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FRESCOS FROM ÁCS-VASPUSZTA

A few fresco remains were unearthed during the 1966–1972 excavations at Ács-Vaspusztá (ed. GABLER 1989).¹

A minority of the frescos came from the area of the camp, while the majority derived from the vicus.² The find unit will be evaluated and grouped within Pannonian frescos of the same age. Following this analysis, an attempt will be made to define the possible routes where the workshops making the frescos at Ács-Vaspusztá may have operated and along which wandering painters could come. Nevertheless, it should be mentioned that the quantity of the recovered frescos is too small to identify characteristic stylistic features. Finally, a catalogue is added containing the most important data on the frescos from Ács-Vaspusztá.³

The coloured and white painted frescos from the camp and the adjacent vicus at Ács-Vaspusztá were made using an al-fresco technique using a very thin layer of paint, a thin limey base and the addition of a limey plaster in which pebbles and sand were mixed.⁴ The fresco was mounted on clay walls as attested to by clay clods which stuck to it in addition to the imprints of plants (from the camp: unit 4/a, No.1.; unit 9., fragm.No.1.; from the vicus: frags Nos. 8, 9, 12, 21). They were made at the time that the stone camp was built and renovated, during the period from Hadrian to the Constantini. Those fragments with large amounts of plaster to their backside must have lain on the stone wall from the later period (e.g. from the camp: No. 39/7, 8, 11; fragments). It should also be mentioned that fragments suggesting a date from the same period were found in the fresco material of house No.1. unearthed in the vicus outside the camp (Nos.5, 15, 19 and 20). All these can be dated from the first Late Roman construction period at Ács-Vaspusztá: the period of the Constantini.

The stratigraphical analysis of the unearthed frescos has revealed that they range, in time, without break from the Hadrian period. Based on the stratigraphic observations and the archaeological finds the following chronology can be set up for the frescos at Ács-Vaspusztá.

No frescos are known from the *earliest camp* and the period of the plank camp (98–101) and (101–118) at Ács-Vaspusztá.

Red fresco fragments were found among unidentified vessel bottom fragments in the fill of the trench

from the *second palisade camp* (118–170/8), dated to the period between Hadrian and the Markoman wars (unit 12/b)⁵ (GABLER ed. 1989. I.P.37. fig.13.). These frescos ornamented the wall of one of the wooden buildings of the palisade camp.

The building of the stone camp (170/8–305) was the period from which fragments of frescos displaying a red frame ornament on a white base, and changed with white lime on a white base can be dated from the building period following the Markoman wars (unit 9,1–2, trench 24/a)⁶ (GABLER ed. 1989, I.P. 38. fig.14).

The remains of frescos painted in white, red and green, sometimes with plant ornaments and later alterations⁷ (1,3–7,10–17,19–21) were found in building No.1. equipped with a heating channel and a terrazzo floor in the territory of the vicus. These specimens can be dated to the same period. In a later building phase, the frescos were covered with plaster and white-washed (e.g. Nos.4, 11, 17).

Within the framework of transforming the camp at Ács-Vaspusztá into a Late Roman fortification during the reign of the Constantini, interior decoration was also carried out as attested to by the finds: fresco fragments with white, blue, red and yellow geometric patterns, later partly altered by white lime (unit 7., 1, 2, 3 and unit 9, 3; unit 39, fragments Nos 1, 3–5,10–11).⁸

The white fragment suggesting renovation, found within the area of house No.1. in the vicus, also seems to date from the same period (fragm. No.13/a).

During the rebuilding of the Late Roman fortification during the reign of Emperor Valentinian, the inner walls were probably repainted (with white, blue and red geometric motives).⁹

The review of the find material from Ács-Vaspusztá resulted in a differentiation of 18 coloured fresco fragments from the *camp*: 10 with a geometric pattern, 1 with plant ornamentation and 7 in plain white. Six of the fresco fragments displayed repainting. Four were repainted in a colour different from white while two were painted white on white.

Twenty-two fragments from the *vicus* were coloured.¹⁰ Eleven displayed geometric patterns, 2 plant ornaments, and 9 were painted in a single colour. Of the six repainted pieces, four were painted white, one was painted white over a coloured original while one was painted white on white.

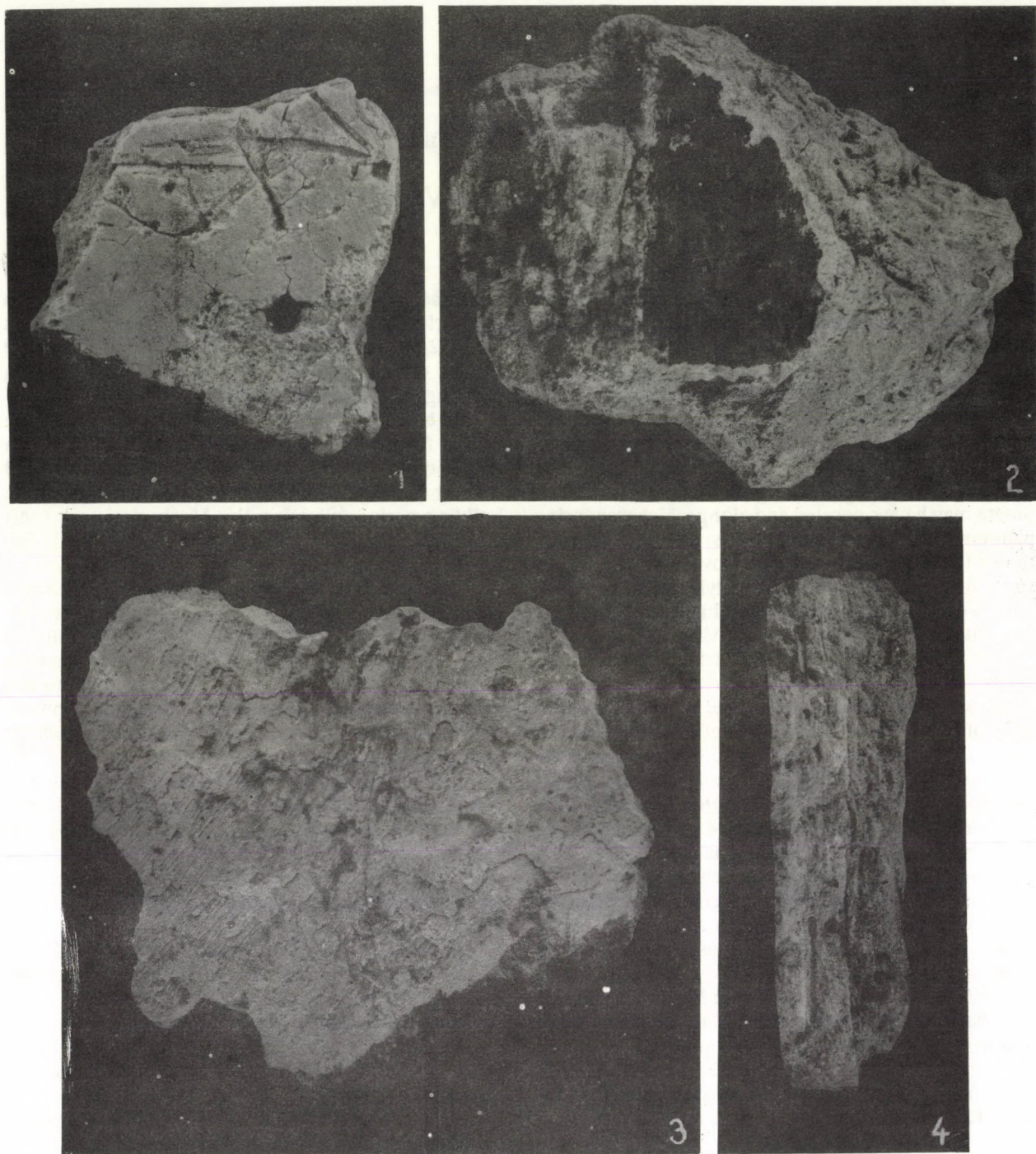


Fig. 1. 1-4: Fragments of frescos from the camp at Ács-Vaspusztá (No. 4/a/7; No. 39/9,10)

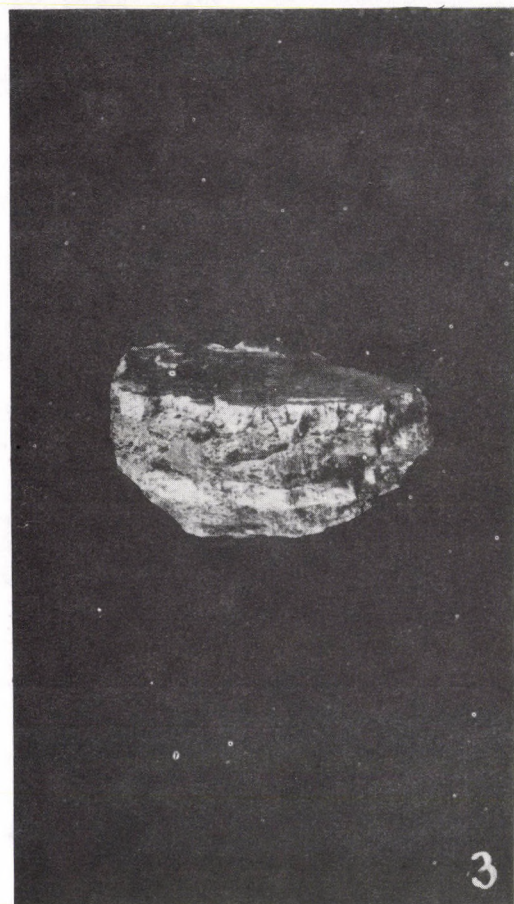
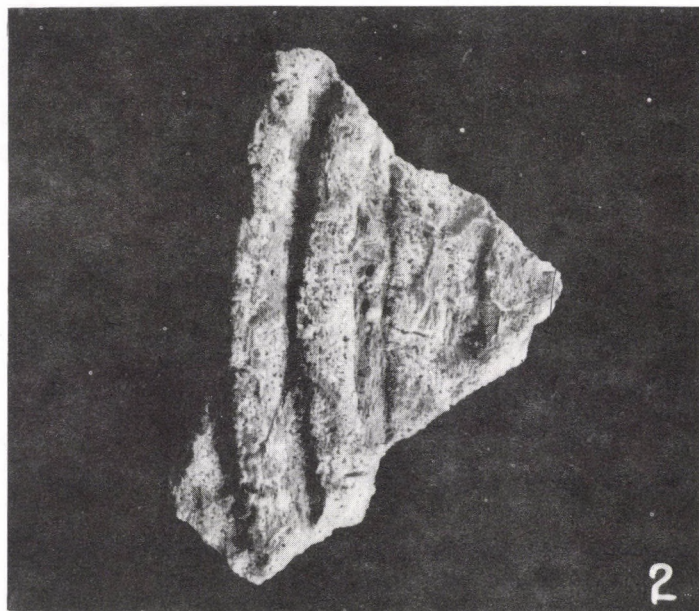
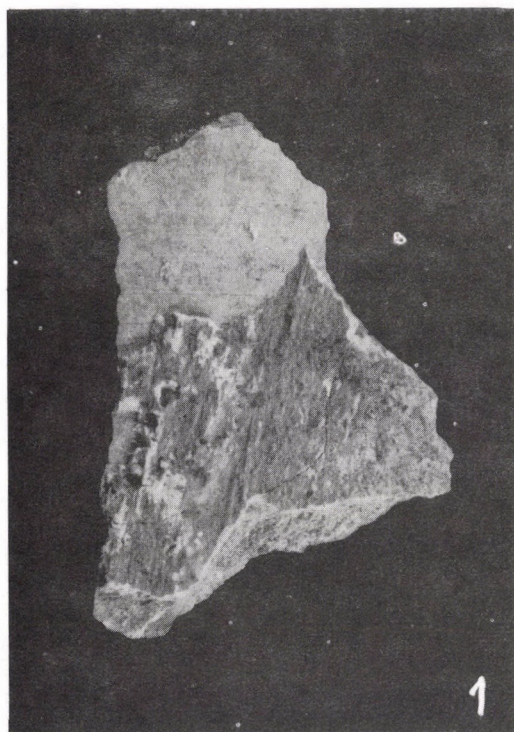


Fig. 2 . 1-4: Remains of frescos from house No.1. in the vicus of the camp at Ács-Vaspusztá and details from them (Nos 3,4,5)

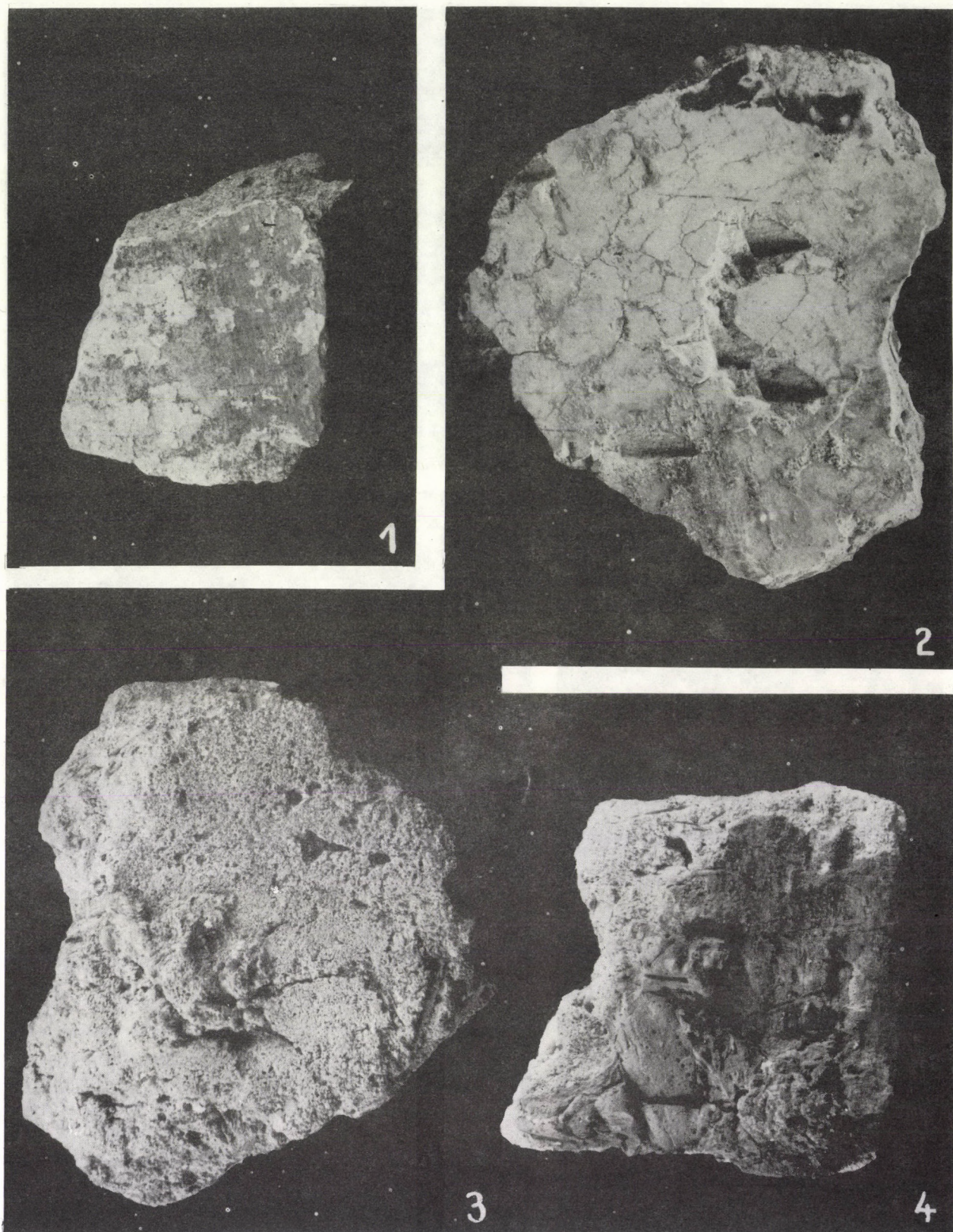


Fig. 3. 1: Fresco fragments from house No.1. of the vicus with traces of lime;
2-4: Front and back views of fresco remains from house No.1. in the vicus with traces of renovation, clay and mortar
(No.13)

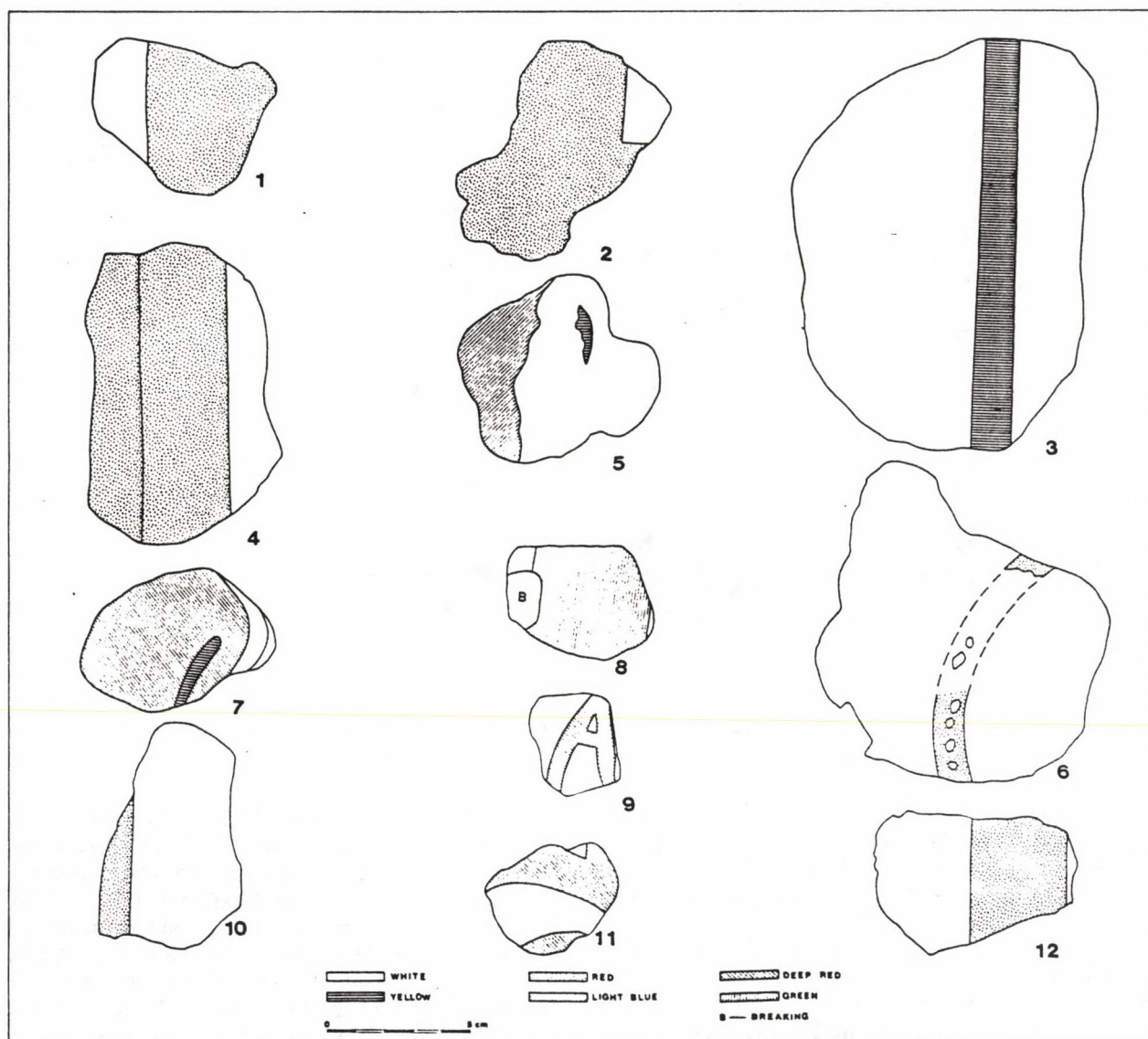


Fig. 4. 1–3: Coloured fresco fragments from the area of the camp (No.4(a)1; Nos 9/2–3,7);
4–6: Fresco fragments with patterns on them from the area of the camp (Nos 39/2,5,10);
7–12: Fresco fragments with ornamentation from house No.1. in the vicus (Nos 6,8,16,20–21)

The dominant colour of the frescos was a redwhite combination. Within these colours red, claret and pink shades could be identified. In addition, green, yellow and blue paint could sometimes be encountered. It was found that of all these colours, red and white were dominant in the camp, although they are also common on frescos in the vicus. Green is more often present on fragments from the vicus while blue was only found in the find material from the camp.

It is unlikely that the frescos would have been made locally, at Ács-Vaspuszta. Probably they were products of a workshop or workshops which met the demand in the neighbourhood, and which was complimented by works of wandering painters. Without attempting completeness, a list was compiled of the most impor-

tant contemporary frescos in Pannonia, located near to this site or sometimes farther off.

I. The earliest group of frescos at Ács-Vaspuszta¹¹ was made between 117 and 178. Frescos and plasters from the same period are known from the legion camp at Aquincum (SZIRMAI 1980, 190), the military town in Aquincum, the civil town the palatine's palace and finally the territory of the vicus at Albertfalva (PÓCZY 1955, 42; NÉMETH 1973, 119; NAGY T. 1958, 117; PÓCZY 1958, 105–109; NAGY T. 1948, 96). Similar frescos from the canabae at Brigetio, the vicus at Arrabona and the Forum at Scarbantia can also be grouped here (WELLNER 1971, 342–345; GABLER 1971, 22; GÖMÖRI 1985, 66).

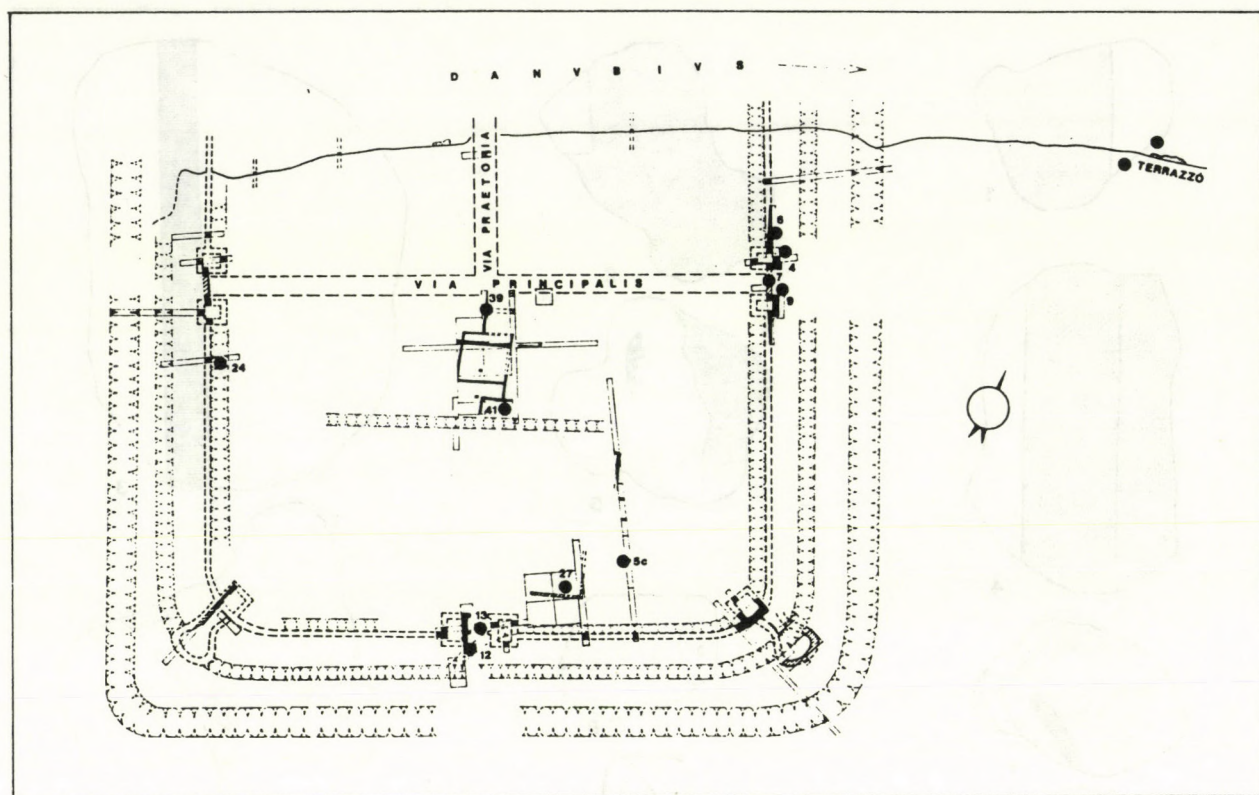


Fig. 5. Map of the location of frescos from Ács-Vaspusztá.

II. The next group of the frescos from Ács-Vaspusztá are represented by those made in the period from 178 to 305. It should be mentioned that fresco fragments produced using a technique similar to the ones found in stratigraphically attested layers from the Severus period (9/1–3), were unearthed in house No.1. from the vicus. These data seem to reflect the fact that in the period of the Severi the higher ranking officers lived not in the camp but in its vicinity (WELLNER 1977, 415). The rich fresco material found in the 1st house of the vicus also reflects a higher standard of living. Although it could not be dated stratigraphically, similar fragments from the Severus period prove that they date to that period, as well.¹² Within this group the frescos of legion camp in Aquincum may be mentioned again together with the plasters. They were found in one of the barracks, in the mithreum (O. MADARASSY 1991), (SZIRMAI 1991) and in the *thermae maiores* (chief thermal bath). Furthermore, we may add similar high quality remnants from the military camp at Aquincum, the frescos from the area of the Shipyard and finds from the civil town dating to the same period (SZIRMAI 1984a, 284; KOCSIS 1986, 217; SZIRMAI 1984b, 138; WELLNER 1971, 382–387; PÓCZY 1958, 109–134; PÓCZY 1955, 44–56; NAGY L. 1926, 100–104; NAGY T. 1958, 178–182.) The fresco material from the vicus at Albertfalva (NAGY T. 1948, 98, 102, 106) and the frescos from the second period of the stone camp at Intercisa

(BARKÓCZI 1954, 15, 29–32) also belong to the same period. Frescos were found from the renewal of the vicus and from the military bath at Arrabona (SZÓNYI 1982, 43) as well (GABLER 1971, 29–38). Fresco fragments from the same period have also been mentioned as coming from the civil and the military camps at Carnuntum (BRANDENSTEIN 1958, 10–19; BRANDENSTEIN 1961–1962, 5–21; KANDLER 1981, 10; SCHEDIVY 1985, 72–73). The frescos from the Intercisa material, the great common bath at Gorsium (FITZ 1982, 56) and Tokod should also be mentioned (FITZ 1957, 21; KELEMEN 1981, 16–17). The interior decoration attesting to the renovation of the forum at Scarbantia should also not be left excluded from the list (GÖMÖRI 1985, 56). The frescos from Balácsa may also be added (NAGY L. 1926, 90–91; 118–122) (PALÁGYI 1991).

The above mentioned fresco material was the product of fresco workshops operating during the economic boom following the Markoman wars. The boom was partly due to the peaceful situation during the era of the Severi and partly to the building period after the barbarian attack in 260.

III. The next great renewal period in the camp at Ács-Vaspusztá took place during the *Constantini*. Traces suggesting interior decoration were noted in several places in one of the towers at the southern gate of the Late Roman fortification at Aquincum (FA-

CSÁDY 1976, 145; PARRAGI 1976, 137). Frescos from the 4th c. were found at Tokod (KELEMEN 1981, 17) while a building from the 4th c. at Gorsium was also plastered (FITZ 1984, 58). A group of the frescos from Baláca and from Sopianae can also be classified here (PÓCZY 1984, 53–55; NAGY L. 1926, 122).

IV. The next building period of the cohorts camp at Ács-Vaspusztza can be dated to the *Valentinian* period.¹³ The only remains which may be grouped here come from the plaster renewal on the polygonal building at Óbuda, Aquincum (SZIRMAI-ALTMANN 1976, 235) and, from farther away, the frescos from the mausoleum at Kapospala-Alsóheténypusztza (TÓTH 1988, 33).

It is evident that without a comparison of the complete fresco material from the same periods in

Pannonia, the workshops, where the frescos at Ács-Vaspusztza were made cannot be identified with certainty.

As a result of the most accurate excavation method having been employed, primary was given to the stratigraphic data. Thus, the frescos from Ács-Vaspusztza can be considered one of the most significant ensembles for the evaluation of the fresco material in Pannonia (fig. 5). Scientific analysis of the frescos added data which further support the periodization derived from the archaeological material at Ács-Vaspusztza.

The results of the scientific analyses and further research possibilities related to them open up a broad perspective on to the complex analysis of Roman age frescos in Pannonia.

CATALOGUE

A) The area of the camp

a) *unit 4/a* – eastern end, debris. –141 cm (1966) From the debris of recent removal in the foreground of the porta principalis.

1. *Corner segment*. Red field with white stripe. Trace of clay on the backside. Good quality. Av.M: 5,6x5,6 cm. Th: 12 mm (fig.4.1)

2. *Fragment*. White and light green painting. Good quality. Grey, compact, one-layer plaster with thin white setting coat. Trace of mortar on the backside. Av.m: 10,9x7,4 cm. Th: 2,1 cm.

3. *Fragment*. White field repainted in red. Imprints on the backside. Av.m: 7,5x4,7 cm. Th: 24 mm.

4. *Fragment*. White field repainted in pink. Av.m: 6,2x4,9 cm. Th: 23 mm.

5. *Fragment*. White field. Multiple vaulted imprint on the backside. Av.m: 8,9x5,8 cm. Th: 12 mm.

6. *Corner segment*. Red field. Imprints on the backside. Av.m: 7,8x6,9 cm; Th: 34 mm.

7. *Fragment*. Light green field with incised ship(?) motif. Grey, compact single-layer plaster with thin, white setting coat. Mortar remains on the backside. Av.m: 7,2x6,7 cm. Th: 16 mm. (fig.1.1)

b) *unit 7*. – area outside the immuration, –157 cm. (1967) From the levelling of the Late Roman immuration.

1. *Fragment*. White field with a narrow yellow stripe. Thick, rough grey plaster, thin white setting coat. Av.m: 14,5x0,6 cm. Th: 28 mm.

2. *Fragment*. Red field. Thick, rough grey plaster, with thin, white setting coat. Av.m: 2x2,7 cm. Th: 29 mm.

3. *Fragment*. White field with a red stripe. Good quality. Thick, rough grey plaster with thin, white setting coat. Av.m: 3,7x2,1 cm. Th: 19 mm. (fig.4.3)

c) *unit 9*. – eastern part, outside the wall, debris No. 2. –134 cm. (1967) Debris from the Severus period at porta principalis dextra.

1. *Fragments* (2pp) White field repainted in white. Av.m: 8,6x11,7 cm.

2. *Fragments* (3pp) white field with red frame ornament. Thick, rough grey plaster with thin, white setting coat. Clay clod and imprints on the backside. Av.m: 5,7x6 cm. Av.th: 14 mm (fig.4.2)

3. *Fragment*. White field with traces of renovation. Trace of lime on the backside. M: 13,5x9 cm. Th: 2 mm.

d) *unit 12/c*, debris

1. *Fragment*. Whitewash on white base (4pp). Traces of clay and of earlier whitewashing on the backside. Av.m: 4,1x3,2 cm. Th: 1,2 cm.

2. *Fragments* (4pp) Whitewashed. The backside is smoothed. Av.m: 3,5x2,6. Th: 0,5 cm.

3. *Fragment*. White field with a red stripe. The backside is smooth. Av.m: 3x1 cm. Th: 0,8 cm.

4. *Fragment*. Stucco plaster mixed with brick powder. Av.m: 7x4,5 cm. Th: 1,7 cm.

e) *unit 39*. – above the gravelly settlement level (1972)

1. *Fragment*. White field, scattered traces of pink paint. Smoothed crane pattern, chaff imprints on the backside. Av.m: 12x9,6 cm. Th: 3,5 cm.

2. *Corner segment*. White field with a dark red painted stripe. Imprint on the backside. Av.m: 9x4,9 cm. Av.th: 2,9 cm (fig.4.4)

3. *Fragments* (2pp) Red field. Yellowish plaster with rough, thick setting coat. Imprint on the backside. Av.m: 6,9x3,5 cm. Av.th: 1,5 cm.

4. *Fragments* (5pp) Blue field. Smoothing on the backside, mortar suggesting renovation. Av.m: 5,2x3,8 cm. Av.th: 6 mm.

5. *Fragment*. Yellow field painted over light blue. Worn. The backside is smoothed. It displays mortar suggesting renovation. Av.m: 5,6x5,3 cm. (fig.4.5)

6. *Fragment*. Green field. Worn Setting coat stuck to smoothed surface. Av.m: 2,8x1,7 cm. Av.th: 6 mm.

7. *Fragment*. Thin, rough plaster, thin whitewashing. Trace of lime on the backside. Av.m: 8x4 cm. Th: 0,8 cm.

8. *Fragment*. White field. Double layer greyish plaster with thicker, white setting coat. Av.m: 6,5x6,5 cm. Av.th: 14 mm.

9. *Corner segment*. Dark claret field. Good quality. White base under the plaster. Imprint on the backside. (fig.1.2) Av.m: 9,9x8,2 cm. Av.th: 84 mm.

10. *Fragment*. White field, narrow, red, vaulted frame ornament. Double layer greyish plaster with thick, white setting coat and traces of lime. M: 10,6x9,2 cm. Th: 22 mm (fig.1.3–4; fig.4.6)

11. *Corner segment*. Traces of red paint in white field. Impressions on the backside. No earlier painting can be seen although the plaster displays traces of smoothing and imprints. Av.m: 7,7x10,9 cm. Av.th: 31 mm.

12. *Fragments* (2pp) Red painted stripe in white field. Thicker, greyish, compact plaster with thick, white setting coat. Lime traces on the backside. Av.m: 6,7x7,3 cm. Av.th: 15–18 mm.

13. *Corner segment*. Pink field with the fragment of a red stripe on one edge. Thick, rough, double layer plaster with thick, white setting coat. Av.m: 8,7x9,7 cm. Av.th: 32 mm.

f) *unit No.41*. – western side, the trench of a removed wall. D: 130 cm. (1972) Secondary site on the territory of Principia.

Fragment. White field. Rough marks of manufacture. The backside has been smoothed with traces of lime. Av.m: 6,8x5,1 cm. Av.th: 10 mm.

B) The area of the vicus

a) *outside the right well of the camp*, on the Danube bank. Stray finds (1966).

1. *Fragments* (11pp) Whitewashed. Finer and rougher finish. One piece was corrected twice. Smoothed on the backside. Av.m: 3x2,6 cm. Av.th: 7 mm.

2. *Fragment*. Red field. Smoothed on the backside. Av.m: 3,3x1,9 cm. Av.th: 6 mm.

3. *Fragment*. (4pp) White field with red cornerframe ornament. Smoothed on the backside. Av.m: 4,5x2,6 cm. Av.th: 5 mm.

4. *Fragments* (2pp) Red field painted over white field. Smoothed on the backside. Av.m: 2,5x2,3 cm. Av.th: 5 mm.

5. *Fragments* (2pp) Whitewashed over red field. Smoothed on the backside. Av.m: 1,9x1,7 cm. Av.th: 5 mm.

6. *Fragments* (3pp) White field with red frame ornament. The backside has been smoothed. Av.m: 2,5x2 cm. Av.th: 0,5 cm.

7. *Fragment*. Red pattern (frame ornament?) made with light touches of the brush on white setting coat. The backside is smoothed. Av.m: 3,5x5 cm. Av.th: 5 mm.

b) *Vicus, house No.1*. (1967) – above the terrazzo floor.

1. *Fragment*. Red field. The backside is smoothed and shows the traces of later yellowish, thick plaster. Av.m: 8x6 cm. Th: 25 mm.

2. *Fragment*. Red field with a claret stripe. Trace of clay on the backside. Av.m: 2,8x3,8 cm. Av.th: 8 mm.

3. *Fragment*. Pink field with red frame ornament over whitewashing. Imprint on the backside. Av.m: 12,3x8 cm. Th: 23 mm (fig.2.4).

4. *Fragment*. Bright red field, setting coat. Double. The backside has been smoothed. Av.m: 3,9x2,5 cm. Total th: 15 mm (fig.2.3).

5. *Fragment*. Light green painting on whitewash. Greyish plaster with thin setting coat. Multiple vaulted imprint on the backside with traces of dark clay. Av.m: 6,8x3 cm. Th: 10 mm (fig.2.1–2).

6. *Fragment*. Yellow-green-white touches of the brush on a claret field. The backside is smoothed. Av.m: 6,5x3,8 cm. Th: 1 cm (fig.4.7).

7. *Fragment*. White field with green leaf ornament. The backside has been smoothed. Av.m: 4,6x3,1 cm. Th: 16 mm.

8. *Fragments* (11pp) White field with red stripe ornament. Double layer yellowish plaster with white, mediocre setting coat. Traces of clay and, on three pieces, vaulted imprints on the backside. Av.m: 7,6x6,5 cm. Th: 1 cm (fig.4.10,12).

9. *Fragments* (2pp) Claret field. The backside is smoothed. Av.m: 1,7x3 cm. Th: 4 cm.

10. *Fragments* (3pp) Red stripe on rough whitewashing. Light coloured smoothed clay with a coating of yellowish plaster containing lime grains on the backside. M: 6,5x4 cm. Th: 8–9 mm.

11. *Fragments, among them a corner segment* (5pp) Light red field. The backside has been smoothed. One is doubled. Av.m: 3,9x3,8 cm. Av.th: 9 mm.

12. *Fragments* (5pp) Mellow red field. Grey plaster with thin setting coat. Vaulted imprint on the backside, smoothed. One has traces of only on it. Av.m: 6x8,3 cm. Av.th: 7 mm.

13a. *Fragment*. White field with traces suggesting double renovation. Smoothed clay traces on the backside. Av.m: 10,1x8,2 cm. Av.th: 1,8 cm (fig.3.2–3–4).

13b. *Fragment*. White field. Traces of clay on the backside. Av.m: 7x7 cm. Av.th: 1 cm.

14. *Fragments* (2pp) White field with green paint on it. Multiple vaulted imprints on the backside. Av.m: 8,1x8 cm. Av.th: 8 mm.

15. *Fragment*. Green field with stripe. Smoothed on the backside. Av.m: 5,8x5 cm. Th: 7 cm.

16. *Fragment*. Green stripe. The backside has been smoothed. Av.m: 3,3x2 cm. Th: 8 mm (fig.4.8).

17. *Fragment*. Green field in various shades. Traces of earlier whitewashing on the backside. Av.m: 3x3,5 cm. Av.th: 11 mm.

18. *Fragments*. Red framing on white field. Greyish white plaster. The painting was whitewashed. Av.m: 4,7x5,5 cm. Th: 20 mm (fig.3.1).

19. *Fragment*. Red pattern. Traces of clay on the backside. Av.m: 9,1x7,1 cm. Th: 8 mm.

20. *Fragment*. Fragment with claret patterns on a white field. Traces of clay on the backside. M: 3,1x3,8 cm. Th: 10 mm (fig.4.11).

21. *Fragment*. White field with claret pattern(?). The backside has been smoothed. M: 3x2 cm. Th: 6 mm (fig.4.9).

22. *Fragment*. Yellow painting on white field. The backside is limey. Fragment of setting coat. Av.m: 1,6x2 cm. Th: 1 mm.

Notes

- 1 Due to technical problems the frescos have not yet been analysed. For allowing us to examine the material thanks must be given to Dr. Dénes Gabler, the leader of the excavations.
- 2 We are also grateful to Dénes Gabler for allowing us to use the documentation from the excavations filed in the Archives of the Archaeological Institute of the HAS.
- 3 The measurements of some fragments have changed during the course of sampling for scientific analyses.
- 4 See the study by M. Járó in the same volume.
- 5 "Grey bottom, fresco fragments with red and white paint from the debris of unit 13/c (the area between the towers of the porta decumana)." (notebook from 1967, pp. 25–26) According to oral communication by Dénes Gabler, recent disturbance prevented stratigraphic observations from being made. Here we may mention that the fresco material from the two sections could not be examined.
- 6 See Notebook from 1967, 5.: "A polishing bowl and fresco fragments were found under a red burnt layer in trench 24/a". (Notebook from 1970, p.24) According to information from D. Gabler, the material came from the layer belonging stratigraphically to the period following the Markoman wars, from the first period of the stone camp (We have not examined it.)
- 7 See Notebook from 1967, p.41.
- 8 "Trench 5/c: fresco fragments from the southern side of the southern wall." (Notebook from 1966, p.16.) According to a personal communication from D. Gabler, they came from trenches near the southern wall of the stone camp. No stratigraphic observations could be made, however.
- 9 "Unit 7. The frescos above the socle of the Late Roman immuration of the porta principalis dextra can stratigraphically be dated to the period of the Constantinus dynasty." (Notebook from 1967, p.6) According to stratigraphic data, the frescos from unit 39. can be dated to the Constantinian period of the via principalis: Notebook from 1972 and personal communication from D. Gabler.
- 10 "Unit 6. Green and red fresco fragments have been found in front of the wall of the porta principalis dextra." (Notebook from 1966, p.16). There were no stratigraphic data. These pieces came from recent pits. – Information by D. Gabler. I have not examined these frescos.
- 11 "Northern part of unit 27. fresco fragments together with glazed pottery and grey jug with spout from the section of the yellow clay layer near the southern wall of the camp." (Notebook from 1970, p.28) According to D. Gabler its stratigraphy has not yet been clarified. (I have not examined these frescos.)
- 12 "Unit 41. Western area, the trench of a removed wall, secondary site. D: 130 cm. According to the stratigraphic data and the archaeological finds (glazed ware, red ware, key), it had been part of the interior ornamentation of the principia in the Late Roman fortification, renovated during the Valentinian period. (Notebook 1972, p.18, Personal communication from D. Gabler)
- 13 On data concerning the vicus see Notebook from 1966, p.25 and Notebook from 1967, pp. 29–30.
- 14 See note 5.
- 15 I would like to thank D. Gabler for calling my attention to this fact.
- 16 See note 9.

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CHEMICAL ANALYSIS OF WALL PAINTING FRAGMENTS EXCAVATED IN ÁCS-VASPUZSTA

More than 40 samples taken from 25 wall painting fragments were investigated using an optical microscope, chemical analysis, X-ray diffraction, as well as, in some cases, energy dispersive X-ray analysis.¹

The aim of the investigation was the identification and characterization of the pigments and the level-

ling plasters (the intonaco or the upper layer of the intonaco if it has more than one), as well as the study of the plaster structure and the tool marks if any. The data obtained by the scientific investigations could contribute to the archaeological study of the fragments.