.

42 Pieces of the larger frieze may, of course, have been found in room F, and parts of the 'Crocus Panel' in room E.
Evans thought the white panel B would be 'killed' if placed next to the red panel A, a point against the frieze idea. But this assumes that Gilliéron's reconstructions are not only correct but as good as complete. Phanourakis and Caravella have now shown that more could in fact be done in the way of reconstructing these paintings, and other changes to, and new extensions of, the reconstructions achieved by Evans and Gilliéron could be suggested. In any case, at least four fragments show how these Minoan artists overcame the difficulty of 'clashing' backgrounds—by dividing two main fields in different colours by means of undulating bands in yet other colours.

Evans also believed that panel B might have been executed at a later date than the others because it seemed to him 'different in style'; but this suggestion invalidates his earlier statement that the frescoes were 'executed at the same time, in the same style, and by the same hands'—an opinion justifiable on many grounds, not least because the one series of border stripes appears on the same scale and in the same paints on both monkey panels. The idea of a 'difference in style' could perhaps have arisen from the fact that the two monkeys concerned are seen against backgrounds filled with different kinds of subject matter; but this difference can at best signify a special place or function for the monkeys in the frieze as a whole.

V. The Subject Matter Considered as a Frieze

Two phenomena suggest that the temporal setting of these naturalistic scenes may be understood as taking place during a typical Cretan spring or early summer. Flowering plants, particularly crocuses and dwarf iris, and at least two waterfalls are represented. Those plants flower in Crete at the end of February or early in March, and cease to bloom by midsummer. Similarly, hillside streams are common enough after the winter season, but by midsummer they have dried up.

Three monkeys certainly belonged to the one composition (one in panel A, and two in panel B), a point which suggests all six monkeys may once have appeared in the one frieze as members of a troop or family. The natural daily life of monkeys in general may be broadly divided into two parts: sleeping, and hunting for food. Two of our monkeys are undoubtedly actively engaged: one is clambering among papyrus stems (panel B); the other, with paw raised, is peering through the undergrowth (panel A). To judge from the positions of the limbs, the monkey to which no. 6 belonged may well have been represented in an active posture, and the positions of monkeys' tails on two other fragments suggest that the animals denoted by those pieces were at least portrayed in upright postures. Our monkeys, then, may reasonably be considered as hunting for food. Monkeys are usually vegetarian, but given the right opportunities they can be predators, too, with an appetite for young animals and birds' eggs.

Panel B, with two monkeys in papyrus thickets, recalls a class of scene, of great popularity in Egyptian wall painting, of which the basic feature is a predator hunting for the eggs and young of birds nesting in papyrus marshes. Such Egyptian scenes prompted Evans to suggest not only the presence of Nilotic elements in these paintings but in particular that our monkeys, too, were looking for birds' eggs, perhaps of waterfowl. A close examination of all the

43 PM II. 450.
44 PM II, fig. 271; Europa (MC), no. 4, fig. 24a; no. 47 here; and a very large 'dado fragment' in HM tray 182, Epsilon XII, HOF.
45 PM II. 450; panel B assigned to L.M. IA in PM Index Vol. 52.
46 PM II. 446.
47 This is largely true of Crete as a whole, and certainly of the Knossos area. Some plants, including certain species of crocuses, flower after the autumnal rains.
49 As early as the Vth Dynasty (Tomb of Ti, at Saqqara): thereafter an increasingly common mural theme.
50 PM II. 447. Gardlan writes that our monkeys may, in captivity, take to eating birds' eggs, but adds that he himself has not seen them doing so in their natural surroundings. For a report of a monkey's skull found below lava deposits on Thera, see The Times, 5 Sept. 1966, p. 11.
unpublished material from this house failed to produce any evidence for the representation of nests among papyrus plants and for waterfowl. To the contrary, all the fragments which it was possible to identify as parts of birds belong to the ‘blue bird’ type, which, if doves, do not nest in papyrus marshes—a point of divergence in this scene from Egyptian parallels. If the monkeys were on a predatory expedition, we could expect them to be looking for the doves’ nests placed elsewhere in the frieze. It is, of course, possible that the monkeys were looking for vegetation to eat, but other considerations favour Evans’s hypothesis.

The large number of birds, at least eight if not more, may indicate pairs of mated birds, which could be expected if the temporal setting of the scenes is rightly understood to be springtime. Six of our eight certain birds, and perhaps others, are flying, and only two others are certainly on the ground. One of the latter (in panel C), with half-opened wings, looks about to fly off at any moment: its posture indicates unrest. The birds may be disturbed by approaching monkeys, all of whose heads are turned to the right. Five birds are flying in the same direction, as if actually fleeing from the monkeys.

There is no evidence in the paintings to show that the doves were nesting in trees or bushes; but these birds, particularly the ‘rock dove’ which our painted birds resemble, frequently choose nesting-sites among rocky crevices on the ground. But there is nothing which looks nest-like on rockwork fragments belonging to the central and upper parts of the paintings; so this leaves only the areas above the lower dado bands in which to locate the nests of these birds. The dado provides the base-line for the scene represented and may reasonably be interpreted as showing the ground-level. It is to this area of the frieze that the only fragments of the series showing representations even remotely nest-like evidently belong: these are the four pieces nos. 23–6, whose cup-like representations containing circular orange objects have suggested their interpretation as our birds’ nests and eggs.

To the right of the nest on no. 26 (Plate 4, 4 and Fig. 31) is a linear design in black and blue paint which may signify scattered twigs and nesting material. Outside the three other nests is a single egg, and on no. 23 (Colour Plate B 4) two oblong objects in the same orange paint can be seen within the nest in the top half of it: these objects seem to be falling into the nest and may perhaps be explained as the yolks from broken eggs. These points imply that the nests have been robbed, and that the birds are alarmed for that reason in particular. Some creature must be eating the eggs and destroying the nests—in this view, one of the monkeys.

In the region of the mouth of the monkey represented by no. 3 (Colour Plate A 2) appears an orange area. This colour is not found on the muzzles of other monkeys whose mouths are closed. Its appearance here suggests this monkey’s mouth was open. As the insides of monkeys’ mouths are in reality flesh-pink in colour, it seems reasonable to interpret the orange area in question as the yolk of an egg which that monkey is eating.

One way in which monkeys may eat eggs is whilst sitting on their haunches in a forward-of-upright posture, with the egg held to the mouth by one or both front paws: if small, the entire egg may be put into the mouth, but with larger eggs an incision may be made in the shell so that the yolk can be scooped out with a paw. When this posture is adopted, the distance

53 On nesting sites, see Peterson and others, A Field Guide to the Birds of Britain and Europe (1966) 178.
54 As on the ‘Procession Fresco’ from Knossos, and on other Minoan and Mycenaean figured paintings. So, too, on many Egyptian murals.
55 Ten other pieces in HM tray 191, Epsilon XXI, HOF, give the same impression.
56 As it would appear on analogy with known fruit-eating habits of cercopithecids (Gartlan).
between haunches and arms is small; the monkey to which no. 6 belongs may have been depicted in this position, as suggested by the disposition of the limbs. A drawing of a monkey eating an egg is given in Fig. 10.\(^7\)

Fig. 10. Monkey Eating Egg from Bird's Nest

\(^7\) The length of the animal's body (tail excluded) here reached 28.2 cm. — restored on the basis of nos. 3 and 6. That of the monkey seen in PM II, fig. 264 (to left, in enlarged panel B) is about 28.0 cm. There are slight differences in the sizes of our animals' heads. Garilan has kindly pointed out that the mouth of the
If the present interpretation of the general theme of these paintings is correct in principle, the *raison d’être* for the portrayal of monkeys on the wall paintings of the ‘House of the Frescoes’ is their raid on the doves’ nests. The correctness of this conclusion is assumed in the following discussion.

VI. RESTORATION AS A FRIEZE

A tentative restoration of the frieze as it may once have appeared is given in Fig. 13. Many parts of the original composition are missing; neither the length nor the height of the frieze can as yet be firmly established.

The restored panels A—C, if placed end to end, come to over 3·0 m. in length; but they contain only three monkeys and one bird. Inclusion of all six monkeys and eight or more birds, as well as plant and rockwork fragments previously omitted, would probably bring the total length of the frieze to about 5·5 m. which is the approximate length of the three walls at the eastern end of our conjectured ‘Main Hall’, between its northern and southern doorways (Fig. 9, based on the ground floor plan). But on this calculation some fragments in the existing reconstructions of the paintings would need to be removed to places elsewhere in the frieze in order to make a more compact assembly of the material.

Evans thought the monkey panels would originally have been about 0·8 m. in height.58 The restoration reproduced in Fig. 13 was drawn at about one-fifth true scale, the estimated height of the frieze being 0·85 m. The length of the monkeys is based on that of the original animal of panel B which is almost fully preserved (see PM II, fig. 264); the composite restorations of flying and standing doves seen in Fig. 11 are based on nos. 8, 10, 15, 16, 21, 22 and the bird seen in panel C (PM II, pl. xi). Coloured versions of Figs. 11 and 13 may be found at the British School at Athens.

Little can be said with certainty on the order and place of subject matter in the frieze and much of it has been arranged arbitrarily in the sketch under consideration.

Panel B, containing three groups of large papyrus flowers, two monkeys, and perhaps as many as three groups of rushes, reaches to about 2·0 m. in length, thus exceeding the lengths of those sections of the northern and southern walls to the east of the doorways at the east end of the ‘Main Hall’. This section of the frieze may therefore be assigned a central place on the longer east wall of the Hall which occupies the central part of Fig. 13. The flowers here are waterside plants and so we may expect a stream to be flowing near them, perhaps from one of the two certain waterfalls known from the same fresco deposit. The waterfall on a buff ground has been placed in Fig. 13 to left of the restored ‘panel B’, close to the left-hand group of papyrus flowers on the same buff ground.59 On analogy with the more complete waterfall on

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monkey seen in Fig. 10 may be too wide for the purpose of sucking out the yolk—which perhaps, in any case, may be scooped up with a paw (see n. 56). Fig. 10 may require correction—if only for those reasons; but a strict comparison with facts of nature could perhaps be taken too far: Minoan wall painters rendered naturalistic subjects in a conventional manner, and rarely in strict and detailed accord with realities of nature. Further discovery of joining pieces to the head fragment, no. 9, is clearly of primary importance—for the ‘proof of the pudding’ here lies in the reconstruction of the original paintings.

That the orange ‘egg’ held by the same monkey may rather be explained as some form of fruit (the correctness of the restoration being assumed)—on the ground that it is too large for an egg in relation to the size of the monkey (about half true size)—seems ruled out, (1) by the lack of any evidence to suggest the presence of fruit-bearing trees or bushes in these paintings, and (2) because the various subjects are not consistently represented in realistic proportion to one another (e.g. the monkeys and papyrus plants in panel B); the ‘egg’ is restored after those seen on nos. 23–6 (cf. p. 8 above).

58 PM II. 459: but the analogy drawn with the ‘Cat and Bird’ fragment from HT (now restored in a panel about 5·5 m. in height) no longer holds good. Even so, the smaller main features and more complicated details of the HOF paintings weigh in favour of Evans’s calculation.

59 See ‘Addendum’, Europa (MC), 68 f.
a white ground, it is assumed that the present example was depicted cascading down the face of undulating rockwork—here made to impinge upon the upper border stripes as seen on

Fig. 11. Restoration of 'Blue Birds' in Postures Characteristic of Minoan and Mycenaean Bird Representations

several original fragments.\(^6\) 'Panel A' with a red field and 'panel C' with the bird perched on a rocky outcrop in a plain white field seem best placed on different sides of our central section containing the enlarged 'panel B'.

\(^6\) e.g. PM II, pl. x. Also represented on unpublished fragments.
The survival of many fragments showing subject matter against a red ground suggests that a large section of the frieze once existed with a red field. The red ground of such a section may perhaps have given way to other areas with white and buff background colours, conceivably to the left of the central area containing 'panel B'; such a transition in background colours could be arranged by moving much of the rockwork and all the border fragments of the original panel A (PM II, pl. x) into an essentially red section filling nearly the entire northern wall of the eastern part of the room (to the left in fig. 13), and by allotting the large fragment showing a rose bush on red and white grounds (at present in panel C: PM II, pl. xi) and the bird fragment no. 21 (likewise on red and white grounds) to the upper part of the corner formed by the north and east walls. Of the original panel A, the monkey with its nearby papyrus flowers and rockwork may remain as the first main features in the lower left part of the long section on the east wall. To the upper left part of the section on the north wall has been assigned white-outlined rockwork on which is perched a dove looking over its shoulder at the monkeys; this arrangement counterbalances the place and posture of the bird in 'panel C', here considered to have been depicted on the opposite wall of the room—its white background continuing that found in the centre and to the right of the enlarged panel B.

The fragments with vertical border-edge impressions could be fitted in as follows: no. 48 showing rockwork, and an unpublished fragment with traces of an ivy bush with blue and green leaves, to the left side of the red section on the north wall; nos. 35, 36 and the madonna lilies of PM II, fig. 266c, to the right of the same red section, and, in the centre, the monkey represented by no. 1: the head of this animal was on a level with a horizontal architectural feature, possibly a central beam in the timber framing of the wall. To the left side of the section on the south wall (with 'panel C'), go no. 20 showing the tail of a dove flying to the right below orange and blue rockwork (in connection with no. 50), and on the right side of the same section the waterfall on a white ground—its impressed right-hand edge and vertical creamy-white stripe being assumed to denote the termination of that side of the frieze by the southern doorway.

If the theme of the frieze has been correctly determined, the location of the nests and of a monkey eating an egg in the lower part of our main section on the east wall seems appropriate. The grey-black areas below the nest fragments may perhaps be understood as parts of a dark undulating area on a dado otherwise light rust-coloured (possibly imitating woodwork). This dark area, assumed to taper out into a thin black band below a clump of myrtle shoots which have here been placed in the lower left corner of that section of the frieze on the south wall, may have served to counterbalance the rockwork impinging upon the upper border stripes. The restoration of one monkey (based on no. 4) as looking to the right over his shoulder attempts to unify the suggested design of the frieze by directing attention to the chief point of the composition—the robbing of the nests. The doves have flown off in alarm 'in all directions', leaving the monkeys in sole occupation of the nesting area.

Enough has been said to suggest that much of the surviving material may in theory be fitted into a long frieze on three walls of a room. Further reconstruction of the original fragments may well improve upon the present restoration.

61 Compare the posture of a partridge on the frieze from the 'Caravansera' (PM II, 115, fig. 52. Repeated in restoration, ibid., Frontispiece, section 2. The original fragment is now in HM tray 177, Epilon VII, Hof).
62 Ibid. 438, fig. 270; Europa (MC), no. 14, pl. iiiie, and fig. 6, for new join and restoration.
VII. Restoration of the 'Crocus Panel' (PM II. 459, fig. 271)

Reasons have already been given above in Part III for believing that nos 27, 28, 38–46, showing parts of two 'agrimi', crocus flowers, an olive tree, and undulating bands, once belonged to the same composition as a very large crocus fragment, published by Evans. Eighteen pieces of crocus plants undoubtedly from this painting provide evidence for at least six, and probably seven, plants: these were formally set out on a buff ground on which the only other representation was the grey, black, and blue feature seen on no. 40, surmised to show rockwork.

To judge from the largest crocus fragment, the plants were plotted out across the entire length of the painting at the ratio of two to every 36 cm., an estimate which could be supported by a complete restoration of the two plants on no. 38. As there is certain evidence for six or seven plants, the length of the painting may well have originally approached 1·95 m.; the height of the 'panel' may have been much the same as that of the frieze with the birds and monkeys, or even up to 1·0 m., as Evans suggested.

The uncomplicated design of the upper part of this composition suggests a simple and formal treatment of the painting as a whole. The plants may be restored at the ratio given above, the

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\[\text{About 80 cm. of the original length of the upper border stripes survive.}\]
uncertain 'rockwork' feature perhaps occupying a central place in the buff field. The undulating blue, black, and white bands may likewise be assumed to pass from one side of the composition to the other, dividing off the upper buff field from the white field below. In this lower section was certainly an olive tree, perhaps in a central position, too, with an 'agrimi' standing in heraldic posture on each side of it, as suggested in the sketch seen in FIG. 12.

This painting, executed by the same hands to be detected in the bird and monkey frieze, shows that the one group of artists painted frescoes in more than one style in the same system of decoration. The composition perhaps adorned the northern section of the east wall of the room above F on the ground floor (FIG. 9, T), if, indeed, it is reasonable to assume that much of this painting formed that part of the fresco deposit which Evans described as a 'fringe' extending from room E into room F.

VIII. The Date of the Paintings and Synchronisms with Other Frescoes

Evans assigned the paintings to the transitional M.M. IIIB–L.M. IA phase on the ground that they probably went up on their walls in the last stage of M.M. IIIB shortly after the construction of the house. But a slightly later date for their execution is possible.

The lower of the two layers of plaster seen on no. 1 was painted in light red (COLOUR PLATE A 1) indicating that some mural painting had already been done in the house prior to the execution of the naturalistic scenes. Some lapse of time should perhaps be allowed between the two phases of mural painting. A date early in L.M. IA for the execution of the floral and faunal compositions would seem reasonable; but they can hardly be later in date, for the following reason. Evans drew attention to the considerable 'family likeness' of a few pieces of painted stucco from the 'South House' at Knossos to the paintings from the 'House of the Frescoes'. The technical and artistic character of the fragments from the former site are indeed such as to leave no doubt that the two houses were decorated by the same group of artists. The pieces from the 'South House' were found in the fill of the lustral basin which was sealed over with gypsum paving slabs: pot-sherds of L.M. IA date accompanied these fresco fragments.

It is clear that this group of artists was engaged in decorating houses at Knossos early in the L.M. IA period, if not perhaps earlier still. On the other hand paintings in the same style, of the same technical character, and by the same hands, are lacking among the fresco remains found within the Palace.

IX. Concordance of Trays in HM Store Room from which Joining Pieces of the Present Paintings Have Been Found

References to the Catalogue in this or other publications are cited at the end of each entry. Kn = Knossos; HOF = House of the Frescoes; NTFA = North Threshing Floor Area (misplaced fragments). The initial Arabic numerals denote the tray number, which is followed by Evans's code letter and Roman numerals, then the provenance, and finally the individual number of the fragment, in parentheses ( ), where present; + = 'joining'.

20 Delta VI NTFA

20 Delta VI NTFA
127 Alpha XVI (4) Kn. Ohne Angabe; certainly HOF
127 Alpha XVI (5) Kn. Ohne Angabe; certainly HOF

64 PM II. 435–7; PM Index Vol. 52.
65 Ibid. 378, l. fig. 911 (in HM tray 170, Eta III).
66 Ibid. 378; J. D. S. Pendlebury, A Guide to the Strati-
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

162 Gamma VII (4+3) 'Kn.?'; Reusch: 'sicherlich "HOF"'.

171 Epsilon I HOF

171 Epsilon I (1+3+4+15+16) HOF

171 Epsilon I HOF

174 Epsilon IV HOF

175 Epsilon V HOF

175 Epsilon V (1+4) HOF

178 Epsilon VIII HOF

181 Epsilon XI (2) HOF

182 Epsilon XII HOF

185 Epsilon XV (1) HOF

185 Epsilon XV (2) HOF

185 Epsilon XV HOF

187 Epsilon XVII HOF

195 Zeta III HOF

195 Zeta III HOF

196 Zeta IV HOF

196 Zeta IV HOF

20 Delta VI NTFA. No. 35

20 Delta VI NTFA. No. 3

195 Zeta III HOF. No. 34

181 Epsilon XI (2) HOF; blue shrub, like no. 35—mentioned above, p. 11.

195 Zeta III HOF. (large border fragment, rockwork; unpublished)

195 Zeta III HOF. (large border fragment, rockwork; unpublished)

171 Epsilon I HOF. Mentioned above, p. 11, n. 26

195 Zeta III HOF (large border fragment, rockwork: unpublished)

X. Catalogue

HM = Herakleion Museum; gb = modern gypsum-paste backing. All measurements in centimetres unless otherwise stated; colour descriptions, where given in the text above, are here omitted.

General features

Plaster: medium-grained, crumbling at edges, and generally fragile; light sandy-coloured and varying from 1.0 to 0.2 in depth. Paintings executed on fine white slip, about 0.5 to 1.0 mm in depth. Backs of fragments flat (PM II. 444 f.). White surfaces are unpainted.

1. Head of monkey, colour plate A; plate 1, 1; and fig. 12. HM Epsilon II (tray 172) HOF. Two layers of lime plaster, both painted.

Uppermost layer: finer sandy-coloured plaster with monkey’s head in right profile on dark red ground; 0.2 x 0.4 x 0.7 max. tapering to 0.2 below area of animal’s jaw; tip of nose missing. Slip on which lower jaw was painted has flaked, exposing red background colour; three fragments of slip with blue markings of whiskers survive in situ in area of jaw, (slip fixed in position by polyvinyl acetate to stop further flaking of painted area). Gb on three sides of this layer, holding it to the lower painted plaster. Max. depth of penetration of blue and red paints, 0.5 mm.

Head reproduced in photograph of painted copy in PM II. 447, fig. 262 (muzzle evidently restored after monkey’s head in ibid., pl. x). Compare (1) nos. 2 and 3. Plaster, pl. x, opp. p. 447, and 451, fig. 264; Europa (MC) no. 31, fig. 15; (3) N. Platon, Khr (1947), pl. opp. p. 512 for ‘Saffron Gatherer’ restored as a monkey (Interconnections, fig. 103 for similar restoration by Piet de Jong).

Lower layer of plaster: thick, coarse, and hard, 0.5 x 0.8 x 3-25 max. Gb. Light red wash on surface (matt). Horizontal bevelled impression at edge of plaster below animal’s jaw (depicted on upper layer); plate 1, 1 and fig. 14. Depth of red paint about 0.25 mm.

2. Head of monkey in right profile on white ground, plate 1, 2 and fig. 16. HM 195 Zeta III HOF. 8.3 x 6.2 x 0.65, gb. Surface and colours very worn. Orange painted lines ('preliminary sketch') below flaked slip of head. Comparisons under no. 1.

3. Part of monkey’s muzzle, in right profile, colour plate A 2 and fig. 10. Two joining fragments, the larger from HM 195 Zeta III HOF. 8.3 x 6.2 x 0.65, gb. Surface and colours very worn. Orange painted lines ('preliminary sketch') below flaked slip of head. Comparisons under no. 1.

4. Monkey’s tail in left profile in floral and rocky setting, colour plate A 3. HM 195 Zeta III HOF. 26.5 x 11.0 x 0.8, levelled and mounted on wax backing: large repair in gypsum in centre of left side. Bluish-green rose leaves, without veins, on dark red stems; crocus leaves rust-coloured; blue rockwork with black veining; orange plant-stem immediately above left-hand rockwork. Surface damaged, details indistinct, lime accretions in places. Black smudge (not paint) above crocus.
Fig. 13. The ‘Red’ and ‘Grapes’ Panels omitted as PARTS OF A CONTINUOUS PICTURE from the ‘Main Hall’ (12) in the ‘House of the Frescoes’
Epsilon takenly considered a 'marine shell' in 454, p1. x; Angabe der Fundstelle', but certainly HOF. 56X36X on surface of slip underlies edges of five feathers. Fragment at bottom edge a trace of a white unpainted area. Bird possibly a lighter shade of red with black blobs on it; and overlie, red ground, and white background extends beyond HM '93 dulating darkred and white ground, centre, exposing light red lines on main body of plaster PLATE I, Blegen, stomach have been omitted). 451, fig. 264 (where the blue hairs outlining the animal's right of back leg. Budded. Compare no. 7 and PL 305, top right on white ground, no. 11 'K. Fresco No Provenance', but certainly from HOF. 152X185X36X, gb. Paints badly worn and flaked; orange paint on surface of slip immediately below blue feathers, parts of twelve blue feathers and wing-frame. Traces of orange paint on surface of slip below first primary feather and inside edges of four feathers. The two pieces making up this fragment were lifted from the fresco deposit together. Compare nos. 10, 12-15.

6. Pink-spotted collar of 'blue bird' on white ground, PLATE 1, 5 and FIG. 1f. HM 193 Zeta III, HOF. 54 x 3.5 x 0.65, gb. Compare treatment of doves' eyes on metalwork (C. W. Blegen, Prosymna I (1937) 330-9, pl. ii (lower), no. 2) from Tomb III (L.H. II, p. 332).

7. Tail of 'blue bird' flying on white ground, PLATE 1, 5 and FIG. 1f. HM 193 Zeta III, HOF. 54 x 3.5 x 0.65, gb. Compare treatment of doves' eyes on metalwork (C. W. Blegen, Prosymna I (1937) 330-9, pl. ii (lower), no. 2) from Tomb III (L.H. II, p. 332). Buckled; slip missing near bird's shoulder, and also pieces of plaster on right-hand side (compare Evans's illustration).

8. Tail of 'blue bird' flying on white ground—earth-stained; PLATE 2, 4 and FIG. 2o. HM 195 Zeta III, HOF. 7.8 x 2.8 x 0.65, gb. Traces of orange paint on surface of slip immediately below blue feathers, as on nos. 10 and 11. Compare also nos. 13-15, and PM II, pl. xi for blue spots at birds' sides.

9. Pink-spotted collar of 'blue bird' on white ground, PLATE 1, 5 and FIG. 1f. HM 193 Zeta III, HOF. 54 x 3.5 x 0.65, gb. Compare treatment of doves' eyes on metalwork (C. W. Blegen, Prosymna I (1937) 330-9, pl. ii (lower), no. 2) from Tomb III (L.H. II, p. 332).

10. Twelve wing-feathers of 'blue bird' flying over undulating darkred and white ground, PLATE 2, 1 and FIG. 2a. HM 193 Zeta I, 1, HOF. 18.5 x 10 x 0.55, gb. Mistakenly considered a 'marine shell' in PM II 500 L, fig. 305, top right (Euope (MC), 62 and n. 34). Wing-tip overlies red ground, and white background extends beyond first primary feather and forefront of wing; beyond wing-tip, possibly a lighter shade of red with black blobs on it; and at bottom edge a trace of a white unpainted area. Bird possibly flying left (cf. PM II 457, fig. 268; panthere lilies on similar black-spotted red ground). Orange paint on surface of slip underlies edges of five feathers. Fragment buckled; slip missing near bird's shoulder, and also pieces of plaster on right-hand side (compare Evans's illustration).

Compare on frescoes: (1) nos. 11-15; PM II, pl. xi, bird's wings; (2) from Pyllos (L.H. III), AJA lxix (1964), pl. 29, fig. 5. On daggers and ivory comb (wings) Karo pha. xxii and xcv, no. 765 (Circle A, Graves IV and V: Myc. I—Chrom. A, and I—I, HOF. 78x28xo65, gb. Traces of orange paint on surface of slip immediately below blue feathers, as on nos. 10 and 11. Compare also nos. 13-15, and PM II, pl. xi for blue spots at birds' sides.

Compare on frescoes: (1) nos. 11-15; PM II, pl. xi, bird's wings; (2) from Pyllos (L.H. III), AJA lxix (1964), pl. 29, fig. 5. On daggers and ivory comb (wings) Karo pha. xxii and xcv, no. 765 (Circle A, Graves IV and V: Myc. I—Chrom. A, and I—I, HOF. 78x28xo65, gb. Traces of orange paint on surface of slip immediately below blue feathers, as on nos. 10 and 11. Compare also nos. 13-15, and PM II, pl. xi for blue spots at birds' sides.
sions in gb. 'White' feather and three blue ones defined by black lines (compare nos. 13, 18, 20 and A7A, loc. cit.); orange lines immediately below worn black paint of bar on tail. Fragment buckled with damaged area at top. 'g' (or 'e') in pencil on gb.

17. Blue tail and light grey 'trailing feathers' of 'blue bird' in right profile, plate 3, 4 and fig. 3d. Provenance as no. 15. 12 x 7.1 x 0.6 gb. Paints worn; blue area, to left, of uncertain significance. Traces of orange paint below one grey 'trailing feather', poorly preserved. Black stain (not paint) in white field below tail. Compare nos. 13, 15, 16, 18-20.

18. Tail-feathers, three blue, one white, of 'blue bird' in right profile, possibly flying, plate 3, 4 and fig. 3d. Provenance as no. 15. 7.5 x 6.5 x 0.6. Orange line below black paint of terminal bar on tail (cf. no. 16). Colours well preserved. Compare nos. 13, 15-17, 19, 20, and A7A, loc. cit.

19. Tail fragment of 'blue bird', possibly flying; plate 3, 5 and fig. 3e. HM 184 Epitonia XIV, HOF. 7.5 x 5.1 x 0.75 gb. Black stains (not paint) on blue feathers, and 5 deep, ancient scratches on surface. Compare nos. 13, 15-18, 20.

20. Tip of 'blue bird's tail, (probably flying) in right profile on white ground below orange rockwork, plate 4, 1 and fig. 3f. HM 173 Epitonia III, HOF. 13.1 x 12.2 x 0.5 gb. Paints of tail poorly preserved, but 'white feather' distinct: compare nos. 15, 16, 18. Fragment buckled and slip flaking in area of tail. Rockwork, with red striations and one white blob of paint; technical character closely matched by no. 50.

21. Head, neck, and edge of lower wing of 'blue bird' flying left on dark red ground with undulating white area above; Colour plate A 5 and fig. 3e. HM 196 Zede IV, 3 (head) and 4 (neck and wing), HOF. 27.5 x 19.6 x 0.6, levelled and mounted in wax. Tip of beak missing; eye elliptical and paints partly worn away. Head fragment mentioned in PM II, 454. Fig. 3e here is after Gilliéron's painted copy (slightly under 1') in the Knoossos Archive at the Ashmolean Museum. Between eye and beak on original fragment are red stains in the area where blue paint has worn away: these have no connection with the original painting, but have been mistakenly interpreted as red markings on the (restored) bird's head in PM II, pl. xi and on the fresco panel (C) exhibited in HM (compare no. 8, without red markings). Red paint underlies the edge of the wing on which there is a dark stain (not paint). Neck decoration: three or four rows of lilac-pink spots and orange lines immediately below worn black paint of bar of the wing.

22. Neck and body of 'blue bird' in left profile on dark red ground, colour plate B 1 and fig. 12b. HM 185 Epitonia XVI, HOF. 19.4 x 10.5 x 1.1 tapering to 0.8 gb. Light blue wing, folded: compare no. 21. Worn trace of red ground below bird's breast. White-outlined blue rockwork with black striations. Paints worn or flaked in places, and dark stain (not paint) on neck and breast.

Pink collar: compare nos. 9 and 21, and PM II, pl. xi. For seated or standing birds on frescoes, compare (1) hoopoe and partridges from the Caravanseri, Knoossos, Pink II, part I, Frontispiece; (2) pheasant, from Hagia Triadha, Interconnections, fig. 110, left. On pottery: Analyse, motive 7, figs. 25 and 30 (L. M. L. H. IIB-IIB). White-outlined rockwork: (1) nos. 33, 48, and 49; (2) on the 'Saffron Gatherer Fresco', PM I, pl. iv, opp. p. 262; (3) 'Horse and Groom Fresco' from Mycenae, BSA xxv (1921-2), pl. xxvii.

23. A dark red cup-shaped object containing an elongated orange blotch; circular object in orange outside cup; all above grey-black lower dado band; 'bird's nest and eggs', colour plate B 4 and plate 4, 5. HM 191 Epitonia XXI, 2. HOF. 17.2 x 7.6 x 0.6 to 0.9 gb. Rim of 'nest' ragged; shape of curve matching those on nos. 24-5. On left side, blue, orange, and light brown curved bands, twice interrupted by black areas: perhaps adjacent rockwork and vegetation. Edges of fragment fragile and crumbling; buckled, otherwise well preserved. Mica or gypsum particles in red paint. Nest: compare on L. H. IIIC pot from Lefkandi (LLV 5 June 1950, 91, figs. 2-3; Antiquity xxxviii (1965) 56, pl. viii) and on geometric pot, J. K. Brock, Fortetsa (Cambridge, 1957), pattern 17 n, (rather than 'carcass or worm', ibid. 184).

24. 'Birds' nest and eggs': colours and quality as no. 23; plate 4, 3 and fig. 36. HM 191 Epitonia XXI, 1, HOF. 19.8 x 9.6 x 0.5 gb. Rounded lower part of 'nest' better preserved than on no. 23, matching in shape the 'nest' on no. 25. To right, grey-black curved area, ? rockwork, with dado in same colour below. Two 'eggs', one inside, the other on left of the 'nest'. Much slip missing on left side; fragile, crumbling edges, buckled. Compare nos. 23, 25-6.

25. 'Birds' nest and eggs', colour plate B, 5. HM 191 Epitonia XXI, 7, HOF. 15 x 9.1 x 0.3 gb. Large, roughly oval 'egg' inside 'nest' and smaller one outside to the right. Edges worn and crumbling.

26. Right half of 'birds' nest and eggs', with linear design in blue and black to the right; plate 4, 4 and fig. 3t. HM 191 Epitonia XXI, 8, HOF. 16.9 x 10.9 x 0.8 to 0.9, gb. Two buckled joining pieces (join, 4 mm., checked by HM technicians). To right of 'nest', small painted fragment of plaster out of place in broken area. Compare nos. 23-5.

27. Tips of two black horns of 'agrimi' or ibex, head in right profile, on white ground; plate 4, 5 and fig. 44. HM 101 Epitonia XI, 1, HOF. 14.5 x 10.6 x 0.65 gb. Black paint and slip worn in places, technical character best compared with that of nos. 28 and 46. Slip lifting in places from surface of main body of plaster. Buckled, and crumbling edges above horns. Compare, on frescoes, (1) two leaping animals on 'Park Fresco' from Hagia Triadha (L. M. 11B or earlier), see L. Banti, Enciclopedia dell' Arte Antica vi (1963) 58; Interconnections fig. 110 right; (2) on HT painted
sarcophagus, R. Paribeni, MA xix (1928), pl. iii left: L.M. IIIA context; (3) from Mycenae, AE (1887), pl. ii, top left (PM IV. 894, fig. 815) L.H. IIIIB. On pottery, Analytis motive 6 (1) Myc. II (IIA); Phylykopi 175, fig. 149 (Analytis 441, n. 3; Late Cycladic II-IIIA). On clay sealings, cf. Levi, op. cit. figs. 91, 144, and 145; L.M. IB. On stone bowl from Zakro, see Platon, ILM 7 March 1963, 352, figs. 10 and 15 (L.M. IB or earlier). On seals, Kenyon, passim, especially nos. 95, 170, 190, and 201. On linear (PM II. 833, fig. 879-4). On gold sword-handle, A. J. Evans, The Prehistoric Tombs of Knossos, Grave no. 36, p. 57, fig. 59: L.M. II-IIIA.

28. Part of black horn of goat or ibex (as no. 97), PLATE 4, 6 and fig. 4b. HM 174 Epsilon IV, HOF. 7.8 X 7.8 X 0.7-0.6, gb. Head of animal once in left profile. On the left appears a black vertically inclined line with an orange line to its immediate right: of unknown significance. Pieces of plaster now missing from upper left corner.

29. Part of bright blue waterfall on buff ground, PLATE 5, 6 and fig. 4c. HM 175 Epsilon V, HOF. joining a piece from HM 185 Epsilon XV, HOF. 9.8 X 4.1 X 0.9 to 0.7, gb. Blue paint flaked in places. Compare PM III, Colour pl. xxii, opp. p. 254 (Europa (MC) nos. 1-13 and 68 f. for mention of no. 49). Buff ground as on left of enlarged panel B, and as on 'Crocus Chumps' fragment (PM II. 459, fig. 271).

30. Crocus plant on unpainted ground, COLOUR PLATE 2, HM 196 Zeta IV, 2, HOF. 12.9 X 12.7 X 0.8, gb. Drawing in PM II. 455, fig. 266b. Plant surrounded by vivid and pale blue rockwork with red and black striations. Small white area with orange line passing through it at upper left corner. Right-hand flower and leaves have crumbled away since Evans's sketch was made; buckled, but otherwise excellently preserved. Compare no. 4 where other comparisons are listed.

31. Crocus plant below blue and orange rockwork, PLATE 5, 1 and fig. 4d. HM 162 Gamma IV, 1, 'Ohne Angabe der Fundstelle', but certainly HOF. 15.0 X 7.5 X 1.0, gb. Rockwork striations, red and black. Comparisons listed under no. 4.

32. Crocus plant with bifurcating stamens below orange rockwork with red and black striations; PLATE 5, 2 and fig. 4e. HM 168 Gamma VII, 2 (see no. 31). As squared, 12.0 X 11.7 X 0.9, gb. Comparisons under no. 4.

33. Blue papyrus flowers on red ground below rockwork, COLOUR PLATE B 9. HM 196 Zeta IV, 1, HOF. 18.9 X 7.7 X 0.8 to 0.4, gb. White-outlined rockwork, as on nos. 22, 48, and 49; white paint overlies blue. Flowers: PM II. 477, fig. 285b; compare larger type, ibid., fig. 284. On pottery, Analytis motive II, 29-30. Myc. IIA (but these, except no. 28, are closer in form to lotus flowers).

34. Bush of ivy, PLATE 5, 3 and fig. 50. Seven joining pieces, from HM 171 Epsilon I, HOF, and one piece from HM 195 Zeta III, HOF. 39.0 X 28.3 X 0.6, gb. Rusty-coloured group of dots (inflorescence) on upper right. Bright and pale blue rockwork with black and olive-green striations. Paints and slip worn, particularly in centres of leaves and on lower right side. Buckled. Compare, on frescoes (1) PM II, pl. x, and 479, fig. 286 with different inflorescence; (2) on 'Park Fresco' from Hagia Triadha, Guida degli Scavi Italiani in Creta (1947), pl. 44. L.M. IB or earlier. On pottery, Analytis motive 12, K (Myc. IIA) and 1-3 (Myc. I and IIA); I. Sakellarakis, 'Archeologias' vol. 58 (Aug.-Sept. 1966) 66, fig. 4 (L.M. IB), from Archanes.

35. Shrub on dark red ground, with lily bud on right side, PLATE 6, 1 and fig. 5b. HM 162 Gamma VII, 4, joining 5 'Ohne Angabe' (but certainly HOF), joining piece from HM 20 Delta VI, 2 North Threshold Floor Area (but HOF; see no. 15 above). As squared, 28.0 X 24.5 X 0.5, levelled and mounted in wax. Paints worn, especially at lower right corner. Compare PM II. 455, fig. 275b, and 455, fig. 266b. Identification: compare O. Polumin and A. Huskey, Flowers of the Mediterranean (1965) 124 and Colour pl. 98.

36. White madonna lily flower on red ground, with vertical border impression on right, PLATE 5, 4 and fig. 6a. HM 196 Zeta IV, HOF. 5.4 X 4.2 X 0.9, gb. Slip missing in places; white paint overlies red. Compare, on frescoes (1) PM II. 455, fig. 266c; (2) PM I, pl. vii: 'M.M. III'; (3) from Amnisos, Marinatos and Hirmer, Creta and Mycenae pl. xxii; (4) from Hagia Triadha, Bernier and Banti, Guida degli Scavi Italiani, pl. 43; L.M. IB or earlier; (5) from Thera, Perrot and Chipiez, Histoire de l'Art vol. vi, figs. 210-12: L.M. IA (BCH 1922, 119-50); (6) from Phylykopi, Phylykopi 73 E (G. 5, 11), fig. 64: 2nd city, M.M. III; (7) from Ialysos, Stratium I, Clara Rhodos xi, pl. vii (Furmarck, Opus. Archeologica vi. 177-79: L.M. IA), and Stratium II B Clara Rhodos x, pl. xi (Furmarck, ibid. 178 f.: L.M. II-IIIA 1); (8) from Thebes, Frauenfries, pl. 1, no. 5, and pl. 14, no. 31; (9) from Mycenae, The Mycenaen Tablets III, fig. 53, top (L.H. III). On pottery, Analytis motive 9 a, c, d (Myc. IIA), and the lily vases from Knossos, PM I. 603-5, fig. 443 (M.M. IIIB).

37. Rose leaves on white ground, PLATE 5, 5 and fig. 6b. HM 178 Epsilon VIII, HOF. 3.9 X 2.6 X 0.5, gb. Light blue leaves, greenish-brown veining; branches in dark red with red blob at end. Compare PM II. 455, fig. 266d to which no. 37 may belong; veinless rose leaves on no. 4.

38. Parts of two crocus plants in buff field, PLATE 6, 3 and fig. 6c. HM 184 Epsilon XIV, HOF. 12.8 X 9.3 X 0.8, gb. Rose-red flowers and buds, dark red stamens, and olive-green leaves; from same composition as PM II. 459, fig. 271, and nos. 39-46. Crocus comparisons under no. 4.

39. Part of crocus plant in buff field below white upper border stripe, PLATE 6, 4 and fig. 6d. HM 162 Gamma VII 'Ohne Angabe der Fundstelle' but from same composition as nos. 38, 40-6: HOF. Impressed string guide-line at lower edge of white stripe. Brushstrokes visible on left-hand petal of flower on lower 9.3 X 11.9 X 0.75, gb. Part of crocus plants in buff field, with rockwork, PLATE 6, 2 and fig. 6e. HM 191 Epsilon XXI, HOF. 20.6 X 11.2 X 0.6-0.3, gb. From same painting as nos. 38-9, 41-6. Slip mostly flaked.

40. Undulating bands in blue, black, and white, with traces of leaves of olive tree in very damaged white field, PLATE 6, 5 and fig. 7a. HM 184 Epsilon XIV, HOF. 10.7 X 6.4 X 0.7, gb. Slip below bands almost entirely missing, including two unattached pieces each showing three olive leaves (unfortunately misled during cleaning process): orange 'preliminary' line undulating below slip bearing blue, black, white bands; also to left of olive leaves. From
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

'Crocus Panel' (PM II, fig. 271); olive leaves as on nos. 42-5.

42. Branches and leaves of olive tree on pale blue ground (area of tree only), PLATE 7, 1 and FIG. 7b. HM 188 Epsilon XVIII, 3, HOF. 192 x 60 x 0.9-0.6, gb. Slip (1 mm. deep) missing on upper and lower sides. Buckled. From the same painter as nos. 38-41, 43-6. Compare trees on frescoes from (1) North Entrance Passage, Knossos, PM III. 166-9, figs. 105 and 113; (2) South-east House, Knossos, PM I. 426, fig. 306, and pp. 536 f.; Knossian Atlas, pl. d, fig. 2; original in Oxford, AM AE 1715; () HM fresco Cat. no. 39, from Knossos: Knossian Atlas pl. viii, fig. 3. Restoration on exhibition: 27 small pieces omitted (in HM tray 142 Theta XVII 'Ohne Angabe'); (4) Sacred Dance Fresco', miniature, PM III, pl. xviii; (5) miniature fresco from Tybris, J. H. D. (1951) 62 f., and pl. viii (L.M. 18 or earlier); (6) H.T. painted sarcophagus, MA xix. pl. ii (L.M. II A context). On 'Siege Rhyton' from Mycenae, PM III. 93. (L.H. I).

43. Part of olive tree (as on nos. 41-2, 44-5), PLATE 7, 2 and FIG. 7c. HM 188 Epsilon XVIII, 1, HOF. 152 x 7-8 (once 9-2) x 0.5, gb. Slip largely missing on left side, exposing orange 'preliminary' line; traces of brown paint to left, 7 tree-trunk or goat's body (cf. nos. 27 and 28). In crumbling condition. Brown areas: cf. brown goats on 'Park Fresco' from Hagia Triadha (Interconnections fig. 110 right).

44. Outer edge of olive tree (as on nos. 41-3, 45), PLATE 7, 3 and FIG. 7d. HM 187 Epsilon XVIII, HOF. 104 x 50 x 0.6, gb. Black-painted circular mark (partly obscured by splash of modern gypsum paste) to right on 'wooden beam'. Impressed string guide-lines at top edges of highest black and white stripes. Compare ibid, fig. 264, and Supplementary pl. xxx-d, f. Knot in wood: cf. Tiryns II, pl. viii (L.H. III), and Bulle, Orchomenos, pl. xxx, 1 (L.H. III).

45. Part of olive tree (as on nos. 42-4), PLATE 7, 4 and FIG. 7e. HM 187 Epsilon XVII, HOF. 6 x 8.6 x 0.5, gb. Slip missing in places, orange 'preliminary' line revealed at top left corner.

46. Black, blue, and white undulating bands with white field below, PLATE 7, 5 and FIG. 7f. HM 184 Epsilon XIV, HOF. 238 x 153 x 0.9-0.5, gb. Buckled surface, badly cracked; slip missing in places and lifting up from main body of plaster; one piece of slip out of place at spot marked 'x' in FIG. 7f. Orange 'preliminary' line below painted bands on right side. From 'Crocus Panel' (PM II, fig. 271) and technically comparable to nos. 27 and 28.

47. Buff (right) and white (left) fields separated by pale blue band rising upwards from rusty-brown lower dado, PLATE 7, 6 and FIG. 8b. HM 182 Epsilon XIV, HOF. As squared, 11.7 x 10.6 x 0.6, gb. Another piece of the same band, on left in enlarged panel B (Europa (MC) no. 4, fig. 2a). Dado as found below myrtles (PM II. 458, fig. 270).

48. White-outlined rockwork on red ground, border impression (vertical) on left, PLATE 8, 1 and FIG. 8c. HM 174 Epsilon IV, HOF, joining fragment from HM 176 Epsilon VIII, HOF. 12.5 x 7.7 x 0.6 at border edge, to 10, gb. Compare nos. 22, 33, 49.

49. White-outlined blue rockwork with black and white veining, on dark red ground, PLATE 8, 2 and FIG. 8d. HM 173 Epsilon III, HOF. 7.2 x 5.5 x 0.6, gb. Compare nos 22, 33, 48.

50. Blue and orange rockwork on white ground, PLATE 8, 3 and FIG. 8e. HM 175 Epsilon III, HOF. 15.9 x 14.7 x 0.5, gb. Black, white, and red striations. Technically matches no. 20.

51. Upper border stripes and imitation of wooden beam as seen in PM II, Colour pl. x, opp. p. 447. PLATE 8, 4 and FIG. 8e here. HM 172 Epsilon II, HOF. 12.5 x 13.4 x 0.6, gb. Black-painted circular mark (partly obscured by splash of modern gypsum paste) to right on 'wooden beam'. Impressed string guide-lines at top edges of highest black and white stripes. Compare ibid, fig. 264, and Supplementary pl. xxx-d, 4. Knot in wood: cf. Tiryns II, pl. viii (L.H. III), and Bulle, Orchomenos, pl. xxx, 1 (L.H. III).

52. Red, yellow and white upper border stripes above red field, PLATE 8, 5 and FIG. 8f (where red field cuttared). HM 162 Gamma VII, 3, 'Ohne Angabe der Fundstelle', but HOF: (another piece in HM tray 189), 21.1 x 16.2 x about 0.6, gb. Red field 19.9 deep; white stripe 3.4, with impressed string guide-line at both sides.

M. A. S. CAMERON
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'
(1-4) Monkey Fragments; (5) 'Blue Bird's' Neck
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

FRAGMENTS OF 'BLUE BIRDS' WINGS
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

FRAGMENTS OF 'BLUE BIRDS' TAILS
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FREScoes'

1 (No. 20)

2 (No. 23)

3 (No. 24)

4 (No. 26)

5 (No. 27)

6 (No. 28)

(c) 'House B's Tum. dish, lower reverseures; (5-6) horns or 'Anatam'
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'
(1-2) Crocus; (3) Ivy; (4) Madonna Lily; (5) Rose-Leaves; (6) Waterfall
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES' 
(1) SHRUB ON RED GROUND; (2-4) CROCUSES AND (5) UNDULATING BANDS FROM THE 'CROCUS PANEL'
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

(1-4) Parts of an Olive Tree and (5) Undulating Bands from the 'Crocus Panel'; (6) Lower Border Fragment
UNPUBLISHED PAINTINGS FROM THE 'HOUSE OF THE FRESCOES'

(1-3) Rockwork; (4-5) Upper Border Stripes
Mark A. Cameron

UNPUBLISHED FRESCO FRAGMENTS OF A CHARIOT COMPOSITION FROM KNOSSOS

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UNPUBLISHED FRESCO FRAGMENTS OF A CHARIOT COMPOSITION FROM KNOSSOS

Four fresco fragments from the Palace at Knossos* depicting chariots have recently been published by St. Alexiou. These show a charioteer with whip and reins in hand (frgt. I: fig. 1), the back part of a figure in a chariot, possibly part of the same charioteer (frgt. II:

* I wish to thank the Director, Mr. A. H. S. Megaw, and the Managing Committee of the British School of Archaeology at Athens for permission to publish here some results of my work as a student of the School. The Director and Assistant Director, Mr. M. R. Popham, read and improved this article in draft form, and Mr. G. Cadogan, Mr. N. Coldstream and Mr. H. Hewitt made many helpful suggestions. Mr. J. Crouwel, who is making a special study of Aegean Bronze Age chariotry, supplied some additional references and made most valuable criticisms for which I am grateful. Thanks are due to Prof. N. Platon, of the University of Thessalonike, and to Dr. St. Alexiou, Director of the Herakleion Museum, for permission to study material in their charge; to the Director of the National Archaeological Museum at Athens, Dr. G. Dontas, and to Mrs. A. Xenaki-Sakellarioi for helping me to study a chariot fresco from Mycenae now stored in that Museum; further, to the Keeper of Antiquities at the Ashmolean Museum, Mr. R. W. Hamilton, for permission to study papers bequeathed to the
Fig. 1. Charioteer (frgt. I); blue background below pebble motifs on white ground
Fig. 2. Chariot fragments from HM 15 Beta VIII 'North Threshing Floor Area' or 'Area of Man in High Relief'
Fig. 3. Fresco fragments painted in the hand of the same artist as executed fragments I—IV
fig. 2 II), the front part of a red chariot and parts of two horses' tails (frg. III: fig. 2 III), and part perhaps of a spoke of a chariot wheel (frg. IV: fig. 2 IV)\(^1\); but see correction below (p. 344). The paints, brushwork and style of these pieces are repeated in the two chariot fragments, V and VI, here published for the first time (figs. 3, V. VI; 4; 5.) The larger of the two new pieces is of particular interest as being the main evidence for the representation of what Sir Arthur Evans called the "dual chariots" on the walls of the Palace at Knossos; this type of chariot has been widely considered a specifically Mycenaean feature.

Ten other fresco fragments from the Palace at Knossos are illustrated in this article; these are relevant to discussion of the problems concerning the theme and chronology of the six chariot fragments.

\(^1\) AA. 1964, 785–804 Figs. 1 4 (the latter in colour).

\(^2\) A. Evans, The Palace of Minos (hereafter = PM.) IV 821–825. In Essays in Honour of Sir Cyril Fox (ed. by P. Foster and L. Alcock [1963]) T. G. E. Powell suggests (p. 161f.) that the side extensions on Aegean 'dual chariots' may be large guards to protect the hands of warriors from the wheels whilst mounting and dismounting the chariot.
The new material relating to chariots

The larger fragment V (figs. 3 V; 4) shows against a vivid blue ground a bovine head in right profile, in front of which is the curved side of a red chariot; at the perimeter of this extension at the back of chariot and on both sides of its horizontal black 'cross-bar' are rows of white spots which indicate the stitching of the red hide to the framework of the extension. Parts of a vertical black line (denoting the join with the main body of the chariot) can be seen on the right side of the fragment.

The second new piece, fragment VI (figs. 3 VI; 5) shows on the same blue ground parts of the tails of two horses — one with a brown tail, the other with a white one. The tails fall on opposite sides of a yellow pole which it may be assumed originally extended from the floor at the front of the chariot to the harness. This piece could belong to the same horses as fragment III, but it was unable to test whether the two fragments joined: (see now new joins shown in fig. 13). The plaster on all sides of fragment VI is white and clean indicating fresh breakages in modern times: one small joining fragment has already been located and further joins may turn up from the fresco material stored in the Herakleion Museum and the Stratigraphical Museum at Knossos. The six chariot fragments are complementary in subject-matter and on the same scale.

The remaining pieces illustrated here

Blue and yellow trefoil and circular designs with small black striations appear on a plain white ground on the two fragments seen in figs. 3 A. B. and 7—9; below these designs are yellow bands and blue and red areas. Both pieces evidently represent the dappled...
hide of an animal, probably an ox-hide, the vertical thin red bands on the same fragments being perhaps leather thongs. The execution of these two pieces suggests they are the work of the same artist as painted the chariot fragments.

The two next pieces have already been published by Evans. One shows two male figures in right profile before an architectural façade (fig. 6 A). On the other fragment (fig. 6 B), a figure in a long yellow robe is portrayed seated on a folding stool within a yellow 'framework', interpreted by Evans as part of a palanquin. From the shoulder of this figure hangs a swordsling to which is attached a dagger or short sword in a tapering black scabbard with a red spot at its lower end. Identical paints, brushwork and style indicate that these two fragments were painted by one artist who also depicted the subject-matter on the following six fragments.

In fig. 6 C, another figure is seated within similar yellow 'framework' on the same type of folding stool, here with a red object hanging downwards from the intersection of the legs of the stool; the pale blue robe reaches ankle-level, and the yellow 'framework' evidently continued horizontally below the seated figure. Parts of five male heads, three in right and two in left profile, appear on the fragments shown in figs. 6 D—H and 10. The mouths of the men on fragments fig. 6, A, D, E. and G were carefully rendered as open; those of the men on fragments F and H of that drawing are now indistinct.

The background colour of all the pieces of fig. 6 is the same vivid blue, deeper in tone than that of the six chariot fragments I—VI.

Provenance

The six chariot fragments appear to have been found in at least three different areas of the Palace. Only fragment I, however, has a certain provenance: it comes from the south wall of a compartment used as a stone-mason's workshop, on the south side of the building.

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6 Cf. especially the trussed bull on the Hagia Triada sarcophagus, MonAnt. 19, 1908 pl. 2, and also hides of chariots (ibid. pl. 3), and shields (PM. III 306 pl. 23: 'Ox-hides'). Further joins would help to clarify the identification of the subject matter on these pieces: either a trussed bull or a chariot seems indicated. — Fig. 3 A from 'S. Border of Area of Fish Fresco'; fig. 3 B from an unlabeled tray (165) and 'N. Portico Different Areas' (tray 46).

7 PM. II 770—772 fig. 502 A; PM. IV 399 fig. 382 b.

8 PM. II 771 f. figs. 502 C and 503.

9 Cleaning of the fragment has exposed the entire length of the dagger (curtailed in PM. II fig. 502 C) and PM. IV fig. 332 b.) Cf. Furumark, The Mycenaean Pottery 238 fig. 25, 1: Man, 1, 3, 4, 6, 8; Schaeffer, AASyr. 11/12, 1961/62, figs. 8. 9; Catling—Millett, BSA. 60, 1965, pl. 58, 2; for sword in belt at waist of ivory figurine, PM. IV 932 figs. 903 A and 904; Tiryns II pl. 1 3 for sword-sling on charioteer (fresco). See too, Iliad VII 303 f. . . . ἔχεις ὀργυρόν τὸν κολόκτον χαῖρε πέραν καὶ ἐνυμίττα τε πελάμωνι and ibid. X1V 404.
Fig. 6. Fresco fragments in the hand of the painter of the 'Palanquin Fresco'
This being so, may we believe that these various pieces, showing complementary parts of a chariot on the same scale and by the same artist's hand, originally belonged to a single wall painting? The agreement in colours and plaster is such that I think they did. But if so, there must have been either considerable movement of debris after the destruction of the Palace or else substantial contamination of the trays of fresco material since the time of its excavation. There is at present no way of deciding where the original position of the composition may have been.

A restoration of the chariot fragments as parts of one composition

Alexiou put forward a tentative restoration of three pieces (frgts. I—III) as parts of the same chariot, cautiously leaving unrestored the side extension and the lower pole linking the bottom of the chariot to the pole-stay. The two new pieces, frgts. V and VI, now make it quite certain that our painter was depicting the 'dual chariot'. A possible restoration of all six pieces as parts of one composition is given in fig. 12.

As in Alexiou's restoration, frgt. II is assumed to belong to the charioteer (frgt. I), but it could perhaps belong to a second figure standing behind the charioteer. The latter evidently wears a sword-sling which suggests he may be accepted as a military person. It seems likely that the animal behind the chariot, probably a bull, was depicted moving to the right at a lower level than the chariot and horses. If in principle this is correct, what was the theme of the painting?

The apparent movement of both chariot and bull to the right suggests a procession. But with what purpose? Could it possibly be a ceremonial procession of military people to a cult place where the bull was to be sacrificed? Some support for this supposition could be found in the sacrificial scene on the Hagia Triada sarcophagus, and in the correspondence of the ox-hide and possible leather thongs on the fragment by our painter seen in fig. 3 B with details of the trussed bull on the same sarcophagus. In addition, the head of a bull, apparently decapitated, has recently been found in the blocking wall of the side chamber containing a royal burial in Tholos Tomb A at Archanes. But we may go even further in our conjectures.

From the room adjacent to that where the charioteer fragment I was found came fragments of the so-called 'Palanquin Fresco'. On one of these, Evans identified a shrine partition are misplaced fragments from the 'House of the Frescoes'. Painted fragments by the same artist's hand, including fig. 3 A here, are to be found with fragments of the 'Palanquin' series in trays of fresco material ascribed to the 'Queen's Megaron' and 'Area of Fish (Dolphin) Fresco'.

12 Alexiou, AA. 1964, 791 fig. 3.
13 The portrayal of one or three persons in chariots in Mediterranean and Near Eastern Bronze Age representations is uncommon; two is the usual number as found on the following: Hagia Triada sarcophagus (Faribeni, MonAnt. 19, 1908 pl. 3), Tiryns II pl. 12, and perhaps on 'Palanquin' fresco (here fig. 6 A; see n. 22 below); generally two in chariots on craters, Furumark op. cit. Motif. 1; Man).
14 Comparisons for sword-slings in n. 9 above. Note, too, that dotted dress decoration is often found on the robes of military figures on Mainland frescoes from Mycenae, Tiryns and Pylos, and on pottery (Furumark op. cit. Motif. 1; Man).
15 Cf. Paribeni op. cit. pl. 2.
16 Sakellarakis, Kadmos 4, 1965, 178 f. See also representations of bull sacrifices on seal stones: F. Mata, Corpus der minoischen und mykenischen Siegel I (1964) nos. 80, 203 and ? 264.
17 PM. II 770 ff. and PM. IV 399; Alexiou, AA. 1964, 797.
Fig. 7. Fragment joining piece in fig. 8, showing dappled bull’s hide (cf. fig. 3 B)

Fig. 8. Fragment joining piece in fig. 7, showing dappled bull’s hide (cf. fig. 3 B)

Fig. 9. Fragment showing dappled bull’s hide (cf. fig. 3 A)

Fig. 10. Male head in the hand of the painter of the 'Palanquin Fresco' (cf. fig. 6 E)

Fig. 11. Robed figure wearing a dagger and seated on a camp-stool within a shrine (cf. fig. 6 B)
Painted in yellow (fig. 6 A)\(^{18}\). Similar yellow framework appears on other pieces from the same area, including the fragment illustrated in figs. 6B and 11 though in this case Evans interpreted it as representing part of a palanquin with a figure seated on a folding stool within\(^{19}\). These fragments, however, could equally well show parts of a shrine, perhaps of the same shrine which Evans recognised on the fragments seen in fig. 6A\(^{20}\). With good reasons, Evans thought the person seated on the folding stool was of priestly rank (fig. 6 B)\(^{21}\): a dagger or short sword hanging from a red sword-sling is now to be seen at that figure's side, and similar red sword-slings are worn by the two adjacent men depicted before the shrine who seem best explained either as priests in procession or as military figures in a chariot\(^{22}\); their open mouths (and those of the men seen in fig. 6 D, E, G) could denote that they were chanting or singing\(^{23}\). Add to this that the similar style, brushwork and colour schemes of the chariot and 'Palanquin' frescoes suggest that both are the work of painters of the same 'school'\(^{24}\), and there arises an increasing possibility that we have the fragments seen in fig. 6 C the yellow framework continues horizontally — perhaps the floor of the upper storey rather than a threshold or step into the lower part of a shrine.

\(^{18}\) PM. II 770 fig. 502 A; PM. IV. 399 fig. 332 b. Cf. now AJA. 66, 1962, pl. 40, 12.

\(^{19}\) PM. II 771f. figs. 502 B—E; 503.

\(^{20}\) Evans's restoration in PM. II fig. 503 is unacceptable not only because the occupant would hardly be shown sitting on a folding stool if riding in a palanquin (Alexios, AA. 1964, 785f. n. 3) but also because the two horizontal string-impressed guiding lines at shoulder-level of the man in PM. II fig. 502 B are absent on the supposedly adjacent frgt. C where they could be expected to appear. See now the palanquin on a fresco from Mycenae, E. Bennett—A. Wace — J. Chadwick, The Mycenae Tablets II Trans. Am. Philos. Soc. 48, 1, 1958, 29 fig. 31. The similar width and colour of the wooden struts on other pieces of the 'Palanquin' series suggest they belonged to the same shrine as that denoted by PM. II fig. 502 A (fig. 6 A here).

\(^{21}\) PM. II 770. No evidence has survived to show what the sex of the figure was, (against Banti, EAA. V 59).

\(^{22}\) As priests, cf. the figure with dagger sitting in the shrine (fig. 6 B). Representation of sword-slings and the overlapping stance of the two men could equally well point to chariocteers; cf. the positions of chariocteers on the Hagia Triada sarcophagus (Paribeni, MonAnt. 19, 1908 pl. 3) and on the Tiryns fresco (Tiryns II pl. 1, 3; 12), and their sword slings with objects listed in n. 9 above. If chariocteers, their height from the ground would explain their representation on a level with the capital of the shrine, which may be assumed to support a second storey containing the figure on a folding stool (fig. 6 B) seated within it: much of the lower storey would have been hidden from view by the bodies of the horses drawing the chariot. Note, too, that below the similarly seated person
Fig. 12. Restoration of fragments I–VI as parts of one composition
from two or more related panels — one showing a chariot procession leading a bull towards a shrine, the latter represented in the continuation of the scene on another painting, in which a person of priestly rank is waiting to carry out the sacrifice.

**Chronological considerations**

Alexiou has proposed a date before LM II (1450–1400 B.C.) for the chariot pieces I—IV. Chronological comparisons for fragment V, however, and other reasons, make possible a date in LM II or even LM III A 1. The fresco can in any case hardly be later than 1375 B.C. (LM III A 1) for the following reasons:

1. The latest frescoes from the Palace at Knossos belong to the period immediately before the 'final destruction', whether that event is put at about 1375 B.C. in LM III A or at about 1200 B.C. at the end of LM III B. At present, the earlier date seems preferable for the reasons already set out by M. R. Popham. In that case it follows that the fresco would have been painted before 1375 B.C.

2. The design, colouring and brushwork of the ox-hides on the pieces seen in fig. 3 A and B, and of the bull on fragment V, resemble so closely the treatment of the hides of the sacrificed bull and two chariots on the Hagia Triada sarcophagus that a close chronolog-
Fig. 13. Fragments III, IV, VI and the piece from HM tray Upsilon VI fitted together.
Fresco Fragments of a Chariot Composition from Knossos

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ical relationship seems very probable. The sarcophagus was found in an unmixed LM III A deposit and is generally assigned a date around 1400 B.C. (LM II/III A 1)²⁹.

3. Chariot scenes on pictorial craters are with good reason held to be derived from frescoes³⁰. Those represented on vases which most closely resemble our fresco chariots are assigned by A. Furumark to LH III A 2 late; those of LH III B date are considerably different³¹.

Gem-engravers, too, were influenced to some extent by mural paintings³², and the 'dual chariot' may well have been one of the motifs they borrowed; this type of chariot appears on a LM II cylinder seal and on a LM II seal stone³³.

4. The typological sequence of 'dual chariots' on Aegean Bronze Age wall paintings seems as follows:
   b. Mycenae (Lamb, BSA. 25, 1921-23, 165 VIII—X pl. 26 b): Myc. III A.
   c. Tiryns (G. Rodenwaldt a. O., Tiryns II 98 fig. 40 pl. 12): Myc. III B.

5. The appearance on both the 'Palanquin' and 'Camp Stool' frescoes of long-robed figures seated on similar folding stools suggests a close date for the two paintings; on the second of these is probably depicted a kylix, first recognised as such by M. Mackeprang who ascribed it to LM III A²⁴.

The chariot, 'Palanquin' and other frescoes here cited from Knossos and Hagia Triada are representative of the latest styles of human figure mural painting in Minoan Crete: all appear to belong to LM II or early LM III A.

Further considerations

To the period 1450—1375 B.C. (LM II to the end of LM III A 1) belong the Knossos 'Warrior Graves', the Palace 'Shield Frescoes', the Palace Style vessels decorated with similar shields and warriors' helmets, and records of military equipment, which include 'dual chariots', on Linear B tablets from the Palace at Knossos. These and other objects are generally understood to denote the presence of a military dynasty in the Palace during the period in question. Our chariot fresco, with its armed charioteer, may reasonably be regarded as a further sign of that dynasty.

With the decipherment of Linear B as Greek, the military rulers of Knossos are widely accepted as Mycenaean Greeks. The date, subject-matter and possible significance of our chariot fresco as proposed above suggest that our painter was perhaps portraying Mycenaean warriors and a Mycenaean ritual.

²⁹ Paribeni, MonAnt. 19, 1908 pls. 2. 3; MonAnt. 14, 1904, 685—690 figs. 4. 5. 7; A. Furumark, The Chronology of Mycenaean Pottery 104. Quotation from J. D. S. Pendlebury, The Archaeology of Crete (1939) 249. Cf. the scenes on the sarcophagus with a late fresco from the villa of Hagia Triada which shows a LM III A vessel (Paribeni op. cit. 70 fig. 21; cf. A. Furumark, The Mycenaean Pottery. Analysis and Classification 403 Motif 69 a. b. 2: LM II—III A, and Motif 70, 5: LM III A 2).
³¹ Ibid. 333 Motif 39, 7. 8 especially similar.
³² V. E. G. Kenna, Cretan Seals (1960) 51 f.
³³ PM. IV 426 fig. 351; p. 823 fig. 803 respectively. Kenna kindly allows me to mention that he would assign both objects to LM II on stylistic and other grounds.
³⁴ Ibid. 388 f. fig. 323, 324; Mackeprang, A.J.A. 42, 1938, 546. Furumark, however, followed Evans in assigning a LM I B date to this fresco and the cup (The Mycenaean Pottery. Analysis etc. 58 f. 159 n. 6); but cf. ibid. fig. 16, 256. 264: LM/LH III A 2 early — a style of pottery which was beginning at Knossos when the Palace was destroyed (Popham, Antiquity 40 no. 157, 1966, 27).
Corrections in the light of new joins

Preparations for the publication of this article had already reached an advanced stage when, as a result of further work carried out by me early in October 1967, new joins were found to the present chariot fragments (fig. 13); these entail some corrections, chiefly to the restoration offered in fig. 12, but my suggestions as to the theme and date of the painting remain unaffected.

To the left side of frgt. VI was joined the unpublished fragment mentioned above in n. 5; the yellow paint, once denoting the lower part of the wooden prop situated between the upper and lower pole-stays, has completely worn away, exposing the blue background colour below. To the right side of frgt. VI was fitted the small piece, frgt. IV, which is now seen to show the continuation of the lower pole-stay, not part of a spoke of the wheel as previously conjectured (p. 334 above; Alexiou, AA. 1964, 790f., but with reservations). The three united pieces proved to join, in turn, the lower edge of frgt. III. The clean white plaster of fresh breakages at the lower sides of the enlarged fragment (12.3 x 9.6 x 2.2 cm., as squared) suggests the existence of other joining pieces, but a brief search throughout the trays of fresco material from Knossos failed to locate the missing fragments.

The linking of frgts. III and VI makes it clear that the chariot and horses — perhaps the bull, too — have been restored at too great a scale by some 0.5 cm., and the true positioning of frgt. IV in fact leaves us without immediate evidence for the type of wheel originally depicted; it seems safe to assume, however, that the wheel of our chariot was four-spoked, in agreement with all known representations of the 'dual chariot'. In addition, the new joins add weight to the supposition that all our fragments had once belonged to the one composition (p. 338 above).
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MARK A. S. CAMERON

THE PAINTED SIGNS ON FRESCO FRAGMENTS
FROM THE "HOUSE OF THE FRESCOES"

In a brief communication to this periodical in 1965, I reported that the fresco fragments with painted signs from the "House of the Frescoes", the whereabouts of which had for some time been unknown, had been found in the Stratigraphical Museum at Knossos; some pieces published by Sir Arthur Evans were then still missing, but these have since come to light.

Evans divided the painted signs into two groups, A and B, according to the colours of the backgrounds and to the colour and size of the signs themselves. To group A (PM II, 440, fig. 257; nos. 1—6 on pl. I and II here) Evans assigned six fragments with signs in a sepia tint on a rosy ochre ground, the signs ranging from 7.5 to 3.0 cm. in height; he thought the pictorial conformation of the script was more strongly marked in this group than in group B, and that the first sign, A 10, on one of these pieces was perhaps "decorative". Evans left out of account "one or two uncertain pieces, perhaps pictorial" (ibid. 440 n. 1).

Evans described the signs of group B, with three fragments (ibid. 441, fig. 258; nos. 12—14 on pl. III and IV here), as a brilliant orange hue on a pale buff ground, and from 16.0 to 13.0 cm. in height; he noted a greater tendency towards linearization here as compared with the signs of group A. Only those parts of the fragments on which signs B 1, 2 and 4 were painted were reproduced in Evans's illustration.

Evans drew up a Table showing restorations of the signs of both groups to which he compared signs in Linear A (ibid. 442, fig. 259); three signs he regarded as types occurring only in Linear A (A 8, B 1 and B 2) and four others as "UNCERTAIN" (A 2, A 5 — not A 6 as stated —, A 9 and A 10). Evans thought all the fragments with painted signs stood apart from the other fresco remains from the same deposit (in Room E), and that they had perhaps once

1 Kadmos 4, 1965, 170—171
belonged to the walls of Rooms D and E on the ground floor of
the house rather than to the upper rooms originally containing
the well-known floral and faunal compositions. Further, the signs
could have served a "definite cult purpose" that was religious or
talismanic, and possibly decorative as well (ibid. 442f.).

Evans's identification of the painted marks on these fragments
as signs of a linear script, and in particular his Table of restored
signs and comparisons, have been considered with reserve by sev-
eral scholars — notably, W. C. Brice, in whose opinion no definite
signs are identifiable², and J. Chadwick and E. Grumach, both of
whom have expressed doubts about the validity of Evans's resto-
rations of the signs³. But there are yet other grounds for hesitation,
particularly as regards Evans's identification of signs on the frag-
ments of group B, as the following commentary on the individual
signs, the evidence of other fresco pieces from the same deposit,
and a description of the painting process used for the floral and
faunal compositions from this house may show.

The numbering (in italics) of the individual fragments in the
Text, Plates and Figures here corresponds to that in the Catalogue
at the end of the article.

Commentary on group A

Signs A 1 and 2 (PM II, fig. 257, 1 and 2; no. 1, pl. I and fig. 1)
Along the edge of the plaster to the right of A 2 (the lower
part of which is now missing) is a vertical impression from
some architectural feature: the original position of the frag-
ment is uncertain — it could have belonged to the top right
corner of the composition or to the bottom left corner⁴. It is
also uncertain that the left side of A 1 terminated in the place
and manner suggested by Evans. Another fragment, no. 7
(pl. II and fig. 1), hitherto unpublished, shows a similar im-
pressed edge (see cross-section in fig. 1) and is probably to be

² Inscriptions in the Minoan Linear Script of Class A, Oxford 1961, 23 under
V, 10
³ Chadwick in a letter to me (1963); Grumach in Kadmos 4, 1965, 49. On the
other hand, Sir John Myres considered these to be Linear A signs (Scripta Minoa
II 73).
⁴ There is no clear evidence for two horizontal bands in different colours (against
Evans, PM II, 440); only traces of a black or dark grey paint are visible. This
piece could therefore show part of a dark lower dado band (as seen on no. 21 in
pl. VI).
associated with no. I; grey-black lines⁶ appear on our new piece, but they are not readily recognised as parts of linear signs. Signs A 3 and 4 (PM, loc. cit., 3 and 4; no. 2, pl. I and fig. 1)

Located in 1966 in the Herakleion Museum. A 5 is somewhat more carelessly painted than it appears from Evans's illustra-

⁶ Not "sepia", as stated by Evans; see correction to Kadmos 4, 1965, 14 (ibid. 171). Only the painted marks on the piece with signs A 5 and 6 could be described as sepia — to judge from the younger Gilliéron's painted copy: but on this piece see notes 6 and 7.
tion; part of A 4 is now missing. Neither looks convincing as a sign of a Linear script.

Signs A 5 and 6 (PM, loc. cit., 5 and 6; =? no. 3, pl. II and fig. 1)
It seems clear from the younger Gilliéron’s painted copy of the fragment that the marks were indistinct at the time Evans made his study of these fragments. If no. 3 may be regarded as the piece bearing Evans’s A 5 and 6, whatever signs it may once have had are no longer distinguishable.

Signs A 7 and 8 (PM, loc. cit., 7 and 8; no. 4, pl. II and fig. 1)
The lower part of A 7 is incorrectly given in Evans’s illustration: compare fig. 1, 4. This sign was broken off in antiquity on its lower side, a point which makes Evans’s restored drawing of the sign and its comparison with a Linear A sign in his Table most uncertain (PM II, fig. 259). The right-hand stroke of A 8 — the only sign of this group which Evans considered to be a type occurring in Linear A only (L 78 on G. Pugliese Carratelli’s numbering, 1945) — was composed of hard particles of earth lodged only in the grooves of the rough surface: attached to the earth were a few strands of a dead miniature moss-like plant. The same plant once grew over a much larger area on the softer, cracked and buckled surface of one piece of group B (no. 14).

Sign A 9 (PM, loc. cit., 9; no. 5, pl. II and fig. 1)
The horizontal ‘bar’ in the centre of this sign is more irregular in shape than Evans’s illustration suggests.

Sign A 10 (PM, loc. cit., 10; no. 6, pl. II and fig. 1)
Two fragments were joined in 1965 to Evans’s piece. A 10, now nearly complete, is pear-shaped, not oval as in Evans’s reproduction; A 10 does not closely match a known sign of a linear or even a hieroglyphic script. Another mark (sign A 11), which in its incomplete form resembles A 2 (= “uncertain”), can be made out to the right of A 10.

In the tray which contained these fragments were five other pieces of wall plaster. No. 8 (pl. II and fig. 2) shows, on the same

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6 Gilliéron used a light greyish-brown paint to denote these very worn signs, whereas a dark grey-black paint indicates the most clearly visible signs on all the other pieces (except the piece with A 10, in a light ‘metallic grey’ paint).

7 Although there are differences in shape between the fragment reproduced by Evans and no. 3 here (which has only one small modern break), both are approximately the same size and all the pieces of Group A (no. 2 excepted) were in the same tray: I know of no other piece which could be that illustrated by Evans.
Painted signs from the "House of the Frescoes"

Fig. 2

rosy ochre ground, lines in a 'metallic-grey' paint — unrecognisable as parts of a Linear sign. Nos. 9 and 10 (pl. III and fig. 2) bear lines in white paint on a similar rosy field: these, too, cannot be identified with individual signs of a script, but they may well be the fragments referred to by Evans as "uncertain . . . , perhaps pictorial" (PM II, 440 n. 1). No. 11 (pl. III and fig. 2) once belonged to a border edge of a mural composition, probably Minoan; the fifth piece, however, shown in pl. III "H/R," is certainly Hellenistic or Roman.

At least seven of the eleven signs may be described as "uncertain" (A 2, 5, 7—11); A 6 is no longer visible, if, indeed, no. 3 is the piece on which it was painted. Of the three remaining signs, A 1, 3 and 4, only the former could perhaps be understood to bear a remote resemblance to a sign of a script (see Evans's Table of restored signs), but it is incomplete, and other interpretations of it are possible: these will be considered following a review of group B.
Unlike other fresco fragments from the "House of the Frescoes", the backs of the pieces representing group A are indented; this feature suggests that these fragments possibly belonged to a wall other than those to which the floral and faunal paintings, and group B, with flat backs, were once attached. In addition, their surfaces are rougher.

Commentary on group B

Signs B 1 and 2 (PM II, fig. 258, 1 and 2; no. 12, pl. III and fig. 3)
There seems far too little evidence to justify the extent of Evans's restoration of B 1. Above B 2 is an orange line, curtailed in Evans's illustration; moreover, the lower end of this sign evidently continued diagonally downwards to the left (see fig. 3). In situ in eight places on the existing surface are small traces of 'slip' of the same technical character as that found on the floral and faunal frescoes from this house*: one small, worn piece of slip lies immediately above the orange sign of B 2, from which it may be inferred that the signs were once hidden from view. This feature will be discussed below.

Sign B 3 (PM, loc. cit., 3; no. 13, pl. IV and fig. 4)
Above this sign is a diagonal orange line, rising to the right, which was omitted in Evans's drawing. On this fragment, too, there are eight small areas of slip, mostly worn but in situ — that in the upper left corner being the most evident (encircled in pl. IV). Further, in three places on the slip are traces of bright blue paint — the same vivid blue paint as was used on the floral and faunal compositions from this house.

Sign B 4 (PM, loc. cit., 4; no. 14, pl. IV and fig. 4)
It is most uncertain whether or not the two lines at the broken upper right edge of this fragment may be restored as forming a single feature, as Evans proposed. Pieces of plaster are now missing at the lower right edge, and a small area of slip is preserved in situ half-way along the bottom edge: at that point there is a trace of an orange line. The surface of this piece was substantially discoloured by a moss-like plant, now completely dead, which grew in the cracks.

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* White, opaque, very finely prepared and about 0.5 to 1.0 mm. in depth. It was applied in order to provide a better surface for painting than that of the main body of slightly coarser, sandy-coloured plaster.
In the same tray as that containing Evans’s three fragments of group B were five other pieces certainly belonging to the same composition; four of these show similar orange lines and traces of the same slip (nos. 15—18, pl. V and fig. 5), but the fifth piece is undecorated (no. 19, pl. V and fig. 5).

The use of a slip, partly painted blue in one case, suggests that all the pieces assigned to group B once belonged to the same com-
positions as the flower, bird and monkey representations from the same deposit. Other technical considerations support this view: the character of the plaster — thin, flat at the back, medium grained, buckled and crumbling, and light sandy-coloured — is certainly the same, and the manner in which the slip has flaked or worn down is repeated on the floral and faunal fragments.

Pl. VI, no. 21 A shows pebbles depicted above a black lower dado band, the right-hand part of whose slip can be safely removed, as seen in pl. VI, no. 21 B; pl. VI nos. 22 A and B show how a crocus fragment appears after much of its slip has flaked or worn away. The exposed surface of the main body of plaster, revealed where the slip has disappeared on these two fragments, is the same in character and colour (unpainted) as that of the fragments of group B. This is sufficient evidence to show that the painted signs of the present group were once hidden from sight by the slip which, however, has almost entirely vanished as a result of ancient damage. But why were the signs hidden from sight? And are they in fact signs of a linear script?

The evidence of other fresco fragments from this house may throw light on these matters.

Painted signs in relation to pictorial subject matter

Lines or marks in the same orange paint as that used for the signs of group B appear below the level of the slip on the exposed surfaces of the main body of plaster on three pictorial fragments illustrated here.

An undulating orange stripe can be seen below the blue, black and white undulating bands (depicted on top of the slip) on no. 23 (pl. VII and fig. 6 A). To the left of a group of damaged myrtle leaves on no. 24 (pl. VII) is an orange stripe which curves upwards from one side of the fragment to the other: one of the leaves, when extended by restoration, meets this stripe. Similarly, vertical orange lines occur on the surface of the lower of two layers of slip on no. 25, pl. VIII, directly below part of a column of blue water

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9 This section of the slip was lifted as a single piece from the fresco deposit by means of gypsum-paste supporting which was also used in lifting nearly all the fresco fragments from this house (PM II, 445).

10 For a discussion and drawing of this piece, see my contribution to Europa (Festschrift Grumach, 1987), Notes on some new joins and additions etc., 63—65 and fig. 6, on right.
Fig. 5
Painted signs from the "House of the Frescoes"

The Minoan artists used the same orange colour on the *surface* of the slip for initial painted guiding lines for representations of naturalistic ob-

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11 Ibid. fig. 5, lower fragment
jects\textsuperscript{12}, and for pictorial motifs in their own right: e. g., the pebbles seen on no. 20, pl. V and fig. 5.

On this evidence alone, all such orange lines may be interpreted as parts of rough ‘preliminary sketches’ or pictorial marks that were intended to indicate the approximate positions, type of subject, or general proportions of naturalistic motifs shortly to be painted in scenes such as the “Blue Bird” and “Monkey” panels (PM II, pl. X, opp. p. 447; 451, fig. 264, and pl. XI, opp. p. 454). In that case, Evans’s interpretation of the orange marks of group B would appear to be no longer tenable.

Most of these orange marks may more reasonably be assumed to relate to representations of naturalistic, possibly mainly floral, subjects; B 3, if turned right round, may indicate a rough sketch for a water-column, its dimensions and curved ‘base’ recalling two better preserved examples\textsuperscript{13}.

It follows from the present interpretation that the execution of the orange lines signifies an important stage in the painting process as a whole. As this has not been previously described, a brief summary follows; but the classification of the technique, whether as ‘buon fresco’\textsuperscript{14} or otherwise, requires consideration of a number of technical details beyond the immediate scope of this article and so must be left aside for future discussion.

The painting process as adopted for the floral and faunal compositions from this house

There were probably five main stages.

1. It is most likely that, over the bare walls of the rooms to be decorated with floral and faunal paintings, a primary coating

\textsuperscript{12} Orange lines appear below the slip on monkey, olive tree and other naturalistic fragments from this house (to be published shortly in BSA Annual Vol. 63). On three bird’s wing pieces, orange lines on the surface of the slip define the inner edges of the wings which were painted in blue; the yellow lines are immediately below the blue, as seen in PM II, 501, fig. 305, upper right (bird’s wing, not ‘marine shell’: v. Cameron, in Europa, op. cit. 62 and 11. 34).

\textsuperscript{13} Cameron, Europa, op. cit., pls. IIIId and IVa, b, and figs. 2 B and 5. Attempts to find joins between the fragments of group B and other (pictorial) fragments from this house have so far failed; the difficulty of finding joins is, however, substantial owing to the application of gypsum paste to the broken edges of the fragments during the course of their excavation: it now has to be cut away before a join can be verified.

\textsuperscript{14} For a description of this technique as used in Renaissance times, see W. G. Constable, The Painter’s Workshop, 1954, 62.
of mud or lime plaster was laid in order to conceal irregularities in the surfaces of the unplastered walls. Although direct evidence in this respect is lacking, except in the case of a fragment with a monkey's head painted on fine lime plaster which overlies a layer of coarser, red-painted lime plaster\(^\text{15}\), the original existence of a primary layer of plaster is suggested by the fact that the backs of the surviving fresco fragments are invariably flat, indicating that the lime plaster on which the paintings were executed had been laid over a surface already smoothly prepared\(^\text{16}\).

2. A uniformly thin layer of lime plaster (about 0.8 cm. in average depth) was applied on top of the smooth surface of stage 1. The surface of this main body of plaster is matt, light sandy-coloured, and has a stippled appearance.

3. This surface was allowed to dry out to some extent, if not completely, and on it were painted many lines in a thin orange paint: it is such lines which appear on the fragments of group B. As all the evidence points to the use of these lines as rough markers for naturalistic subject matter eventually to be depicted in full on top of the slip (see stages 4 and 5), it seems clear that this was the stage when the overall plan of the composition was sketchily worked out by the Minoan artists. The orange lines were not, however, intended to be seen in the final result.

4. On top of the main body of plaster (stage 2) was laid a wafer-thin coating of very finely prepared white lime, the slip, which hid the orange lines of stage 3 from view. Whether the slip, which is opaque as we now see it in its dried state, was put on in small sections or over the entire surface of a wall at one and the same time, is difficult to establish, owing to the broken condition of the compositions: consequently, it is uncertain how and to what extent the Minoan artists followed their 'preliminary marks' in the course of the last main stage of the painting process.

5. The final painting (i.e., of the familiar scenes with blue birds, monkeys and flowers) was executed on the surface of the slip. Guiding lines for the stripes of upper borders, and for broad dado bands below the picture friezes, were made by pressing

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\(^{15}\) PM II, 447, fig. 262; v. BSA Annual Vol. 63, Cameron, Catalogue no. 1 and Colour pl. A (1).

\(^{16}\) As Evans stated, PM II, 444f.
lengths of taut string into the slip whilst it was still damp and malleable. The same orange paint as used in stage 3 was occasionally employed for initial planning work on the surface of the slip — immediately prior to the painting of naturalistic subjects (see n. 12). Paints of a thick texture can sometimes be felt and seen to rise above the surface level of the slip, the white paint invariably so. There is a slight sheen over the surface of the slip and over individual painted elements, e.g., crocus buds and flowers, indicating that some polishing was carried out both before and after the final painting.

On this technical point, it should be remarked further that what may be termed preliminary planning of pictorial frescoes was not confined to the compositions from the "House of the Frescoes". Sketch lines in red paint, to the left and right of no. 26 (pl. VIII and fig. 6 B), clearly mark out the approximate positions of the kilt and legs of a female bull-leaper, of the well-known "Taureador" series17; in this case, the paints of the kilt and legs have flaked off, exposing the red lines on the yellow-painted background below: the final outlines of this figure were painted in black.

The interpretation of group A

At least five different interpretations of the subject matter of this group seem possible.

(1) As group A lacks evidence for a slip which would have concealed the painted features, it may be assumed that these marks would have been visible on completion of the wall decoration and ought, therefore, to be significant; they may be hieroglyphic or linear characters of unknown types18.

(2) The 'signs' may be meaningless graffiti inspired by the shapes of signs of a script.

(3) They may be rough sketches of naturalistic subjects, for example, rows of pebbles (compare no. 21, pl. VI). The fragments may perhaps belong to the 'missing' primary layer of plaster

17 Compare PM III, 209ff., figs. 144—146, 148, 164 B and pl. XXI
18 It should be remembered that we have a very limited knowledge of Minoan inscriptions which once existed on materials softer than stone, metals or baked clay, and consequently of their sign inventory, which should be compared in the present case.
Painted signs from the "House of the Frescoes"

at one time below the floral and faunal compositions: these were found in the same fresco deposit.

(4) The 'signs' may be abstract decorative patterns, unrelated to signs of scripts or to naturalistic motifs.

(5) Group A may represent a combination of (1) and (3), or (1) and (4) as Evans thought (PM II, 440).

Options (1) and (5) strike me as unconvincing for two main reasons, and I doubt whether a firm identification of the subject matter of this group of fragments can be given on present knowledge:

(a) No definite signs of a script seem identifiable, nor do the marks as a whole compare favourably with naturalistic motifs, nor with known abstract designs, such as are found as dress, border, or geometrical motifs on Minoan frescoes. If 'decorative' features played a part in the whole, their presence would seem inconsistent with an inscription in a linear script.

(b) On analogy with a painted linear sign on a fresco fragment from the "Area of the Taureador Frescoes"\(^9\), it seems reasonable to suppose that a Minoan mural painter would have been able to execute signs of a script in a more convincing manner than is evident from group A — had he been required to paint an inscription.

Conclusions

Writing in any form was evidently rarely attempted on Minoan wall paintings. This seems particularly true of painted inscriptions, of which it appears we have only one definite example — that found in the Palace at Knossos in the "Area of the Taureador Frescoes": that piece, therefore, warrants particular attention. Group A from the "House of the Frescoes", however, doubtfully shows signs of a Minoan system of writing, and group B from the same house may be discounted altogether. The suggestion of Evans, that the two groups of painted marks may have served a religious or talismanic purpose, seems highly speculative in the one case, and erroneous in the other.

\(^9\) PM I, 637; Brice, op. cit. 23 V 10 and pl. XXX (drawing); Kadmos 4, 1965, 12—15 and pl. 10 (photograph)
CATALOGUE OF MATERIAL

HM = Herakleion Museum; HOF = House of the Frescoes; SMK = Stratigraphical Museum, Knossos; gb = gypsum backing; all measurements in centimetres.

Group A

PM II, 440, fig. 257; located in SMK tray 1882 "K. Fresco No Provenance". Now stored in HM.

1. Signs 1 and 2; SMK 1882, 1; pl. I and fig. 1. 10.7 × 9.2 × 1.6 at impressed vertical edge, tapering to 0.8, gb. Buckled, paints poorly preserved, rough matt surface particularly over lower half of fragment. No clear evidence for two border stripes (black traces only). Sign 1 barely visible: Sign 2 somewhat more distinct, but lower part of sign now missing owing to a fresh breakage.

2. Signs 3 and 4; located in 1966 in HM tray 184 Epsilon XIV, HOF; pl. I and fig. 1. 7.5 × 5.8 × 0.85 to 0.35, gb. Rough matt surface, particularly in unpainted areas. Both signs are distinct, but the lower part of sign 4 is now missing.

3. ? = Evans's signs 5 and 6. Made up from three pieces in 1965; SMK 1882, 2; pl. II and fig. 1. 5.4 × 4.2 × 0.7 to 0.4. If this is the same as Evans's piece, the differences in shape may be accounted for by modern breaks along the lines of ancient cracks; the only fresh-looking damage is a chip at the bottom right corner. No signs distinguishable.

4. Signs 7 and 8; SMK 1882, 3; pl. II and fig. 1. 3.95 × 3.1 × 0.9 tapering to 0.3. Matt stippled surface. Sign 7 distinct. Sign 8 shows left-hand stroke distinct, but right-hand stroke composed of earth on which were remnants of a dead miniature plant (removed in cleaning the fragment).

5. Sign 9; SMK 1882, 4; pl. II and fig. 1. 4.1 × 3.3 × 0.9 tapering to about 0.15, gb. Matt stippled surface, as no. 4 above. Sign distinct, except at bottom edge. The central bar possibly once curved downwards to join the lowest part of the sign, but this is uncertain.

6. Signs 10 and 11; SMK 1882, 5, with two joining pieces; pl. II and fig. 1. 7.2 × 6.2 × 1.2 tapering to 0.3. Rough matt surface. Dark 'metallic grey' band above signs, as on no. 1. Sign 10
Painted signs from the "House of the Frescoes"

pear-shaped, worn. Sign 11, to right of 10, indistinct but resembles top part of sign 2 on no. 1.

7. SMK 1882, 6; pl. II and fig. 1. $5.3 \times 5.8 \times 1.2$ to $0.2$. Matt surface and impressed edge, as on no. 1. Dark grey-black line on rosy ochre ground extending diagonally downwards from impressed edge on right; at bottom edge, traces of similar dark paint.

8. SMK 1882, 7; pl. II and fig. 2. $6.8 \times 4.9 \times 1.0$ to $0.35$, gb. Very rough matt surface with distinct grey-black, broad lines on rosy ochre ground.

9. SMK 1882, 8; pl. III and fig. 2. $7.8 \times 4.8 \times 2.1$ to $0.9$. Slightly rough matt surface divided by grey-black line into lighter and darker pink or rosy ochre sections. In lighter half, several white lines in thin paint of which one extends into darker section.

10. SMK 1882, 9; pl. III and fig. 2. $4.4 \times 2.4 \times 1.7$. On a pink or rosy ochre ground, one white band and a white area below. Slightly rough matt surface.

11. SMK 1882, 11; pl. III and fig. 2. $6.8 \times 4.8 \times 1.6$ tapering to $0.8$. Border edge of mural painting, probably Minoan. Traces of orange band with black area below. Fine-grained, hard, off-white plaster.

Hellenistic or Roman fragment: SMK 1882, 12; pl. III H/R. $4.7 \times 3.2 \times 0.9$. Plaster pinkish-white, hard, with considerable admixture of small stone particles which appear at surface level. Traces of very thin slip and red stains, apparently paint.

Group B

PM II, 441, fig. 258; located in SMK tray 1883 "K. Fresco No Provenance"; now stored in HM. ppm = "Small pieces of plaster missing from . . ."

12. Signs 1 and 2; SMK 1883, 1; pl. III and fig. 3. $25.5$ (once about $26.4) \times 25.3 \times \approx 0.6$ to $0.35$, gb. Both signs distinct. Fragment badly buckled, and stained with dark substance which also appears on modern gb. Traces of slip in eight places. ppm upper left corner.

13. Sign 3; SMK 1883, 2; pl. IV and fig. 4. Now $16.0 \times 12.5 \times 1.15$ tapering to $0.5$, gb. Painted marks distinct, including area of blue paint half-way down on right side. Traces of slip in at least eight places. Buckled; ppm upper and lower left corners.
14. Sign 4; SMK 1883, 3; pl. IV and fig. 4. Now 16.2 (once about 17.6) \( \times \) 11.3 \( \times \) 0.7 to 0.6, gb. Buckled, and stained by dead miniature plant formerly growing from cracks and broken edges, mostly removed in cleaning the fragment. Trace of slip in one place. Sign distinct but damaged in centre by deep crack. \( ppm \) bottom right edge.

15. SMK 1883, 4; pl. V and fig. 5. Now 13.5 (once about 16.0) \( \times \) 16.0 \( \times \) 0.8 tapering to 0.4, gb. One straight orange line, curved to the right at its lower end. Traces of slip in two places. \( ppm \) upper right corner.

16. SMK 1883, 5; pl. V and fig. 5. 6.0 \( \times \) 4.1 \( \times \) 0.8 to 0.6, gb. Two distinct orange lines. Traces of worn slip on left side.

17. SMK 1883, 6; pl. V and fig. 5. 5.2 \( \times \) 4.9 \( \times \) 0.7, gb. One tapering orange line; trace of slip at one point and of orange paint at edge below.

18. SMK 1883, 7; pl. V and fig. 5. 2.8 \( \times \) 2.1 \( \times \) 0.75. One curved orange line, and trace of slip at one point.

19. SMK 1883, 8; pl. V and fig. 5. 3.1 \( \times \) 2.7 \( \times \) 0.8. Undecorated and without slip.

**Pictorial fragments**

From the "House of the Frescoes".

20. Red, yellow and white upper border stripes with orange pebbles in field below; SMK 1883, 9; pl. V and fig. 5. 7.0 \( \times \) 4.1 \( \times \) 0.8 to 0.6, gb. Stripes: as found on monkey panels, PM II, pl. X, opp. p. 447, and ibid., 251, fig. 264. Orange paint, as used for 'signs' of group B.

21. Seven blue and white pebbles, heavily outlined in black paint, on 'sandy' background above broad black lower dado; pl. VI. HM 107 Lambda III "HOF". As squared, 19.8 \( \times \) 22.0 \( \times \) 3.0 at vertical border edge on right, tapering to 0.6 on left, gb. 'Sand': buff field with white, red and black painted speckles. Existing height of dado, 9.0.

22. Crocus fragment, from same panel as PM II, 459, fig. 271 and no. 23 here. SMK 1883, 10; pl. VI. 17.6 \( \times \) 12.1 \( \times \) 0.8 to 0.5, gb. Parts of three flowers and one bud in dark red paint; olive-green leaves, poorly preserved; all on buff-yellow background. Slip mostly missing.
23. Black, blue and white undulating bands, with buff-yellow field above and white field below; from same panel as PM II, 459, fig. 271 and no. 22 here. HM tray 184 Epsilon XIV "HOF". Pl. VII and fig. 6 A. 14.0 × 7.6 × 0.7 to 0.5, gb. Slip substantially flaked from right side, revealing undulating orange line (roughly aligned with upper bands) on surface of main body of plaster.

24. From myrtle composition; PM II, 458, fig. 270 (top centre); from HM tray 175 Epsilon V "HOF" (but in unlabelled tray with pieces from HOF on east side of store room). 12.3 × 11.1 × 0.6 max., gb. Orange line to left of group of leaves (on right). Spot of modern gypsum on lower left, and very worn and crumbling on upper left. Pl. VII here.

25. Fragment of a blue water-column (waterfall). For a technical description and a further join, see M. A. S. Cameron, Notes on some new joins and additions, etc., in Europa (Festschrift Grumach, 1967), 57—63 and 71—72, no. 12 in Catalogue. Pl. VIII here.

From "Area of Taureador Frescoes".

26. Waist and legs of kilted female bull-leaper; pl. VIII and fig. 6 B. HM fresco cat. no. 33; located in unnumbered tray on north side of store room, below tray 179. Almost certainly found with the "Taureador" series described in PM III, 209ff.; ibid., fig. 164 B is in the same unnumbered tray. As squared, 11.1 × 7.9 × 1.6 max., gb. Plaster fine-grained, fairly hard and off-white. Yellow ground first painted, then 'sketch' in red for figure: red lines on right below kilt, below codpiece and below outline of front leg. Blue, white and black paints applied on top of 'sketch;' these have flaked in several places. (Similar red lines on two other "Taureador" pieces in same tray: (1) below a human foot, (2) in line with shins of female taureador.) Slight sheen on worn surface, as if once lightly polished. Hard earth accretion on surface above her right knee. Illustrated in colour in Sir Arthur Evans's Knossos Fresco Atlas, pl. X, fig. 2, but the extent of the red 'sketch' lines is not fully indicated.

Acknowledgements

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for permission to study fresco material in his charge; to Mr. H. Hewitt for reading this article in its draft form; and to Mr. G. Xylouris for the photograph reproduced in pl. VIII, no. 26. I owe a special debt of thanks to the Society of Antiquities of London who placed at my disposal the painted copies of the fragments referred to here, which were executed by M. E. Gilliéron, fils.

This article was written during the tenure of a Sir James Knott Fellowship at the University of Newcastle-upon-Tyne, to whose Fellowships and Research Fund Committees I am particularly grateful.
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KADMOS

ZEITSCHRIFT
FÜR VOR- UND FRÜHGREICHISCHE
EPIGRAPHIK

BEGRÜNDET VON ERNST GRUMACH

IN VERBINDUNG MIT:
STYLIanos ALEXIOu - HERAKLEION • EMMETT L. BENNETT -
MADISON • PORPHYRIOS DIKAIOs - HEIDELBERG • VASSOS
KARAGEORGIS - NIKOSIA • KONSTANTINOS D. KTISTOPOULOS —
ATHEN • OLIVIER MAISON — PARIS • PIERO MEGGGI — PAVIA
GÜNTER NEUMANN — GIESSEN • FRITZ SCHACHERMEYR — WIEN

HERAUSGEBEN VON
WILLIAM C. BRICE

BAND VII / HEFT 1

WALTER DE GRUYTER & CO. / BERLIN
VORMALS G. J. GÖSCHEN'SCHE VERLAGSHANDLUNG - J. GUTTENTAG,
VERLAGSBUCHHANDLUNG - GEORG BRIMSE - KARL J. TRUBNER - VEIT & COMP.
1968
A GRAFFITO RELATED TO A MYRTLE COMPOSITION
ON A MINOAN FRESCO FROM KNOSSOS

The fresco fragment published here was found on the north side of the 'Royal Road' in the main area of the excavations carried out at Knossos from 1957—1961 by the British School of Archaeology, under the direction of Mr. M. S. F. Hood. From the context in which it and other pieces of the same fresco were found, it could hardly be later than LM I B, and technical and stylistic considerations suggest that it may be earlier, MM III B if not MM III A. On the finely polished surface of the fragment, which was first painted a striking turquoise-blue, there is a deliberately scratched mark or sign (fig. 1).

The mark is undoubtedly of ancient manufacture because (a) its grooves contained tightly-clinging earth of the same character as that surrounding other fragments from the same fresco composition; (b) its design and style have the character of an authentic Minoan inscription — albeit one apparently of an unknown type. It may therefore be accepted as a Minoan graffito, of a new type, but of quite uncertain significance. If we may assume that its scribe was right-handed, its alignment as seen in fig. 1 may be approximately correct: right-handed people as a general rule draw circular or oval shapes in an anti-clockwise direction, starting at a point in the upper half of the shape. At the

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1 I am much indebted to the Committee of the British School at Athens and to Mr. M. S. F. Hood for permission to publish the fragment ahead of the main excavation report. Mr. Hood and Mr. N. Coldstream kindly read the manuscript, written during my tenure of a Sir James Knott Fellowship at the University of Newcastle upon Tyne.

2 5.0 x 3.6 x 1.3 cm. Plaster: hard, white, fine-grained, ? applied here in two layers. Back of fragment flat, attached to mud-plaster backing containing pieces of straw. Depth of penetration of turquoise paint, 0.25 mm — 'line of demarcation' between paint and plaster very clear. Small surface scratches below graffito which was executed some time after the plaster and paints had hardened.

3 I know of no similar sign from standard works on Minoan scripts or from illustrations of marks inscribed by craftsmen (to which class our sign could perhaps belong). Whether or not the sign may be a combination of two signs, the outer form as one, and the two inner lines as another, is uncertain. Both Mr. W. C. Brice and the late Professor E. Grumach kindly informed me that it is a type unknown to them.

7 KADMOS VII
tail-end of the sign, the writing tool seems to have slipped for a short distance on the highly polished (and so harder) surface of the plaster. The approximate position of the graffito on a wall may now be considered in reference to other pieces from the same fresco.

Two large reconstructed fragments have one painted subject in common: highly polished rockwork in maroon, grey, grey-black and deep blue colours which merge into one another at various points — streaked and splashed here and there with white paint. Below the smaller area of rockwork on the one piece appears an extensive field in the same turquoise-blue paint as that found on our inscribed fragment. The second large fragment, however, shows the upper contour of the rockwork section, at that point in very low relief and undulating rhythmically — evidently on a horizontal plane — with an unpainted white field above it. The same white ground continues on yet another fragment: but, in this case, parts of two olive-green leaves and part of a red stem of a myrtle plant spring directly from the upper contour of the rockwork, similar in colours and in technique to that already described. The tops of some of our myrtle shoots (of which there are 40 pieces in all) evidently extended on to a red area horizontally aligned at the top of the floral section of the composition, to judge from one small fragment. The red area here seems best explained as part of an upper border stripe: for among the fresco pieces discovered in the same part of the excavation there are many showing red and white border stripes depicted in the same red paint and likewise highly polished.

General considerations suggest that the myrtles may have been placed at about eye-level, perhaps as a frieze continuing around the walls of a single room. The white section containing the myrtles was perhaps about 60 cm in height, with the rockwork area certainly reaching some 25—30 cm below it; and below the rockwork, in turn, was the turquoise-blue field, possibly once continuing to floor-level, on one part of which was scratched the present sign.

The diagram in fig. 2 shows, within a hypothetical architectural setting, the relationships of the turquoise (A), rockwork (B), myrtle (C) and upper border (D) sections of the one composition, and the possible distance of each section from floor-level; the graffito in section A could reasonably be expected at some point between 50 cm and 1 metre from the floor-level. The relatively low position of the sign is not unparalleled: three Linear A inscriptions scratched on red-painted wall plaster in a small room of the Minoan villa at Hagia Triada were discovered in situ at only a short distance above the floor.

M. A. S. CAMERON

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4 Pugliese Carratelli, Mon. Ant. 40, 1945, 430—433, fig. 1a; Cameron, Kadmos 4, 1965, 8 and pls. 1—9 (LM IB or earlier).
THE MYCENAEAN IDEOGRAPH 120 GRANUM

In the drawing of En 659.6 (E. L. Bennett, Jr. (ed.), The Pylos Tablets 1955, 73) the ideogram 120 GRANUM resembles a monogram composed of phonetic signs *4I and *5, i.e. si + to, or possibly simply of modified si. The interpretation of 120 as a monogram is possible on the other tablets of the E-series as well, but seems unlikely for the Ab's. Three possible explanations for this resemblance occur to me. 1) Perhaps the most likely, but at the same time least satisfying, explanation is that the resemblance is due to chance, in which event it is of no significance. 2) The scribe was struck by the resemblance of 120 to a monogram composed of si + to and intentionally exploited the resemblance here, thus proving to us the identity of 120 = sitos, 'grain'. On this assumption 120 was not originally a monogram, was always an ideogram, but happened (again by chance) to resemble a monogram. 3) The ideogram was originally a monogram of si + to and the scribe simply here gave it in its more original form. This, though intellectually the most satisfying explanation, is nonetheless most unlikely. 120 appears to have been taken over from Linear A (L 42), and though this sign could theoretically in its turn have been a monogram (of L 67 + L 39?), it most probably was not: it seems to have developed from a hieroglyphic ideogram (Ventris & Chadwick, Documents in Mycenaean Greek 34—35 and fig. 5).

Of these possibilities I prefer the third, but am forced reluctantly to favor the second as being most likely to be correct. In either event MY Au 658.4: si-to GRA 4 is to be equated technically with PY Un 718.4: tu-ro2 TURO2 10, both tablets showing the word first written out in normal left to right order followed by the word written as a monogram consisting of two syllables in vertical order. Thus we have fair internal confirmation for 120 = sitos, and also independent support for *4I = si and *5 = to.

WILLIAM F. WYATT, JR.

LATE BRONZE AGE NEWS FROM CYPRUS (1967—1968)

Excavations at the two main Late Bronze Age sites of Enkomi and Kition continued in 1967 with results which may interest students of Mycenaean civilization. 1) At Enkomi the French Expedition of the Centre National de la Recherche Scientifique with Professor C. F. A. Schaeffer in charge continued its excavations at the Late Bronze Age site. One of this year’s principal tasks was the excavation of wells discovered in previous years. This in fact proved of utmost importance, not only for the well-dated material which they produced, but also for the high artistic quality of this material. We mention, inter alia, a
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Of the Minoan wall paintings from Crete depicting human figures which were discovered by Sir Arthur Evans at the turn of this century in the Palace at Knossos and which were restored under his direction by the Swiss draftsman, E. Gilliéron, père, there is one whose restoration has often been over the years the subject of some circumspection among visitors of the great exhibition of mural paintings in the Herakleion Museum: this is the painting of three female figures wearing short-sleeved open-fronted jackets with blue hems who are widely known as the "Ladies in Blue." The original composition, discovered in the chamber to the south of the staircase leading to the North East Hall (no. 1 on the plan), is extremely fragmentary and was severely burnt and abraded in antiquity. One fragment has been badly damaged in modern times: in 1926 an earthquake destroyed much of that piece showing a woman's hand fingering rows of colored beads and it was later replaced by a replica in stucco copied from a full-scale water-color painting of the original fragment. No original part of the heads of these figures has survived, and it is perhaps this fact which causes most concern to those who ponder the restoration and the question: "how did the restorer achieve this result?".

Plan of the Palace at Knossos: 1. provenance of the "Ladies in Blue" fresco; 2. hall of the Colonnades; 3. room of the "miniature" frescoes; 4. find-place of the "miniature" fragment illustrated on page 38; 5. room of the woman's Seat; 6. north foundations; 7. corridor of the Procession Fresco; 8. provenance of the "Cupbearer" fresco; 9. south propylaeum.

Gilliéron's restoration of the "Cupbearer" (Herakleion Museum). Provenance, room no. 8 of the plan, but assigned by Evans to the west wall of the South Propylaeum (no. 9 of the plan). Height of panel, 127.5 cm.

at Knossos. Evans described it as a "brilliant restored sketch seen in Fig. 397. The heads of the ladies are [Gilliéron's] own addition, and the details of the coiffures are conjectural, but they are here produced as giving unity to the composition" (page 546, footnote 3). For the restored details of the heads, Gilliéron was in fact able to draw upon the evidence of a number of paintings which Evans subsequently published in Volumes II and III of the Palace of Minos, notably "miniature" paintings of women and a fragment showing the bejewelled hair of a large-scale female figure. These appear in volume III, pages 46-68, color plates XVI-XVIII and figs. 28-36; and volume II, page 681, fig. 431. Moreover, comparison shows that details of the facial outline of the "Cupbearer," the only life-sized head to have survived among Minoan frescoes, supplied the "model" for restoration of the faces of the "Ladies in Blue." Completion of the ladies' heads, then, was not for the restorers the real problem. This was in fact to establish the correct positions of the many hands—mostly left hands—which appeared in this series of fragments and to work out a convincing scheme relating the figures to one another.
The fragment of a female figure reconstructed by Droop in 1914. It has no provenance, but comes from Herakleion Museum tray Rho IX and is no. 60 in the Museum Catalogue; on exhibition in Room K, floor-case 172. Height 18.1, breadth 38.6, depth of plaster 3.2 cm.

In working out their restorations of frescoes, Evans and his assistants often had more evidence to guide them than it proved possible for them to publish. In the footnote (3) cited above, referring to the restoration of the "Ladies in Blue," Evans mentioned that another fresco fragment (which he briefly described) had provided "new links of evidence" on the basis of which Gilliéron had been able to undertake the restoration of the "Ladies in Blue." Confirmation of this fact is supplied by documentary evidence at the Ashmolean Museum, Oxford, which shows that the fragment in question, hitherto unpublished, had indeed solved the problems confronting Evans and Gilliéron.

This piece, which Evans tells us was reconstructed by J. P. Droop in 1914, is seen here in the illustration on this page. It depicts the bust of a female figure, wearing the same type of jacket as the "Ladies in Blue," and part of her right forearm which is raised upwards. Her breast is indicated by a large red-painted nipple. The hems of her jacket are blue with black outlines and rows of "adder-mark" designs representing embroidery. The main design, however, on a rose-red ground, consists of a black net pattern with white spots at the interstices and small dark red vertical lines as "filling" motifs. The black lines of the net pattern were painted over string-impressed lines, executed in the plaster whilst the surface was still damp and malleable so as to mark out in a quick preliminary fashion the area and nature of the main design. The sleeve terminates with two embroidered hems, one similar in design and colors to that already described (but with the lower row of "adder-marks" mistakenly painted in reverse direction); the other comprising alternating thick and thin red "bars" in dark red on a rose-red ground. Between the waist and arm there appear two thick locks of black hair on a dark red and highly polished ground. Part of another lock of hair beyond the sleeve can be seen falling behind the woman's arms; but at this point and below her arm the ground color is a bright polished blue lacking any trace of a dress pattern. Apparently the background to the figure was divided into blue and red areas—perhaps, as so often in Minoan wall paintings, into broad undulating bands on a horizontal axis, but there is no certain evidence for this here. The woman is near life-size, fractionally smaller in scale than the "Ladies in Blue." The technical quality
of the fragment matches the excellent brushwork. The plaster is white, finely grained and very hard, and the high polishing was skillfully carried out.

Neither the exact provenance nor details of the stratigraphical context of this fragment are known. Stylistic and technical considerations must be our sole criteria for establishing an approximate date for the painting. In the first respect, there seems no appreciable difference between our figure and the "Ladies in Blue" which Evans, for good reason, attributed to the Middle Minoan III period (ca. 1700-1580 B.C.). But there are also grounds to believe that a similar style in painting women in this type of garment prevailed in the ensuing Late Minoan I period (ca. 1580-1450 B.C.), as detailed discussion of paintings from Knossos, Hagia Triada and Pseira could show.

There are, however, technical differences between the two frescoes under discussion which on present knowledge could indicate a date in Late Minoan I for our painting. A date in Middle Minoan III or Late Minoan I for our painting seems certain, the latter perhaps marginally the more likely. Until a more precise date can be established, comparative evidence for the restoration of this figure should in the first instance be drawn from these two periods only.

A colored restoration appears on the cover, the missing parts being completed in gray. Original fragments of the "Ladies in Blue" supply the "model" for completion of the woman's arms, right hand and bracelet. The left arm is restored in front of the woman's waist, as if resting on her lap, by analogy with "miniature" pictures of women on the throne of the "Temple Fresco" (Herakleion Museum). Only the central section with the tripod shrine is shown here. It was found at no. 3 on the plan. Height of the panel, 31.7 cm.

Necklace of dark brown beads worn by a woman shown to be portrayed at life size. From Herakleion Museum (no. 74, Bota III "Area of Hall of Colonades" (no. 2 on plan) now on exhibition in Room K, floorcase no. 172. Note the finger-nail impressions above the middle row of beads: these suggest the painting was initiated while the surface was still soft. A marked gray color in the upper part of the cross-section of the plaster indicates very heavy burning. The surface below the beads has baked considerably. 11.4 x 10.5 x 3.6 cm.

"Miniature" women in an architectural setting. The painting and surface are worn. Possibly by the same painter as depicted the women seen in the illustration above. Provenance: room 4 of the palace, at the right-hand corner of the steps. This is mentioned by Professor Platon in Akrotiri Chronikos vol. 9 (1955) pages 566 and in the Bulletin de Correspondances Helléniques 80 (1956) page 341; to him thanks are due for permission to publish the fragment. Herakleion Museum catalogue no. 103; 8.6 x 6.5 x 2.1 cm.

Gillieron's restoration of the miniature "Temple Fresco" (Herakleion Museum). Only the central section with the tripod shrine is shown here. It was found in 1934 on the plan. Height of the panel, 31.7 cm.
LADY IN RED continued

restoration operations (at no. 4 on the plan of the palace) in the room to the west of that which produced the "miniature Temple" and "miniature Sacred Grove" frescoes from Knossos (numbered 3 in the plan of the palace). Part of a second woman in a yellow jacket, paints worn, is seated to the right below light brown architectural framework. The left-hand woman, of greater interest in the present connection, wears a blue-sleeved jacket with black decorative details; the nipple of her breast, like that of the "Lady in Red," is indicated in red paint, and below her bosom two curved lines represent the fingers of her right hand. A comparison of the "right" date and scale for restoration of the ear of the lady in the red jacket is lacking, but a later fragment from the Room of the Woman's Seat or North Foundations at Knossos (numbers 5 and 6 respectively on the plan) shows details which have been followed in the present restoration.

As for restoration of the jewelry in our figure's hair, there is only the evidence of one fragment to guide us on details: it comes from the north of the Palace, is assigned by Evans to Middle Minoan III, and is the piece which Gilliéron also had in mind when he restored the hairstyles of the "Ladies in Blue" (see above, page 35). The arrangement of the jewelry is largely conjectural, but the "miniature" paintings from Knossos also throw some light on hair ornaments and bands. It remains to consider how our fragment played a part in the restoration of the "Ladies in Blue," and to discuss briefly the significance of all four ladies.

The "Ladies in Blue" is one of the earliest known Minoan frescoes depicting the human figure. Its importance evidently had been clear to Evans long before the composition was actually restored. In his early reports of excavations at Knossos he mentioned the pieces showing women's hands and jewelry in an article in the Annual of the British School at Athens, 7 (1900-1901) page 26. Sometime in 1910 or earlier he had requested Gilliéron to make colored copies of the most readily intelligible pieces for reproduction in the "Knossian Atlas," Volume I, which was to be published in 1967. The earliest for the preparation of these plates, hitherto tentatively put at 1915, is now known to be 1910 from newspaper clippings, from The Times dated 16 September 1910, in a file of papers and photographs once belonging to Evans' scientific assistant Noel Heaton. These documents were discovered early in 1969 by Miss Joan du Plat Taylor among a series of files of papers of Sir Leonard Woolley at the Institute of Archaeology in London.

It seems likely, therefore, that by 1910 Evans and Gilliéron were already contemplating the possibility of restoring the "Ladies in Blue," but success was not to come until several years later. Meanwhile, gradual progress was made with a number of small fragments which were eventually to solve their problems. At some time before 1914, these pieces were joined up to make two larger fragments: a photograph once belonging to Noel Heaton, Evans' scientific assistant, shows the one part, depicting our figure's sleeve and arm, positioned for the photograph to the right of the second fragment which shows her jacket and bust. Heaton, actively engaged in carrying out scientific tests on fresco material from Knossos between 1908 and 1911 during which years he published his most important conclusions, was interested in our pieces because at the top edge of the sleeve (where the fragment breaks off) he had scraped a clean cross section in the plaster for inspection under a magnifying lens or for a sample of the lime plaster for analysis. The photograph was probably taken, therefore, between 1908 and 1911. The great "breakthrough" for Gilliéron came, however, at least three years later in 1914 with Droop's successful reconstruction of the two pieces as a single large fragment—as we now see it on page 37. Gilliéron was evidently working on Crete on the fresco material at that time and Droop's achievement inspired new thoughts on the restoration of the "Ladies in Blue." These Gilliéron communicated to Evans in a hastily written but exciting note. On a small sheet of paper he drew in ink our fragment and three pieces of the "Ladies in Blue" and worked out in pencil rough sketches for the restoration of both compositions, adding also some comments in French. This paper, which clarifies the rest of the story, is reproduced here on page 41 by courtesy of the Ashmolean Museum.

Our fragment appears to the upper left in this illustration and is accompanied by the following notes: "La Dame au vêtement rouge est dévoilée"; also "rouge, je crois que le vêtement était jaune et a été brûlé en rouge." (The lady in the red dress is unveiled; red, I believe that the dress was yellow and has been burned to red.) On this last point Gilliéron (and Evans, who adopted the suggestion) is certainly incorrect: there are no signs of heavy burning (only traces of smoke stains) on the painted surface and none in the cross section of the plaster such as would indicate beyond doubt that the yellow paint had turned red through oxidation as a result of proximity to great heat or fire.

Of his drawing of the "Ladies in Blue" Gilliéron remarks: "The Lady in the yellow dress with the blue
Gilliéron's sketches for restorations and notes for Evans (Ashmolean Museum).
Gilliéron’s restoration of the "Lady in Red" (reproduced by courtesy of the Ashmolean Museum): the original painting is near life-size.

Part of a woman’s necklace or bracelet, from the "Ladies in Blue", but omitted from the restored panel. To scale. Found at no. 1 in the plan. Reproduced in color at Knossos Fresco Atlas (London 1967) color plate XII B, the smallest fragment, at actual scale.

borders thanks to a new fragment has taken a new look but the enigma of all the left hands has not yet been solved.” However he had previously understood the pieces, Gilliéron could now be sure that the various left hands belonged to several women all playing with jewelry, in fact their necklaces, with arms raised in positions comparable to that of the lady in the red jacket. It is equally clear that Gilliéron had by now conceived the idea that the "Ladies in Blue" had originally been portrayed in a row of closely related figures. But the central fragment in his drawing was still a puzzle. The curved blue hem obviously belonged to the sleeve of a woman’s jacket. Did the jewelry to the left of that hem represent hair ornament? Perhaps the very damaged condition of this fragment is sufficient to account for his hesitation on this point. At all events, he subsequently recognized the jewelry to be the necklace of a third woman whom he finally restored as the left-hand figure in the group, partly overlapped by the left arm of the central figure. These changes were put into effect in the exhibited panel,
apparently created by his son, E. Gilliéron fils, also a draftsman, which represents the culmination of their study of this painting.

The elder Gilliéron also painted a fine colored, full-scale restoration of the lady with the red jacket, a restoration which bears many points of resemblance to that of the "Ladies in Blue." It is kept in the Knossos Archive at the Ashmolean Museum, and a photograph of it is given here to complete the record.

One criticism of Gilliéron's two restorations must be set down, for it concerns the important matter of style. It is quite understandable that he should have restored the faces of the women by analogy with the face of the "Cupbearer," for his was the only complete head to have survived from Minoan frescoes depicting life-sized figures. But there are chronological reasons why it should not be admitted as a "model" for the restoration of the present figures. The "Cupbearer" is much later in date than the "Ladies in Blue," Late Minoan II (ca. 1450-1400 B.C.) rather than Late Minoan I B (ca. 1500-1450 B.C.) as Evans thought, by which time the stylistic treatment of human anatomical features had undergone several changes. The paintings of Middle Minoan III or Late Minoan I date referred to above do not indicate that high-bridged noses, heavy protruding chins, and realistically full and somewhat "angular" lips, such as the "Cupbearer" has were depicted in those periods: and lines for nostrils and smiling expressions are always absent from Minoan wall paintings.

A minor point: a small fragment showing part of a woman's necklace or bracelet, certainly by the same artists as depicted the "Ladies in Blue," was left out of account of Gilliéron's restoration of that painting. Notwithstanding these criticisms, Evans' appreciative description of Gilliéron's pioneering work in this difficult field remains a just and most agreeable tribute.

It is unfortunate that so little of these paintings has survived to the present day. We do not know if the women were portrayed as standing or seated, and their thematic context and original architectural positions are also unknown. However, the scale of representation, the fine brushwork and the technical finish are a firm assurance that the women once belonged to important scenes and rooms, whether on the walls of main corridors or cult rooms on the ground floor of the Palace or gracing State Halls or public corridors in upper stories as Evans thought in the case of the "Ladies in Blue." In this connection, we note that several fragments comparable in scale and subject to the "Ladies in Blue," and evidently the work of the same painters, were found by Evans in a firm Middle Minoan III context below the floor of the "Corridor of the Procession" (no. 7 in the plan)—a point which might suggest they had belonged to an early processional scene. Indeed processional or so-called "conversational" activities (like those of the miniature "Temple Fresco," seem the most likely—if not the only possible—themes of our paintings, but one cannot say which of these should be preferred. Nevertheless, it is clear that at some point in Middle Minoan III, one group of painters was engaged in decorating different and important parts of the Palace with scenes prominently featuring large-scale pictures of women, gracefully portrayed: there is perhaps a hint here of a thematically coherent yet widespread scheme of decoration in the Palace of this period. If the lady in the red jacket is to be referred to a later date, stylistic, technical and perhaps thematic continuity in the art seems indicated in Late Minoan I Knossos. But what of the figures themselves?

Evans was inclined to regard the present form of dress, a short-sleeved jacket usually worn with a flounced skirt, as "court dress." The German scholar, Dr. Helga Reusch, who has more recently studied these compositions in relation to paintings from the Greek Mainland depicting women, would emphasize, however, that it was above all the dress of the chief Minoan deity, a goddess, and of her earthly representatives, priestesses. In that case, as goddesses in most Minoan works of art usually make individual, not collective, appearances, it seems best to interpret the three closely adjoined figures of the "Ladies in Blue" as priestesses of the Palace. But in the case of the "Lady in Red" there is insufficient evidence to say whether she appeared alone or as one of a group of women. Was she priestess or goddess?

In the apparent absence of further fragments of the composition, this is one puzzle that seems likely to be with us for a long time.

The author has been studying Minoan frescoes, in particular those from new and old excavations in the Knossos district, since 1962 as a research student of the University of Liverpool and from 1966-1969 as a Sir James Knott Fellow of the University of Newcastle upon Tyne where this article was written. He is currently preparing a general survey of Minoan wall painting, with special reference to chronology and unpublished material from British excavations in Crete.

Thanks are due for permission to publish here some of the results of my work to the Director and Managing Committee of the British School of Archaeology at Athens, to the authorities of the Heraklion Museum, the Ashmolean Museum, and the Institute of Archaeology in London. Mr. G. Xylouris and the Ashmolean Museum kindly supplied photographs.
New

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Translated and Edited by M. W. Thompson

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Myrtos: An Early Bronze Age Settlement in Crete

by PETER WARREN

British School at Athens
Supplementary Volume No. 7
APPENDIX IV. THE PLASTERS

BY M. A. S. CAMERON

The excavations produced abundant evidence for the lime-plastering of walls and ceilings or roofs, and, to a lesser extent, of floors and benches, throughout the site. Evidently many plastered walls were given a monochrome wash of dark red paint as a ‘finish; some evidence was found for the painting of external wall-faces, and even for redecoration. The function of the wall-plasters was primarily constructional, providing smooth and protective coverings to the walls even though these were in some cases very carefully built of stone. The plasters from Myrtos ‘Fournou Korifi’ confirm and, particularly on technical aspects, amplify our knowledge of EM II wall-plastering and painting hitherto based on study of the plasters from contemporary settlements at Vasiliki and Knossos.

The following notes principally concern the wall- and roof-plasters from Myrtos, their composition and physical characteristics, their distribution on the site, their construction and uses. A brief attempt is then made to place EM II wall decoration in the wider context of mural painting in the North Balkans, East Mediterranean and Near East in Late Neolithic and Early Bronze times (c. 9000–2200 B.C.). Finally, the results of chemical and microscope examinations of eight plaster specimens from Myrtos are appended.1 Measurements are in centimetres unless otherwise stated.

THE WALL-PLASTERS (Pl. 8i; specimens 1–6)

(a) Composition and distribution

The materials for the wall-plasters, as for the other classes of plaster in use at this site, were gathered locally and consist mostly of lime (about 63.0%, on re-calculation as calcium carbonate) with some admixture of silicic (about 30.0%), grit and other aggregate, and binding materials such as chaff or hair, now decomposed but attested by ‘negative’ impressions in the plaster-body (Pl. 8iA, left). The wall-plasters are readily indentifiable by their thin depth in cross-section, from 0.6 to about 3.2 or, rarely, a little more; by their medium to fine-grained composition and softish—even friable—texture; and by their painted and sometimes slightly polished surfaces. By contrast, the roofing-plasters are always unpainted and unpolished, and they are much thicker, more coarsely grained and considerably harder. In colour the wall-plasters range from a light pinkish sandy hue to ashy grey (perhaps affected by the fire which destroyed the site).

The relatively high percentage of calcium carbonate and the low percentage of silica and alumina in the Myrtos plasters would seem to account for their relative softness as compared with EM II examples from Vasiliki and Knossos, with only about 40.0% calcium carbonate and...
about 60.0% silica and alumina: the Vasiliki wall-plasters are noticeably harder and more cement-like in character owing to the greater proportion of silica.\(^1\) Despite such differences in the figures, clearly at all three sites local lime-deposits were being worked in EM II with a definite view to the preparation of wall-plasters for extensive use throughout the settlements; possibly the working of such deposits was already in this period being carried out by specialized labour-forces charged with the collection of the raw materials for building, plastering and painting.\(^2\) The use of lime, rather than gypsum or mud, as the main component of the plasters also suggests the use of high-temperature lime-kilns\(^3\) and a knowledge of slaking processes.

Analysis of the painted specimens shows that iron earth pigments supplied the red colour applied to the surfaces of the wall-plasters. This colour may have been prepared perhaps by those producing colouring materials for the pottery and dyeing industries on the site. Only a red or brownish red paint is certainly attested, and a particularly well-painted piece is shown at Pl. 81B. Other colours derived from earth pigments, possibly including yellow ochres, may have been used occasionally, as, for example, a light fawn colour on the surface of the fragment at Pl. 81A, right, and on specimen 4.

Painted wall-plasters were found in Rooms 17, 53, 54, 60, 79, 80 and Passages 64 and 65. Important evidence for the decoration of external wall-faces came to light in Passage 64, whose east and west wall-faces preserved in situ towards the southern end areas of red painted plaster. Specimen 3 was painted and came from the South Paved Way 93, outside Room 80 and the

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\(^1\) Heaton, *Journal of the Royal Institute of British Architects* 18 (1911) 698.

\(^2\) Further on the divisions of labour at Myrtos, see Warren, *ILN* 17 February 1968, 26, and 8 February 1969, 27; also p. 266 above. The *ILN* reports also make reference to the painted wall-plasters at this site.

\(^3\) These may have been 'sow-kilns', circular in plan and constructed from alternating layers of wood and limestone to a height of several feet. The wood was allowed to burn for days until the limestone had become reduced to a caustic powdery state. No stone or other enclosures were necessary. Indeed, no stone or brick-built lime-kilns are known in Crete before the Roman period.
south-west corner of Room 79. The find place of this piece suggests that external walls of the settlement were plastered. Definitive evidence came from the west wall of Area 26, the west face of which, namely the outer wall of the settlement, was covered with rather coarse plaster, for 34 cm. down from the preserved top.

Unpainted wall-plasters turned up in Area 26, Rooms 54, 57, 77, 79-80 and Passage 65, and also in situ over a large part of the west wall of Room 19 (Pl. 13B). Here there was a horizontal impression along the lower border of the plaster, as if it had been set over a low wooden baseboard or laid to the level of an earth floor (other evidence for which could not be discerned); in addition, the extent of the plaster here best suggested that the house walls would originally have been entirely covered with a plaster coating. Another unpainted fragment, with a curved moulding along one axis and there reaching a maximum depth of 3.2 cm. (Pl. 81D), possibly provides further evidence for the plastering of outside walls since this kind of moulding and a greater depth of plaster are characteristic features where the plaster turns an outside corner formed by two adjacent walls (Fig. 122D).

(b) Construction and painting methods
These can be described only in very general terms. Over the bare faces of the mud-and-rubble or stone walls was laid a coat of plaster, varying in depth from less than 1.0 to about 2.0 cm., but rarely more. Occasionally on top of this came a second plaster layer, similar in composition to the first but usually a little thinner—and sometimes no more than a mere wafer-thin layer or 'intonaco', some 3 mm. deep (as in Pl. 81A). The plaster surface was then given a monochrome wash of paint or left unpainted. Presumably the paint was applied with a brush—by Egyptian analogy, a bunch of feathers, perhaps, or a reed with its end softened by chewing or by beating with a stone; some such means of applying the paint is suggested by the appearance of lighter and darker parallel striations on the surface of the piece at Pl. 81A; specimens 4 and 6, with small markings or scratches on their surfaces, suggest the plaster may have been smoothed out with a float or trowel before painting. Finally, the painted surfaces were lightly polished, a process which gives them a slight sheen and also makes them more uniform, and harder—and therefore more water- or damp-proof.1

For a fine example, from Room 79, illustrating all aspects of construction see chapter V No. 233 and Fig. 107 No. 233.

Specimen 3 indicates that painted redecorations of walls were occasionally carried out. The main body of plaster was given a wash of red paint, clearly visible in section; above this a further layer of plaster, some 3 mm. thick, was added at a later stage and the new surface was likewise painted red (Fig. 123). Apparently we have here the earliest instance yet known for the painted redecoration of a wall in any Aegean Bronze Age settlement. The occurrence of two washes of paint on this piece brings us to another technical point, namely, the interpretation of a succession of red and unpainted layers superimposed on the main plaster body of the specimen No. 1 (Pl. 81C).

1 So, too, Heaton, op. cit., 705.
A series of 13 layers, alternately red and unpainted from the surface downwards, can be detected by low power microscope in the cross-section; six layers fall between surface-level and 2.5 mm. down, where begins a seventh (red) layer noticeably thicker than the rest (0.5 mm.): six more layers follow until the main body of plaster is reached at 4.0 mm. below the surface-level (Fig. 124). On one side of the fragment, the layers have dried out and horizontal splits appear separating the layers into pairs of red and unpainted levels: the splits occur below the unpainted layers, to the surface of each of which a red layer adheres firmly. With the exception of the seventh down, the layers are so thin that they can be counted as little more than washes. The red layers certainly contain iron pigment, but they present neither the usual deep red colour nor the 'skin-like' appearance of the paints on other examples—they are light brown and doubtfully 'painted' layers. What interpretation is to be put on this extraordinary sequence of layers is quite uncertain: one explanation may be that the wall-decorator, for unknown reasons, began by building up the surface-level of the plaster with six 'red' and unpainted wafer-thin layers, the thicker seventh layer possibly being intended as a finished 'painted' surface; but then he changed his mind or realized the existing surface was not up to the required level or else was flawed in some way, and so he added another six layers in the same manner. Whatever the right explanation, the fragment bears witness to a remarkable care in brushwork! Somewhat similar pieces, but with fewer layers, turned up in Rooms 52-54.

Whether the paints were applied whilst the plasters were still soft and malleable ('buon fresco' painting) or when they had dried out ('tempera' painting) is also uncertain. Possibly a painting method akin to 'tempera' was employed since the paints are film-like and penetrate into the plaster no more than about 0.2 mm. Moreover, there is a clear line of demarcation between definite 'skins' of paint and plasters. On the other hand, it is difficult to explain how the paints were made to adhere so firmly to the plaster, unless a 'fresco' method was used. The exact painting method adopted at Myrtos is, however, best left an open question.1

Reference has already been made to practical reasons for painting the walls, but the possibility should not be overlooked that some elementary artistic ornamentation may have been attempted, by contrasting painted with unpainted areas. No patterns of any kind were found, and no use was made of black or white paints although these were included in the 'palette' of the EM II pot-painter. The popularity of red paint in the EM II mural decoration at Myrtos, Vasiliki and Knossos may be the result of easy local collection of the pigment, easy preparation in large quantities, and adherence to a traditional use of this colour for decorative purposes in

1 The classification of the Minoan painting process, whether as 'buon fresco', 'fresco secco' or 'tempera', is much disputed by the experts.
general since earliest Neolithic times; but other explanations for its seemingly exclusive use could be put forward, as, for example, a belief in magical properties of the pigment.1

CEILING OR ROOF-PLASTERS (Pl. 82; specimens nos. 7 and 8)

(a) Composition and distribution
These consist of very thick layers (8.5 to 16.5 and more in depth) of rather more coarsely grained, sun-baked lime (about 63.5%, as CaCO$_3$), mixed with silica (about 31.2%), aggregate and binding materials—grit, tiny stream-pebbles, pottery chips, occasional large and small stones, chaff and fibrous material. A beach-pebble, some 13.0 in diameter and nearly 4.0 thick, was found embedded in the lower part of the exceptionally thick fragment seen at Pl. 82A. These plasters are very hard, cement-like in texture, and noticeably pinkish–sandy in colour. The upper surfaces are roughly flattened, but the undersides show impressions of reeds or boughs used to support the heavy overlying plaster layers (Pl. 82 B, D).

Fragments of roof-plasters were widely distributed over the site, turning up in the fill of most rooms.

(b) Construction and functions
The construction of roofs and ceilings (cf. Appendix III) was basically simple, and made easier by the small size of the rooms. Boughs or thin tree-trunks, about 3.0–5.0 in diameter to judge from the impression in the fragment at Pl. 82C, spanned the wall-tops at intervals; cross-wise over these were laid two or more layers of reeds cut from nearby stream-beds (Pl. 82 B, D). On top of the reeds one or more thick layers of plaster were spread and left to bake hard in the sun: presumably this work was carried out in the late spring or summer months. This method of roof-construction implies flat or only slightly sloping roofs—slipping just enough to drain off rain-water. A diagrammatic sketch of the roof-construction is given in Fig. 122. This method of building roofs appears in Crete in earliest Neolithic times and throughout the Minoan Age; indeed it is still employed in outlying districts of Crete today.2

Two types of roof-plasters seem identifiable at Myrtos: (A) those of a single layer, usually between 8.0 and 11.0 in depth, and (B) those of two layers reaching together not less than 17.0 in depth and quite probably more (examples worn). Type A, illustrated here at Pl. 82 B, D, was sufficiently deep to provide a good weather-proof covering, but this was possibly the limit of its function. Type B, on the other hand, illustrated at Pl. 82C, with a thick additional layer, may have served a further purpose in that it seems designed to support a considerable weight. The depth of plaster suggests type B was made to be walked upon, either as the floor of an upper room or as a true roof-plaster but one which could stand the weight of heavy objects stored on it or that of adults who would doubtless have used such roofs to lay out grain, fishing-nets, and so on, to dry in the sun. Type A, however, is doubtfully thick enough to have borne such weights and so may

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2 Knossos, Early Neolithic I (Strata IX, VIII and VII); Evans, BSA 59 (1964), 146 and Pl. 59 (1): pp. 149 and 153; Vasilike, EM II (Seager, Vasiliké 1 1905 [90]); Phylakopi, MM III (JHS Suppl. Paper no. 4 (1904), 48 sqq. and Fig. 41; Thera, Acrotéri 'Bronos 2', MMIIIIB-LM IA (S. Marinatos, Thera I, 1967 Season (Athens, 1968) 40 sqq., marked on plans Figs. 57–8); Palaikastro, LM I (Dawkins, BSA 10 (1903–4) 205); Sackett and Popham, BSA 60 (1965) 255–6 n. 23; and in the same period at Nirou Chani and Gournia; Knossos, 'Unexplored Mansion', LM I–III C, an unpublished fragment. For a modern instance, the porch-roof of a 'kapheneion' on the north side of the main road at Selinari, nearly 20 km. east of Mallia; also in the hamlet of Angathia, near Palaikastro.
be regarded as serving less demanding purposes than type B. Type A is much more frequent than type B.

FLOOR-PLASER

Earth-impacted floors are the norm at Myrtos; but south of the kitchen a floor was exposed consisting of an unpainted lime plaster similar in colour, composition (but purer) and hardness to the roof-plasters. It was laid directly over the earth, without any key. The analysis of a specimen of this, No. 9, is given below.

NOTES ON MURAL DECORATION IN THE ANCIENT NEAR EAST (c. 9000–2200 B.C.)

As far as we know, wall-painting began in Crete in EM II (c. 2600–2200 B.C.) in the town-sites at Knossos, Vasiliki and Myrtos 'Fournou Korifi', and perhaps elsewhere as indicated by surface-finds of similar plasters at EM II Hagios Onouphrios near Mesonisi (Amari region) and on the hill Edhikte east of Mokhos (map, Fig. 125). At Knossos, however, unpainted wall-plasters go back to the early phase of the Middle Neolithic period (c. 4000 B.C.) and, in view of this, it is reasonable to suppose that Knossos may have been the first Cretan site to attempt painted mural decoration. Elsewhere in the Aegean area, only the 'House of the Tiles' at Lerna in the Peloponnese has yet produced wall-plasters of early date (EH II = EM II) and these were apparently unpainted. There are technical differences in construction and decoration between

1 J. D. S. Pendlebury, *The Archaeology of Crete* (1939) 76, for plasters from A. Onouphrios and Edhikte.

2 Knossos, early Middle Neolithic, House A, wall-plaster of clay found in situ on the interior walls (Evans, *BSA* 59 (1964) 174 and Pl. 98, i). A gap in the sequence of plasters follows in the Late Neolithic, but extremely few houses of the period have been excavated (those at Knossos being near the surface of the Central Court of the Palace and therefore somewhat disturbed). Unpainted plasters have been found in a firm EM I context in a well recently dug at Knossos (excav. record Palace Well, p. 34, small-find 20, level 16). A possible black painted mud-plaster fragment comes from an EM II house (Floor VI) near the Royal Road (RR/North Trench LA, level 113; cat. no. RR/61/small-find 370); of interest because this is the only known instance of a colour other than red used on plaster in EM II Crete, some ochrous washes (? paint) at Myrtos excepted.

![Fig. 125 Distribution of Early Minoan II wall plasters](image-url)
the Lerna and Cretan plasters, enough to indicate separate origins for this type of work—or at least no direct connection.1

Possibly the Lerna plasters present a development or off-shoot of techniques mastered in earlier times in the North Balkans or further afield in central Europe. 'Reserved' plaster walls are encountered in Periods I–II at Azmak in Bulgaria (c. 5th–early 4th millennia b.c.), in the 4th millennium at Grossgartach in Germany and at Kőkénydomb in Hungary, and later in Bulgaria at Karanovo, Period VI (c. 3500–3000 b.c.). Simple geometrical and rectilinear patterns in red and white turn up at Azmak (Eneolithic IV) and at Karanovo in the 4th millennium.2 The plasters at these sites, as at Lerna, were made from mud or clay with little, if any, admixture of lime.

Early polychrome representations on walls of human, animal, textile and abstract subjects are known from Anatolia, Iraq and Mesopotamia, for the most part executed on mud-plasters with thin gypsum or lime whitewashes on their surfaces, the painting being carried out in 'tempera'. The exceptional wall-paintings of human and animal subjects from levels III to VIII at Çatal Hüyük in Turkey (c. 6500–5700 B.C.) were depicted on lime-plasters with mud undercoats; red linear patterns from Houses 2–5 at near-by Can Hasan (Layer 2B; destroyed c. 4750 B.C.) were similarly executed although here the white upper coat may have been of clay. Leopards and human figures (common at Çatal Hüyük) appear once more in the temple at Tell Uqair in Iraq on white washed mud-plasters (c. 4000–3300 B.C.).3 Other sites in the Near East have revealed red painted walls: Jericho (c. 6000 B.C.), Tel el-Ghassul in Jordan (c. 4000 B.C.), and Uruk, Eridu and Tepe Gawra in Iraq (c. 3300–3100 B.C.). But, earliest of all, the Palestinian Natufian houses of about 9000 B.C. had plastered, red painted and polished walls.4 In Egypt, wall-painting in 'tempera' on gypsum or mud-plasters in imitation of textile motifs is attested by IIIrd Dynasty tombs; and by the beginning of the following Dynasty (c. 2600 B.C. or slightly later) a sophisticated style of polychrome pictorial representation had come into existence (e.g. the well-known feeding geese from Meidûn).

Seen against this background-picture of considerable artistic progress in wall-painting among the older civilizations bordering the East Mediterranean, the achievements of EM II wall-painting in Crete are modest. With no sure evidence for patterned or pictorial ornamentation, Crete's greatest achievement in this field lay in a certain technical mastery of materials, notably in the use of a lime-plaster such as was rarely employed elsewhere at the time. Only, it seems, at Çatal Hüyük some three or four thousand years earlier, and perhaps at Khafaje in Mesopotamia (where a lime-kiln dating at latest to 2500 B.C. has been found5), were somewhat similar lime plasters manufactured. In Crete some 500 years elapsed before the first pictorial and

1 At Lerna the surface of the plaster undercoat was marked with wavy grooves, as if executed with a comb-like instrument, so as to provide a good key for the upper plaster layer: the latter was fashioned into rectilinear panels by means of horizontal and vertical grooves. These seem quite un-Minoan features, relating rather—if at all—to the geometric and linear patterns incised with the finger in the mud-plasters of Period II at Azmak in southern Bulgaria (cf. n. 2, for ref.). For the Lerna plasters, see Caskey, Hesperia 23 (1954) 25; 24 (1955) 95 sqq.; 27 (1958) 129; 29 (1960) 286 sqq.; ILN 12 January 1957; Archaeology 8 (1955) 119.
2 On Azmak, see G. Georgiev's summary in Antiquity 33 (1958) 7; S. Piggott, Ancient Europe (1965) 46 for Karanovo VI, 47 for Grossgartach (A. Schöll, Das steinzeitliche Dorf Grossgartach (1961)), and 90, Fig. 47 for Kőkénydomb.
3 Çatal Hüyük: J. Melkaart, Anatolian Studies 12 (1960), Ps. 10–18 for paintings from Levels III and IV; 13 (1963), Ps. 11, 12 and 18B for paintings from Level VI; 14 (1964), Ps. 1B–14 for paintings from Levels VI and VII; 16 (1966) Ps. 33–49 and 51–63 for paintings from Levels V–VIII.
naturalistic representations began to appear, in MM IIIA, a fact which suggests little influence on Minoan wall-painting during that interval from other civilizations where decorative or pictorial wall-painting was already well developed. Indeed, the idea of mural decoration in Early Minoan Crete, if inspired or brought in from outside the island, would appear to have originated from an area where only the most elementary form of wall-painting was known. But the simplicity of EM II wall-painting and its slow development as an art thereafter are equally consistent with a local invention of the craft on the island itself—quite independently of progress elsewhere; in that case, Knossos probably has the best claim to its invention in view of its long history in wall-plastering. Once initiated, however, wall-painting in Crete continued without a break until LM IIIB times (c. 1300–1200 B.C.) as now seems indicated by recent discoveries at Chania. But some features of later Minoan paintings had become established practice in EM II: among these, we may include the widespread use of lime-plasters, the widespread painted decoration of walls throughout settlement habitations, the application of lime-plasters in one or two layers (later over mud-plaster backings), the occasional use of a slip or 'intonaco', and the popularity of dark red paint.

From these humble beginnings there eventually emerged a pictorial art which became the crowning glory of Minoan Palatial and domestic architecture.

THE PLASTER SAMPLES

The following notes are based on the work of Mr W. A. Campbell of the Department of Inorganic Chemistry at the University of Newcastle-upon-Tyne; some explanatory comments and excavation data have, however, been added. Mr Campbell notes:

The plasters have been examined by low power microscope, tested for iron in the pigments, and analysed for calcium and silica. The calcium figure has been recalculated for calcium carbonate (on comparison with loss in weight at 1000°C) for ease of comparison with Heaton's results.

The specimens are essentially lime-plasters, carbonated by natural processes, and containing quantities of silica as sand or larger aggregate. One specimen (no. 8) contains fibrous strands (wool, hair or possibly fine plant roots) in the base mix. Where red and uncoloured layers are detectable, the sample has been taken to include both—with the result that the calcium carbonate figure is lowered owing to the presence of iron in the red layers.

Iron in the pigments was detected as prussian blue, calcium as oxalate after soda fusion.

The results of six analysed samples and of two others (nos. 4 and 6) submitted for surface examination only are given in the following Table:

<table>
<thead>
<tr>
<th>Specimen number</th>
<th>Original location</th>
<th>Silica (SiO₂)</th>
<th>Calcium carbonate (CaCO₃)</th>
<th>Ferric oxide (Fe₂O₃)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wall</td>
<td>28.4%</td>
<td>56.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>2</td>
<td>Wall</td>
<td>30.8</td>
<td>63.2</td>
<td>(painted)</td>
</tr>
<tr>
<td>3</td>
<td>Wall</td>
<td>29.4</td>
<td>63.2</td>
<td>4.1</td>
</tr>
<tr>
<td>4</td>
<td>Wall</td>
<td>Scratches from plasterer’s float?</td>
<td>(painted)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Wall</td>
<td>29.6</td>
<td>62.1</td>
<td>(painted)</td>
</tr>
<tr>
<td>6</td>
<td>Wall</td>
<td>Scratches from plasterer’s float?</td>
<td>(painted)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Roof</td>
<td>30.2</td>
<td>65.0</td>
<td>trace</td>
</tr>
<tr>
<td>8</td>
<td>Roof</td>
<td>32.2</td>
<td>62.2</td>
<td>trace</td>
</tr>
</tbody>
</table>
Traces of ferric oxide were present in all samples, on average about 2.0% where the plaster had been painted once; no. 3 was painted twice, and no. 1 has seven film-like layers of red pigment (but it is an open question whether these represent layers of 'paint' in the usual sense of the term).

These results are particularly interesting on comparison with tests carried out by Noel Heaton, Sir Arthur Evans' scientist assistant, who analysed one EM II sample from Vasiliki and another sample of LM II date from Knossos (Journal of the Royal Institute of British Architects 18 (1911) 698 and 699 respectively):

**EM II sample:**

| Soluble in hydrochloric acid (61.57%) | Calcium oxide (lime)   | 24.90 |
|                                      | Magnesium oxide        | 2.24  |
|                                      | Carbon dioxide         | 16.80 |
|                                      | Iron and alumina       | 17.23 |
|                                      | Sulphuric anhydride    | 0.37  |
|                                      | Soluble silica         | 0.03  |
| Insoluble in hydrochloric acid (38.43%) | Insoluble silica     | 37.29 |
|                                      | Alumina, etc.          | 1.14  |

Carbonate of lime, about 40%; silica, nearly 40%; the rest, alumina.

**LM II sample:**

| Soluble (98%) | Calcium oxide | 51.93 |
|              | Magnesium oxide | 1.03  |
|              | Carbon dioxide  | 41.18 |
|              | Sulphuric anhydride | 0.54 |
|              | Iron and alumina | 1.81  |
|              | Alkali, etc.    | 1.39  |
| Insoluble (2%) | Silica         | 2.12  |

Carbonate of lime, 90 to 94%; silica, 2%; the rest, alumina and alkali.

From these figures—if, indeed, the very small number of samples for comparison is meaningful—it is clear that the Myrtos wall-plasters (to which class both Heaton's examples belong) have only one-half the silica/alumina content of the Vasiliki sample, but about half as much again (c. 60% as against c. 40%) of calcium carbonate. This perhaps indicates that regional variations in the chemical compositions of EM II plasters should now be expected: Heaton's tests of EM II plasters from Vasiliki and Knossos appeared to give closely similar results from which the impression might be gained that plasters of this date might generally have been more uniform in their chemical make-up. But the Myrtos plasters stand in character almost half-way between Heaton's Vasiliki and his much later Knossian samples: the analyses from Myrtos therefore warn against basing chronological inferences for the dating of wall-paintings on the results of chemical analyses—at least until many more samples of all periods have been analysed. The differences in chemical composition of plasters of the same date but from different sites may arise from many factors, notably, varying geological deposits, and differing practices of various local groups of wall-plasterers and painters.

The analyses carried out on the present series of wall-plasters have confirmed the impressions of the excavators, noted at the time of digging, that the Myrtos examples are softer and more
frangible than the plasters from Vasilike, and therefore different in chemical character. As to roof-plasters, nos. 7 and 8 are apparently the first of this class from the prehistoric Aegean area of which analytical data are published.

**Floor-plaster. Sample No. 9:**

<table>
<thead>
<tr>
<th>Original location</th>
<th>Silica</th>
<th>Calcium carbonate</th>
<th>Ferric oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor</td>
<td>30.9%</td>
<td>63.8%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

This was a soft plaster containing, however, hardish particles which may account for the relatively high percentage of silica and ferric oxide: the latter, a high percentage in comparison with the Fe$_2$O$_3$ results of the painted wall-plasters, cannot easily be explained, unless the sample itself happens to be unrepresentative of the floor-plaster as a whole which was not painted. The results of sample no. 9 underline the general chemical uniformity of all the Myrtos samples analysed (see above Table); and the relationship between the chemical character of different classes of plaster (wall, roof, floor) and their differing physical properties (colour, hardness, etc.) demands further examination, for the scientific tests have not in the present cases produced significantly different results (no. 1, with a high Fe$_2$O$_3$ percentage excepted, for the reasons already given).

### CATALOGUE OF SAMPLES (excavation data)

1. Wall-plaster from Room 60, north-east corner (Pl. 81C).
2. Wall-plaster from Passage 64, west wall, south end (Pl. 81B).
3. Wall-plaster from South Paved Way 93.
4. Wall-plaster from Room 54.
5. Wall-plaster from Room 54.
6. Wall-plaster (the 'slip' or 'intonaco' only) from surface over Room 54.
7. Roof-plaster from Room 80.
8. Roof-plaster, surface find.
9. Floor-plaster from Room 57, south part.

The size of the specimens varied from a maximum of 4 cubic cm. to about 1 cubic cm.; no. 2 had crumbled into very small pieces and no. 6 represented an area about 1 sq. cm. in surface area.
A Painted wall-plaster. 'Intonaco' missing on left exposing body of plaster. Room 54.
B Red painted wall-plaster found in situ on West wall of Passage 64, South end.
C Cross-section of wall-plaster (specimen no. 1) with 13 red and uncoloured layers. Room 60, North-East corner.
D Unpainted moulded wall-plaster (from outer corner of room?) Room 57.
A Cross-section of corner fragment with two plaster layers, large pebble impression in the lower. Room 54.

B Cross-section of roof-plaster: flat top, reed-impressed underside, small stone embedded on right. Room 54.

C Roof-plaster with impression of beam or branch on underside. Above disturbed North-South wall between Areas 55 and 56.

D Underside of B showing reed impressions. Room 54.
most likely in later groups such as the phylai, phratries, demes, gene, aikoi etc., may have remained isolated for a time, but they met once more as early as the tenth/ninth century B.C. in the religious amphictyonic councils which united larger districts like Attica-Bocotia and Corinth-Joanida, and they contributed ultimately to state cult in the classical polis after synoecism. Despite the uncertainty surrounding the precise nature and history of the phyle, phratry etc., the available evidence does suggest that such communities antedated the famous tripartite Dorian tribal system, and existed as separate units before their integration in the polis.

There is some fairly strong evidence, chiefly from the Pylian land-tenure tablets, of similar community organizations in Mycenaean times where units like the koinai or damos tergoneis, aikoi possibly also governed by a kind of phylobasileus (damokoros), exercised the same sacral and juridical rights as the comparable historical groups. Much of the information from the linear tablets may be circumstantial, but this line of investigation strongly suggests the need for a review of the accepted opinion that the end of the Mycenaean Age was marked by a complete break which came about through the sudden irruption of a racially and culturally alien people, namely the Dorians. However, even the literary evidence, far from treating them as foreigners, speaks of the Doriens, who incidentally used the same language as the Mycenaeans in the thirteenth century and worshipped the same major gods (Zeus, Apollo), as part of the Mycenaean world for possibly as long as six generations before the Trojan War.

The beginning of Middle Helladic seems to be a better period in which to look for an interruption in the development of Greek religion, for this may have been the time when the Indo-European settlers first arrived in Greece. But there are a good many arguments that can be ranged against this view as well.

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MR M. A. S. CAMERON

New Restorations of Minoan Frescoes from Knossos

This seminar concerned twenty-two new restorations of frescoes from the Palace at Knossos, from its dependent houses excavated by Sir Arthur Evans, from the Royal Road Excavations of 1957-61, and from the Minoan villa at Amnisos.

Discussion began with the controversial Griffin Frescoes from the Throne Room in the Palace. The seated griffins flanking the western doorway were both shown to be wingless and to have lowered crests (contra C. Hopkins, A.J.A 67 (1963) 416-419); but the unpublished gypsum panel restoring the griffin on the northern section of the west wall mistakenly contains a fragment showing the upraised crest of a third griffin whose head at least was depicted against a yellowish-white background, unlike the heads of the creatures on the west wall seen against dark red grounds. The crest-fragment evidently belongs to that griffin of which Evans found the front paw on a large fragment in situ to the right of the throne itself (AE/NB 10 February 1902). With certain evidence for three griffins, two on the west wall and one to the right of the throne on the north wall in what was clearly a continuous frieze of antithetic creatures, the original existence of a fourth griffin to the left of the throne (and facing it) can hardly be doubted any longer (contra L. R. Palmer, A New Guide to the Palace of Knossos (1969), 12, 66, 68, 126: and also Hopkins, op. cit.). The evidence now to hand entails changes not only to the panel from the northern section of the west wall (removal of the crest fragment) but in addition the entire scheme of restoration on the north wall in the Throne Room itself requires future alteration:

(1) the griffins should have raised crests;
(2) palm-trees certainly sprang from behind the stone throne (as Palmer rightly claims);
(3) the undulating red and yellowish-white background bands are erroneously inverted;
(4) possibly further palm-trees once existed, one in each corner of the frieze
on the north wall, whose foliage disguised in characteristic Minoan fashion the change-over in arrangement of the undulating background bands between the western panels and the continuous section on the north wall.

The fragment published as part of a seated woman in a red dress (II. Reusch, Die zeichnerische Rekonstruktion des Frauenfrieses im Ötobischen Theben (Berlin 1956), 48, fig. 20 omitting a third hair-band) represents rather the neck and left shoulder of a life-sized processional figure of the 'Cupbearer' class, ascribed to the Queen's Megaron (II. tray 80 Beta IV). The eye and a body fragment of the same figure, it seems, are in II. tray 83 Omikron XIII, 'Queen's Megaron'. The pupil of the eye was gouged out (like the 'eyes' in the centres of rosettes in various spiral frescoes from Knossos), perhaps by Evans's LM III B 'squatters' fearing the 'Evil Eye' of the heads of fresco figures still clinging to the walls in that period. As the new fragment of the neck and shoulder is the only surviving evidence of that part of the body of this type of figure, the curly and bound hairstyle (terminating at the shoulder) there to be seen suggests the restored hairstyle of the 'Cupbearer' (PM II, Col. Pl. XII) should be altered accordingly.

The new join to 'La Parisienne' recognized in September 1963 (Kretika Chronika III' (1964) 38-53) turns out to be a fragment, drawn by Evans as 'blue and red and grey grasses' (AE/NB 1900, p. 12 – piece upside-down), found in the fresco dump at the North Portico – some 50 metres away from the find-place of the rest of the figure! Other pieces from this fresco dump likewise seem to belong to scenes of which other pieces were certainly found elsewhere in the Palace, and those most likely to have collected the fresco debris and thrown it out into the North Portico may again be the LM III B 'squatters': that the 'late' wall covered by the fresco dump was of Reoccupation date (so Mackenzie and Evans) need not tell against this possibility, for the wall in question is not closely dateable, and the Reoccupation Period was a long one (LM III A2 – LM III B).

Among many fragments from this northern dump are the four white-spotted and blue painted 'Embossed Band' relief pieces (PM II, 34, fig. 20; KFA Col. Pl. E, fig. 2a-c) whose size and shaped mouldings show they were parts of the 'brief' kilt of a female bull-leaper/catcher wearing the usual Minoan male loin-cloth: the sex of the figure is indicated by the white part of the thigh on the longest (codpiece) fragment. These pieces evidently belonged to a female figure whose unpainted white thigh and lower edge of the kilt-flap painted in the same colours and technique are represented on a relief fragment from the Southern Light-well of the Hall of the Double Axes (PM II, fig. 220 – mistakenly assigned to a male figure). An unpublished woman's arm in relief, from the fresco dump near the South House (probably cleared out by the Reoccupation Period people – DM/DB 31 March 1908), may belong to the same or a similar girl 'taureador' executed by the same painters, one such figure being represented by part of a similarly moulded codpiece with white-dotted chevrons or zig-zags on deep maroon red (T. Fyfe, JRIBA (1903) 117, no. 37), discovered apparently near the Queen's Bathroom ('Spiral Dado', according to a list of proveniences made out by G. Rodenwaldt). These relief figures perhaps originally decorated rooms on upper floors of the Domestic Quarters; they are life-sized, about 180 cm. in overall height.

The same artists also painted many male figures 'on the flat' and about 125 cm. high or two-thirds life-size; the general characteristics of their heads and hairstyles can be fairly accurately restored on the basis of five 'head-fragments', including one appearing in PM II, 751, fig. 485 which Evans thought had belonged to a crowd scene. Their hairstyle, curly and to near waist-level, and their kilts are typically Minoan; and, as this series of fragments presently provides the surest evidence for restoration of large-scale male or female heads of LM I or earlier date, it was suggested that the younger Gilliéron's restoration of the head of the 'Priest-King' relief fresco might be revised in the light of the new fragments. The Priest-King lacks at the moment an eye-brow and a forelock, and the eye and chin seem restored by analogy with the later 'Cupbearer' (cf. PM II, Part II, Frontispiece, and Ibid., Col. Pl. XII). A new restoration of the Priest-King, proposing other changes to the existing restoration, was
illustrated: moreover the identification of the figure as male was also challenged, notwithstanding the obvious objection that noticeably female breasts are lacking in this relief picture!

Might we not have here a crowned 'Princess of the Bull-ring' leading a bull into the ring ("the Central Court"), rather than a white-skinned male figure leading a griffin (so Evans) for which the fresco presents no supporting evidence?

Restorations of two chariot frescoes followed. The first improves upon that offered in A.I 3 (1967), fig. 12, opp. p. 340: the pebble motifs there are now taken to indicate that the panel was once bordered by a band of coloured rockwork, almost certainly followed by at least a white stripe (cf. BSA xxv (1921-23), Pl. xxvii); the horses' heads have been made more horse-like, by analogy with Tiryns II, Pl. xiv (PM IV. 829, fig. 811); an original fragment of the horses' manes has turned up (1968), and the new restoration takes into account the new joins noted at AAIbid., fig. 13 and p. 344. The second restoration was of the first known mural picture of a dappled chariot in the Aegean area, from the Palace at Knossos, with two female figures inside — one in pink, the other in blue robes, like the pairs of women similarly decorated seen riding in dappled chariots on the Hagia Triada painted sarcophagus (LM II—III A) or those in similarly coloured garments in two (red) chariots in frescoes from Tiryns (Tiryns II, Pl. xii): the latter are exhibited in the National Museum, Athens. (In the second and lesser known of the two scenes, the restorer has unfortunately decapitated the women at chest-level (!) with a 'ping-pong' tree of the background scheme). The dappled chariot from Knossos is particularly important in view of Furumark's suggestion that painters of chariots on Mycenaean vases were inspired by fresco scenes: his earliest instance on pottery is in fact of a dappled chariot (Myc. II A 2 early), and the implication is that the painter may have had in mind somewhat earlier frescoes on the walls of the Palace at Knossos.

The discussion then returned to the artists drawing Minoan kilted figures in relief and 'on the flat'. Detailed reasons were given to suggest the men in the frescoes might have been depicted in procession on the right-hand wall of a real staircase whose treads would have been on average about 12.4 cm. in depth, to judge from restoration of two men. Only one surviving staircase fits the bill: the Grand Staircase with treads on average depth 12.7 cm., the right-hand wall of whose lowest flight could comfortably hold two registers of such figures, 125 cm. high.

On this basis, if correctly determined from the very fragmentary fresco evidence, four important implications seem to follow:

1. Processional frescoes are like sign-posts, in this case directing the onlooker (ourselves and the lower figure in PM II. 751, fig. 485) from the less important rooms on the lower or ground floors towards the very important rooms situated in the upper storeys;
2. There the larger and more carefully executed relief figures put up by the same artists took over where presumably the smaller male figures left off;
3. This in turn implies very careful planning of this decoration of a most important part of the Palace (a point against G. A. S. Snijder's 'eidetic' theories — JDAI 49 (1934) 315-338 and Kretische Kunst (1936); and
4. The procession may ultimately have led to Evans's hypothetical 'Great East Hall' from which he assumed had fallen the remains of a wooden and bronze image, some 3 metres high, of a Minoan female deity. Probably the high relief frescoes, likewise derived ex hypothesi from the same hall, which show parts of boxers, wrestlers, bull-leapers, the breasts of a female figure (? a goddess), spiraliform ceiling designs, and winged griffins in low relief, belonged to the same system of mural decoration as the series of kilted figures — which

* To one belongs the 'Barbotine Fragment' erroneously attributed to MM I-11 by Evans and many others following him (PM I, 201, Col. Pl. 1(k); PM II, 199 f., fig. 110 A(k); PM IV, 249, fig. 187. It shows part of the waist-band and kilt decorated with 'comb-motifs', of which there is another fragment, HM tray Rho VII, 6).
they complement thematically, geographically, chronologically, and technically as the acme of Minoan fresco decoration.

This comprehensive system of decoration seems reflected on a more intimate scale in the 'miniature' frescoes from the North Sanctuary near the North Entrance Passage, frescoes possibly put up by the same painters (who decorated the ceiling of that sanctuary or shrine with a spiral fresco in relief technically indistinguishable from that from the 'Great East Hall'). How the goddess herself may have looked is suggested by many frescoes featuring goddesses or priestesses, all by convention similarly rendered; one such figure, based on a fragment reconstructed (mended) by J. P. Driop in 1914 (PM I, 546 f. n. 3 and PM II, 731, fig. 457a), was illustrated in a coloured restoration to be published shortly in *Archaeology* ('The 'Lady in Red': a complementary figure to the 'Ladies in Blue').

Extra-palatial decoration was represented by restoration of a LM I double-zone red-dotted running spiral fresco (recognized as such by M. S. P. Hood and the late Piet de Jong) which has an arcade design above (in black and blue, followed by white, black and blue horizontal bands) unlike LM I B pots with the arcade design more fittingly below; also by the MM III 'Zebra Fresco' — evidently a floor-fresco imitating a rug or carpet made up from leopard and possibly zebra hides. The technical execution of both these compositions, from the Royal Road North excavations, strongly supports Noel Heaton's conclusions (JRS 1 (1910) 206-212, and JRB 18 (1911) 697-710) that Minoan wall-paintings were carried out by the 'buon fresco' process (contra P. Duell and R. J. Gettens, *Techn. Stud. in the Field of Fine Arts* x (1942) 179-223; also Cameron, BSA 63 (1968), p. 3, where the evidence stated in fact adds weight to Heaton's arguments). A coloured version of *Ibid.*, fig. 13, opp. p. 24, showing a family of cercopithecid monkeys robbing the nests of doves, from the 'House of the Frescoes' at Knossos, illustrated one type of decoration to be expected on the walls of non-palatial buildings in Minoan Crete. Another form was conjecturally restored on the basis of published photographs and excavation reports of the frescoes from the villa at Amnisos: large-scale pictures of lily, iris and other flowers decorated the north and west walls of an important room, and the discovery of part of an offering table on a fresco near the south wall suggests not only that the room was the villa's 'house sanctuary' or 'house shrine' but that a goddess (?) Eileithyia might well have been pictured on the southern wall, too: goddess representations are typical of Minoan villa and town-house decoration, and one could be expected here (but the writer disclaims any knowledge of evidence for such a picture since he has not studied the unpublished 'minor' pieces from this site).

The exhibition of coloured restorations consisted of the following:

1. 'La Parisienne' with new join, partly restored to waist-level: Knossos Palace.
2. Male processional figure's head: Knossos Palace (Queen's Megaron).
3. Front part of dappled chariot (omitted from colour-slide restoration of main piece because as yet undrawn: photograph supplied): Knossos Palace.
4. Two mice in reeds: Knossos, South-East House (PM I, 537, fig. 390: KFA Col. Pl. D, fig. 1).
5. 'Ruscus aculeatus' ('Butcher's Broom'): Knossos, Royal Road North.
6. The 'Zebra' floor-fresco: Knossos, Royal Road North.
7. Leopard's head (PM I, 540, fig. 392 B): Knossos Palace (North Portico dump).
10. An accident in the bull-ring (the first known on frescoes: 'miniature'): Knossos Palace.
11. A seated griffin with spiraliform chest-decoration: Knossos (probably from the Palace).
12. An uncoloured copy of the 'Grand Staircase' procession fresco, drawn at one-tenth actual scale: architectural setting indicated: Knossos Palace.