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Burials in context: The 1960s inhumations of Çatalhöyük East

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Abstract

The burial customs practised at Neolithic Çatalhöyük have raised a substantial amount of interest, due to factors such as a tradition of intramural inhumation, elaborate grave goods including organic remains in an excellent state of preservation, and a posited link to scenes in wall paintings supposedly showing vultures pecking at humanoid figures. In consequence, numerous publications have discussed the burial practices of the site, and the systematic study of the burial data is one of the aims of the present excavation project at the site. Given the attention the burials of Çatalhöyük have received, it is surprising that almost no hard data have been published on the hundreds of burials excavated in the 1960s. In this paper a systematic inventory of the 1960s burial data and their drawbacks will be presented. The data for this study were obtained from the notes made by Dr Angel and Dr Ferembach, the two physical anthropologists who analysed the skeletons excavated by Mellaart and his team. The inventory presented in this paper will allow us to study the burial practices at Çatalhöyük in a more systematic manner, and will provide an interesting background for the evaluation of the data forthcoming from the new excavation project at Çatalhöyük.

Özet

Neolitik Çatlhöyük'te uygulanmış olan gömü adetleri oldukça ilgi uyandırmıştır. Bunun nedeni, yerleşim içi gömü adetinin ve organik kalıntılar dahil olmak üzere çok iyi durumda korunagelmiş, ince işlenmiş mezar buluntularının ve bunlarla ilişkili olarak tartışılan ve akbabalar tarafından gagalanan insan benzeri figürleri tasvir ettiğine inanılan duvar resimlerinin varlığıdır. Bu ilginin sonucu olarak pekçok çalışma yayınlanmış ve bu çalışmalarda bölgedeki gömü adetlerinin uygulama biçimleri tartışılmıştır. Şu anda gömü verilerinin sistematik olarak incelenmesi mevcut kazı projesinin başlıca amaçlarından biridir. Çatalhöyük gömülerinin günümüzde çektiği bu dikkate rağmen, 1960'larda yapılan yüzlerce gömü kazısı ile ilgili hiçbir temel veri yayınının yapılmamış olması şaşırtıcıdır. Bu çalışma ile 1960'ların gömü verilerinin ve bunlarla ilgili sorunların sistematik bir dökümü sunulacaktır. Bu çalışma için gerekli olan bilgiler, Mellaart tarafından yapılan kazılar sırasında ortaya çıkarılmış olan iskeletleri incelemiş iki antropolog Dr Angel ve Dr Ferembach'ın notlarından elde edilmiştir. Bu çalışma ile ortaya çıkacak olan envanter hem Çatalhöyük'teki gömü uygulamalarını daha sistematik bir şekilde incelememizi sağlayacak, hem de Çatalhöyük'teki yeni kazı projesinden elde edilecek verilerin değerlendirilmesi için ilgi çekici bir temel oluşturacaktır.

The interest that the Çatalhöyük burials have raised is due to a number of factors. First, the excavations at Çatalhöyük provided an impressive document of intramural burial traditions, a practice that was largely unknown previously. Consider, for example, the map published in Mellaart's monograph on Çatalhöyük (1967: fig. 1), on which the only excavated Neolithic sites in Anatolia are Hacılar and Mersin (the Çayönü project was started in 1964). In the Levant, Jericho was an important excavated site. However, none of these sites had an intramural tradition of the kind found at Çatalhöyük. Today there are many more excavated Neolithic sites in the Near East, yet the burials of Çatalhöyük remain distinct. The burial practices are part of a wider set of characteristics that distinguish the central Anatolian Neolithic from that of upper Mesopotamia and the Levant, including chipped stone technologies, architectural traditions and the organisation of the settlement space (Özdoğan 1995: 58; 1999: 229–32). The burial practices in southeast Anatolia and the Levant differ in a number of respects from those of Çatalhöyük.

The practices of, first, the removal of skulls from graves, and, second, the plastering of skulls, which we find in the Levantine region are rare in central Anatolia. To my knowledge only four skulls with facial mouldings are known from the region. Three of these were found at Kösk Höyük. These skulls have been plastered with clay, and one may have had the eye sockets inlaid with shells (Silistreli 1988: 62; Öztan 2002: 57). Mellaart mentions a fourth example of a skull that was given a similar treatment at Çatalhöyük. In building E.VII.10[1] a skull coated in red ochre was found and the eye sockets were reconstructed as being inlaid with cowry shells (Mellaart 1966: 183, pl. L–b). However, the cowries were not found within the eye sockets, but in the vicinity of the skull. Given the fact that this is the only example of such a practice known from Çatalhöyük, I am hesitant to accept Mellaart's reconstruction. Apart from this possible example at Çatalhöyük, the plastered skulls from Kösk Höyük are isolated from those of the southern Levant both in time, they are approximately 1,000 years later than the latest known instances from the southern Levant, and space, since there are no examples of plastered skulls in the intermediate regions between the southern Levant and central Anatolia (Öztan 2002: 57). There is also a limited number of examples of skull removal in the central Anatolian Neolithic. A number of skulls were found in secondary contexts. At Çatalhöyük four skulls were found on the floor of building E.VII.21 (Mellaart 1964: 64, figs 21, 22; 1967: 84). In building 3, excavated in the current research project at Çatalhöyük (BACH Area), two skulls without jaws were found in what seems to be the building fill (Stevanovic, Tringham 1999). In addition to these examples from Çatalhöyük, a few isolated skull burials have been found at Pınarbaşı (Douglas Baird, personal communication, November 2003). In conclusion, the practices of both skull removal and skull plastering, that are common in the aceramic Neolithic of the Levant and upper Mesopotamia (Bienert 1991; Schmandt-Besserat 2002), are rare in the Neolithic of central Anatolia.

Similarly, special purpose buildings for mass burial, such as the skull building of Çayönü and room 3 in Abu Hureyra (Moore et al. 2000: 280), are absent in the Neolithic of central Anatolia. The central Anatolian Neolithic burials also differ from the burial practices found in the lake district to the west, where burials in the settlement were rare.

[1] References to the buildings excavated by Mellaart should be read in the following manner. The capital letter stands for the excavation area in which a building was found. The Roman numeral indicates the layer to which a building was dated by Mellaart, whereas the Arabic number behind the dot designates the actual building (thus building E.VIII.10 is distinct from E.VII.10).

The closest parallels to the Çatalhöyük burial practices can be found at Kösk Höyük and Aşıklı Höyük. At each site both single and multiple burials were found below building floors. At Aşıklı Höyük about 70 burials were found in the 400 buildings excavated (Özbek 1998; Esin, Harmankaya 1999: 126). The burial population included all ages and both sexes, and all burials are primary. Some contained burial goods, such as necklaces and bracelets, and about half of them display signs of burning (Özbek 1998: 572). At Kösk Höyük 66 burials were found (Öztan 2002: 57). Some of the burials contained stamp seals and figurines, and in a minority of cases the burials were sealed with shards. The assemblages of both Aşıklı Höyük and Kösk Höyük await further publication, and will for that reason not be discussed in this paper.

In only four excavation seasons Mellaart unearthed an estimated 480 skeletons (Mellaart 1964: 93; 1966: 183). These burials where found for the most part beneath the platforms located along the edges of the rooms, and generally situated in the northwest corner of the larger rooms. For an archaeologist working in Anatolia it was a logical hypothesis that these platforms were probably used in a fashion similar to the raised platforms found in traditional Turkish houses; for sitting and sleeping (Mellaart 1962: 47). Thus the association of the living and the dead seemed particularly intimate, a relation in which some group members were resting temporarily, whereas others rested on a more permanent basis. Mellaart indicated that adults were buried mainly below the northeast platform, whereas juveniles could be buried anywhere in a building (Mellaart 1962: 52). In a later report particular platforms are held to be used for the interment of individuals according to gender, suggesting that the smaller northeast corner platforms belonged to the males, and the larger platform immediately south of it, located along the east wall, was reserved for the women (1964: 93).

A second topic often discussed by Mellaart concerns the burial goods. Some of the burials were richly furnished and exceptionally well preserved. Burial goods included, among others, obsidian objects, such as mirrors, daggers and points, necklaces, often with beads of exotic derivation, bone objects, such as belt hooks, spatulas, finger rings and spoons, stone vessels and mace-heads. Due to the excavation of a group of burials located below the buildings of level VI.B/A, which was partly caught up in an intensive fire that charred the burials below, a range of goods made of organic materials, which are ordinarily missing from the archaeological record, can be added. These include wooden vessels, baskets, cloth and even a charred human brain that was used to obtain a radiocarbon date (Mellaart

1964: 84–92; Neuniger et al. 1964; Burnham 1965; Ryder 1965; Stuckenrath, Ralph 1965; Vogelsang-Eastwood 1988; Hamilton 1996). Missing from the burial record are pottery and figurines.

According to Mellaart the burial goods can be divided into goods that were buried with males, on the one hand, and objects that were reserved for women, on the other hand (1963: 94–5; 1967: 208–9). In this view, males were accompanied by weapons, such as stone maces, obsidian daggers and points, as well as by bone belt hooks. By contrast, the graves of women were adorned with jewellery, such as necklaces, rings and bracelets, as well as obsidian mirrors and spatulas (interpreted as make-up appliers).

These statements made by Mellaart on the burial practices of Çatalhöyük reflect the nature of his preliminary reports, which are meant to highlight the importance of particular aspects of the excavated material, presenting interpretations that are by necessity based on impressions, rather than on a systematic archive. It should be kept in mind that no physical anthropologists were present at the 1960s excavations at Çatalhöyük, and consequently burials were not sexed or aged by specialists in the course of those campaigns. Mellaart's interpretations on the subject of differential gender treatment in the burial assemblage, such as the hypothesis of gender specific burials beneath circumscribed platforms, and the idea that certain burial goods were exclusively associated with either males or females, were published before any physical anthropologist worked with the skeletons in post-excavation analysis. In light of these circumstances all discussions of gender differentiation in the burial practices of Çatalhöyük should be treated with due caution.

The third issue of importance with regard to the burials of Çatalhöyük is the treatment of the dead. Based on the fact that many of the skeletons were incomplete, Mellaart argued that they were secondary burials (1962: 52). In his reports an enigmatic painting from the north wall of E.VI.1 (Mellaart 1963: pl. xxvi-a) is interpreted as a depiction of charnel houses, in which the bodies of the deceased were excarnated (1963: 97–8), a process that is supposedly depicted on the walls of buildings E.VII.8 and E.VII.21, showing what are, according to Mellaart, vultures pecking at small headless humanoid figures (Mellaart 1964: 93, pls ix, xii). Mellaart argues that the excarnation was completed only to a certain degree, with the ligaments left intact. In the next phase of this process as envisaged by Mellaart, some of the bodies may have been painted, as evidenced by traces of paint found on the skeletal remains, consisting of either ochre, of which a total of 21 burials are mentioned (Mellaart 1966: 183), cinnabar or unspecified blue and green paint. Finally the bodies were put in a container of textiles, mats or a basket, and interred in the buildings (1963: 95; 1964: 92–4). Mellaart believes that these interments might have occurred at a specific moment in the year (1963: 98). Burials were preferably placed beneath the platforms in the northeast, and were interred elsewhere only if no place was left. A parallel was drawn between the platforms and a family burial site (Mellaart 1964: 92–3; 1967: 205), with a maximum of 32 burials of supposedly related individuals found in E.VI.B/A.10. Finally Mellaart notes that some kind of selection prior to burial probably took place, as some buildings contained only a few burials, and the total number of burials is much lower than one would expect, given the number of buildings and the time span involved (Mellaart 1967: 206; compare Todd 1976: 67, 72).

Mellaart's preliminary hypotheses presented in his *Anatolian Studies* (1962; 1963; 1964; 1966) reports and his popular monograph (1967) were soon taken at face value and reproduced as solid facts. In Todd's monograph on Çatalhöyük we can find all of Mellaart's hypotheses outlined above, including the excarnation in charnel houses by vultures, although phrased with more caution (1976: 64–74). This caution is absent in an article by Macqueen who reproduces Mellaart interpretations without scrutiny (1978: 227–8). Macqueen interprets the Çatalhöyük burial practice of multiple interments in the same location as a belief in an ancestor community.

> As the bones are removed and placed in a communal tomb, so the soul is removed from the isolation of its probationary period and admitted to the community of ancestors; so too the mourners are freed from their isolation and admitted once more to the community (1978: 235).

More recently, Ian Hodder, in his initial paper on Çatalhöyük, similarly adheres to Mellaart's views without questioning their solidity (1987: 46). The ideas first formulated in this article were at the basis of his famous synthesis *The Domestication of Europe*, in which Çatalhöyük has an important place (Hodder 1990: 3–11), and which was one of the elements that led to the formation of the Çatalhöyük Research Project. Hodder's initial interpretations can be opposed to his more recent views in which burial practices at Çatalhöyük are seen as less rigidly structured (Hodder 1998).

A more reserved reading of Mellaart's imaginative hypotheses can be found in the work of Wason (1994: 156) and Becks and Jacobs (1996: 60), all of whom seem to accept Mellaart's basic premises of excarnation, and the gender specific burial goods and locations, but reject the interpretation of the wall paintings as straightforward

representations of charnel houses and excarnation by vultures. This seems to be part of a more widely held view leading away from a naïve interpretation of the Çatalhöyük wall paintings.

> Rather than depicting single events in specific locations, paintings like those of the vultures may have established links of meaning between a variety of practices and served as a set of resources for thinking about the world (Last 1998: 362).

Finally, Wunn (2001: 112) argues that Mellaart's interpretation of the vulture scenes is rooted in a fundamentally modern conception of death.

It is remarkable that all the discussions of the Çatalhöyük burial assemblage have focussed primarily on the wall paintings and their interpretations by Mellaart. The data obtained and partly published by the two physical anthropologists who worked on the skeletal assemblage (Angel 1971; Ferembach 1972), have hardly been considered and neither have the two physical anthropologists entered the discussion of burial practices on the basis of their particular expertise. The potential of using that kind of expertise to answer questions relating to ancient burial practices is evident. For instance, the issue of possible secondary burial and excarnation is dealt with by the physical anthropologists of the new excavations at the site. They have found that, in general, the burials at the site were not secondary burials, and that the skeletons show no signs of having been defleshed.

> None of the bones are weathered and few are broken, and the scattering and disarticulation of bones in multiple burials is mainly due to disturbance by later burials (Andrews et al. in press).

Why were the publications of Angel and Ferembach not used in similar ways? To my mind, the main reason why their articles have not played a large role in the discussion is the paucity of the published data in the reports published by Angel and Ferembach. Consequently, it took about 30 years, until, in the wake of the new project at Çatalhöyük, Mellaart's interpretations of the burial record were scrutinised. In particular, Naomi Hamilton has criticised Mellaart's statements on the basis of the notes of Ferembach and Angel.[2] She challenged the gender division that Mellaart sees in the burial record, assigning specific platforms to males or females, and associating jewellery with females and weapons with males (Hamilton 1996: 254, 259), demonstrating that there are many exceptions to the gender specific grave goods and burial locations outlined by Mellaart.

Such exceptions to the burial practices reconstructed by Mellaart might demonstrate that the principles outlined by the excavator might not hold true in all cases, but it is still possible that they were valid for the majority of the burials. Such issues are difficult to address on the basis of the Mellaart archive, since very few burial goods can be assigned to specific skeletons, and equally very few skeletons can be assigned to a particular platform instead of a building. Fortunately, a detailed database will emerge in time from the new excavation project at the site, and will clarify these matters. To date, preliminary assessments of the material have been made (Hamilton 1998; Hodder 1998: 75), and final reports on the burials will be published in the near future (Andrews et al. in press; Molleson et al. in press).

In my opinion, Hamilton's report on the Çatalhöyük burials from the 1960s campaign suffers from a major flaw. Whereas she laments the absence of any kind of systematic data on the burials of the site (1996: 244), she does not provide such a general overview herself, which she should have been able to present, using the burial data notes, as is evidenced in various tables and remarks that summarise sub-groups of burials (Hamilton 1996: 250–7). Such a database, based on a reading of these sources, is fraught with difficulties, but at least it provides the most reliable data available. The present paper aims to provide the burial data of the 1960s, even if they are problematic in some respects. The data presented may serve as a basis for the assessment of the burial practices as outlined by Mellaart. Second, the data point us to some aspects of Çatalhöyük burial practices that have been neglected so far. Third, in time, the burials found by Mellaart can be compared with the high-quality data emerging from the new excavations, to be published in the near future. These burial data are, however, restricted to a much smaller area than that excavated by Mellaart, and for this reason the burials excavated by Mellaart and his team will remain an important database in the coming decades.

The burial data

Considering the interest that scholars have devoted to the burial practices of Çatalhöyük, it is somewhat surprising to find that hardly any reliable data on those burials has been published (see Todd 1976: 64). Throughout Mellaart's preliminary reports in *Anatolian Studies* (1962; 1963; 1964; 1966), and in the monograph on the site (Mellaart 1967), we can find numerous descriptive references to burials and grave goods, as well as some statements of a more interpretive kind. A more systematic presentation of the burials, such as is given in most final excavation reports, is, unfortunately, not available. Such a discussion would ideally enumerate

[2] This paper is based on the same set of notes, which I have used by kind permission of Dr Molleson.

such matters as the exact locations, the sequence of overlapping burials and the numbers of skeletons found, with a discussion of the ages and sex determinations, the burial positions and other indications for the treatment of burials, the distribution of the associated grave goods, and the health condition of the deceased.

To reach a sounder understanding of the burials excavated by Mellaart at Çatalhöyük it was considered necessary to study the primary sources of the physical anthropologists who worked on the material. The skeletal material from the 1960s has been studied by two physical anthropologists consecutively, first by Dr Lawrence Angel, from the Smithsonian Institute, and subsequently by Dr Denise Ferembach, based at the Laboratoire d'Anthropologie Biologique de l'École Pratique des Hautes Études in Paris. Recently an analysis of a selection of the mandibles excavated in the 1960s seasons has been undertaken under the supervision of Dr Theya Molleson, of the Natural History Museum in London, the results of which will be published in the near future.

Angel first investigated 35 skeletons excavated in 1962, and studied the remainder of the material in 1967. In the meantime these skeletons had been cleaned, restorated and numbered by a local physician, Dr Ahmet Kocaözer from Çumra. Angel was mainly interested in the pathologies in the skeletal assemblage, on which he published in *Anatolian Studies* in 1971. This interest has some important implications with regard to the manner in which Angel worked. For instance, no efforts were undertaken on his part to reassemble small bone fragments that lacked clear deformations into larger elements, which would have been the first step for a researcher interested in the demography of the population, in order to arrive at a minimum number of individuals. In consequence, the demography of the assemblage was not studied systematically by Angel, and his numbers of burials, as well as his ageing and sexing of the skeletons should, accordingly, be treated with caution (Theya Molleson, personal communication, May 2003).

Angel's observations and interpretations of the skeletons of Çatalhöyük are reflected in two documents that were available for this study. The first is a hand-written list of skeletons, with the following entries: (first) running total; (second) burial label; (third) sex; (fourth) age; (fifth) type; and (sixth) remarks. The running total starts with burials from the latest levels, and works down to earlier building levels in sequential order. Up to number 227 this stratigraphical sequence is followed, after which the burials are not ordered according to the sequence of levels. The last batch of burials, running total 228 to 275, derives from the 1965 excavations. They include burials from buildings such as E.VII.44, and F.V.1, which were excavated in the final season.

In cases where more than one burial bag came from a building, the bags are sub-divided with letters in alphabetical order (for example, E.VI.1-a/b/c etc.). We can assume that this was probably done in the course of the excavations. By contrast, in cases where Angel recognised more than one individual in a bag, he sub-divided his running total using letters in the same manner.

In the 275 bags with skeletal remains that Angel seems to have received, he distinguished 299 individuals (see table 1 for further details). The relatively small extra number of 24 individuals, in a total of 275 bags, might suggest that the excavators were reasonably successful in separating the skeletons in the process of excavation. This would be quite remarkable in light of the often confused groups of associated and intermingled burials that were found at the site (see Mellaart 1967: pl. 92). However, as I have argued above, Angel's totals should be treated with some caution, since Ferembach arrived at a considerably larger total of 462 individuals, working with the same bags of material (see table 1 for details).

The second available document on the skeletons excavated in the Mellaart excavations is Angel's article of 1971 published in *Anatolian Studies*. The numbers given by Angel in this report are generally lower than those in his notes. Whereas his notes add up to 299 individuals, in this report Angel mentions 294 skeletons. Similarly he reports 72 infants and children, whereas his notes add up to 83. These differences may be related to the possibly fragmentary state of some skeletons. Angel seems to have omitted the skeletons from discussion that were too fragmentary for secure identification.

Ferembach, the second physical anthropologist working on the Çatalhöyük burial data, focussed on the demographic characteristics of the Çatalhöyük skeletal assemblage, rather than the pathologies of the population. The research seems to have been arranged in this manner by mutual agreement (Angel 1971: 77). Ferembach worked with the skeletal material after Angel, as is evidenced in her notes which refer in some cases to the earlier work by Angel, and also by a list of photographs drawn up by Angel and given to Ferembach. She reports that she worked on the material in 1967 in Konya, and in 1968 and 1969 in the laboratories of the University of Ankara. At the University of Ankara the laborious process of reconstructing skulls took place with the help of students. Due to the different interests of the two researchers, pathology and demography respectively, and the related fact that Ferembach could probably better assess some parameters on the basis of the reconstructed bones, the numbers of individuals, as well as the age and the sex distributions of the skeletons in their respective databases differs substantially.

	Angel	Ferembach
Total	299	462
Adults	216 (18 + yrs)	275
Males	75	115
Females	127	148
Adult indeterminate	14	12
Adolescents	23 (12-17 yrs)	12
Juveniles	60 (<12 yrs)	99
Age indeterminate	0	76

Table 1. Minimum total number of skeletons according to Angel's and Ferembach's notes

The data obtained by Ferembach are recorded in three sources. The first source is a typed inventory list that seems to have been drawn up as a first evaluation of the contents of the material she received. The second source is a typescript of 174 pages, titled *Mesures et indices des squelettes humains Neolithiques de Çatal-Hüyük*, divided in two volumes, the first with measurements of skulls and mandibles, and the second with measurements on a range of other bones, including the long bones, vertebrae, clavicles and foot bones. The measurements are separated for males, females, indeterminate adults, adolescents and juveniles. The third source is a short publication in the *Türk Tarih Kongresi* (Ferembach 1972), which discusses the characteristics of the Çatalhöyük skulls she measured after their restoration. This source is a preliminary report, and does not quantify or identify burials, and is consequently of little use in this analysis.

From the inventory list it would seem that Ferembach received a minimum total of 341 individuals. This number is also mentioned by Hamilton in her re-assessment of the burials excavated by Mellaart, apparently on the basis of the same document (1996: 244). However, the second source, the unpublished typescript with measurement tables, has a markedly higher population of individuals (462). This is 35% more than in the inventory list.

This difference between the two sources seems odd and requires an explanation. It would seem that the inventory list was drawn up in 1967 in Konya, whereas the latter document reflects measurements taken in Ankara in 1968 and 1969, on the reassembled bones, but also, apparently, on a larger sample of skeletons. Where did the extra skeletons come from?

The answer to this riddle may be found in *The Dorak Affair* (Pearson, Connor 1967), where mention is made of a disagreement between Kocaözer and Ferembach on the handing over of the skeletons. As a result, during her initial stay in Konya in 1967, Ferembach received only a part of the assemblage. It is probable that she managed to get hold of the remainder of the assemblage in later years.

The circumstances outlined so far, that is the different interests of the authors and the influence that reassembling bones can have on the burial population, only account for some of the problems with the burial records. Confusion seems to exist over the derivation of skeletons or groups of skeletons. In other words, it is often not clear in which buildings the burials were excavated. Some burials are supposed to derive from buildings that, as far as we know, were not excavated, such as V.49 and XI.35. In other cases, Mellaart reports burials from buildings that are missing from the records of Angel and Ferembach. The burials from 18 buildings, that contained burials according to Mellaart's publications, are not present in Angel's and Ferembach's files.[3] Both Angel and Ferembach list a considerable number of skeletons without labels, but Ferembach has many more 'no label' skeletons than Angel, amounting to 9% in Angel's records (27 individuals), and 18% in those of Ferembach (85 individuals). Angel (1971: 79) mentions that ochre burials from the following buildings are missing: IV.4, IV.8, VIA.14, VIII.1 and VIB/A.10. However, burials from these buildings are treated, with the exception of VIII.1 and VIB/A.10, in both Angel's and Ferembach's measurements, albeit without ochre. It is possible that the ochre traces were eroded from the skeletons by the time they reached the physical anthropologists.

Theoretically, two factors could have mainly caused the discrepancies in the records that are mentioned above, including, first, a potential loss of skeletons, and, second, simple mistakes occurring in the process of reading and writing labels.

In my opinion, of these two factors mentioned, the second, errors occurring while reading and copying labels, seems to be more plausible as an explanation. I have argued elsewhere (Düring 2002: 234) that Mellaart's excavations were in many ways state of the art in the 1960s (De Contenson 1968: 72; Todd 1976: 17–19). Mellaart was one of the first archaeologists who understood that the analysis of archaeological data requires the involvement of a wide range of specialists (Mellaart 1967: 12). In the case of Çatalhöyük this included the deployment of radiocarbon dating, analysis of textiles, macro-botanical remains, faunal remains, chipped stone industries, metals, wood, pigments, minerals and human remains. Such an approach requires a detailed field archive and there is every reason to

[3] Buildings II.A.1; III.1; III.4; IV.1; IV.9; IV.10; IV.A.1; V.4; V.10 (west); V.17; VI.A.25; VI.A/B.10; VI.A/B.31; VI.B.12; VI.B.15; VII.08; VII.12; VIII.1.

believe that such an archive exists. A clear demonstration of how seriously Mellaart took the responsibility of sound documentation is the re-assignation of buildings from one building level to another (see Düring 2001: 3), something that can only be done on the basis of good documentation, as most excavators would agree. Indeed the accuracy of Mellaart's stratigraphical divisions is borne out by the new Çatalhöyük Research Project (Matthews, Farid 1996: 276–89). Considering the thoroughness of Mellaart's excavations it seems unlikely, as Hamilton (1996: 244) suggests, that large losses of skeletons occurred before they reached the physical anthropologists.

A better explanation for the absence of some skeletons from the records of Angel and Ferembach lies with the confusion that can occur when writing, reading and copying hand-written labels. This could explain the absence of burials from some buildings that were mentioned by Mellaart but do not surface in Angel's and Ferembach's notes, as well as the occurrence of labels referring to buildings that were never excavated, and the many 'no label' skeletons in their records. In total there are 85 'no label' skeletons in Ferembach's files, which could have derived from the 18 buildings listed by Mellaart as containing burials, but not in Ferembach's and Angel's records. Given that 462 burials can be assigned to 54 buildings (see discussion section), which is about 8.5 burials per building, 85 burials for 18 buildings, amounting to 4.7 burials per building, may seem too low. However, most of the buildings for which burials are missing probably did contain a few, rather than a lot of burials, because in that case loss is more likely to occur.

By the time Ferembach analysed her material in Ankara the labels had been interpreted and, in some cases, copied at least three times. First, the labels were written during the excavation, second, the material was analysed by Angel, third, the skeletons were cleaned and mended by Kocaözer, fourth, some of the bones were further cleaned and reassembled by students in Ankara, and, fifth, finally Ferembach analysed the material in Ankara. At any point in the sequence, errors might have occurred during the interpretation or duplication of labels. This hypothesis seems to be borne out by the fact that Ferembach received 85 'no label' skeletons as opposed to Angel's 27. This is 3.14 times as many. The overall total of Ferembach (462) is only 1.54 times that of Angel (299). The difference in these ratios seems to indicate that the larger number of 'no label' skeletons in Ferembach's assemblage is not simply a function of the larger overall population in Ferembach's records. In the process of handling skeletons more and more labels seem to have gone missing.

Approach

In order to obtain a more systematic record of the burial record of the 1960s excavations at Çatalhöyük the following steps were taken. The most systematic and reliable document on the burials, Ferembach's unpublished *Mesures et indices de squelettes humaines de Çatal Hüyük*, was taken as a basis for the reconstruction of the minimum number of individuals. This was done by a comparison of the different tables in that document. For instance, a particular building, or in many cases a particular bag with skeletal remains from a certain building, might have contained, according to the tables, three scapulae, four tibiae, etc. By following the determinations of sex and age as evidenced in those tables, it is possible to work out a minimum number of individuals that were interred in a certain building.

This method can lead to both under and over representation of burials. Only well preserved, identifiable bone elements can be used for measurements, and thus fragmentary skeletons will be under represented. On the other hand, a single bone can represent an individual in this analysis, thus skeletons that have become dispersed over a number of bags can boost the number of individuals. Thus a single infant bone astray in another burial bag affects the analysis considerably because an extra individual emerges. In this manner of reasoning it is assumed that where burials were bagged separately, the division of bones was done accurately. This is not simple at Çatalhöyük, where burials often cut through older burials and skeletal elements may have been dislocated from one skeleton to the next.

The effects of both under representation and over representation affect the reliability of the data presented below. Consequently the data presented in this paper should be treated with caution. A building that is said to contain 29 burials, on the basis of the tabulation of skeletal elements, may in reality have had somewhere between 20 to 40 inhumations. However, the difference between a building containing 29 burials and another containing five is clear, and this allows us to study the distribution of burials over the settlement on a general scale.

To the burials that are present in Ferembach's files a certain number of individuals can be added that are mentioned by either Angel (15 burials from buildings A.02.03, B.02.01 and E.06B.05, that probably had no label by the time Ferembach worked on them) or Mellaart. Adding these burials to the total of Ferembach is problematic, since these burials are probably the same as those in the 'no label' groups described by Ferembach. For instance, Angel (1971: 79) suggested in his *Anatolian Studies* paper that a group of 32 burials from building E.VI.A/B.10 was probably the 'no label' group of 27 individuals he received.

The solution adopted is twofold. First, the total number of individuals and their distribution over the sexes will be taken from Ferembach's files. Second, the burials will be contextualised (that is connected to a building from which they derive) as much as possible. For this purpose the 'no label' skeletons, which cannot be assigned to buildings, will be omitted from the sample. By contrast, in cases were either Mellaart or Angel mention burials from buildings that do not appear in Ferembach's list, individuals will be added to the sample.

Discussion

The total number of burials in Ferembach's records is 462. According to these records about 60% are adult skeletons, 2.6% belong to adolescents and 21.4% to juveniles, while the remainder of approximately 16.5% cannot be aged. With regard to these numbers it should be taken into account that juveniles are probably under represented. At Çatalhöyük this is probably not due to the fragile nature of juvenile skeletons and post-depositional processes, because juvenile skeletons preserve excellently at the site (Lori Hager, personal communication, July 2003). Rather the cause of the small numbers of juveniles in the record should be sought in the process of excavation and handling of the skeletons. I will return to this point later in the text.

According to Ferembach's records, the adults encompass 275 individuals, of which 54% are women, 42% men, while the remaining 4% cannot be sexed.

Following Mellaart's building designations, approximately 253 buildings were excavated at Çatalhöyük (but compare Düring 2001: 5). As a mental experiment we can calculate an average number of burials per building of 1.8 individuals (462 burials divided by 253 buildings). These 1.8 individuals can be related to the estimated use-life of a building, the size of the family inhabiting it and data regarding the age distribution of the burials.

The use-life of buildings would have varied considerably. Mellaart (1967: 50–1) mentions a maximum of 120 years, and a normal life span of between 30 and 60 years, on the basis of the number of plaster layers. Matthews reconstructs an average of 70 to 100 years in levels VIII–XII, and 50 to 70 years for the later levels (Matthews in press). Similar ranges are mentioned for buildings 1 and 5, excavated in the North Area in the current excavation (Hamilton 1998: 8-a; Cessford in press, a). As an estimation, an average of 60 years for the use-life of the buildings of Çatalhöyük seems consistent with the results of the new excavations at the site.

The size of the families inhabiting these buildings probably varied considerably, and is difficult to estimate. The average family size can be modelled using the interior sizes of buildings and the number of platforms found within them. Mellaart estimates on the basis of the sleeping platforms that the maximum number of residents was eight people, but that the normal size of the group inhabiting buildings was more in the range of three to four (Mellaart 1967: 60). In an earlier paper I have suggested on the basis of the number of platforms found within the buildings that the average group of inhabitants would be approximately four (Düring 2001: 5), which is similar to an estimate proposed by Matthews (1996: 86). Cessford (in press, b) estimates, on the basis of interior floor sizes, that the average group of inhabitants was between four and eight people. While all of these numbers rely on guesswork, there is some consistency in them. As a hypothesis an average of four inhabitants to a building seems plausible.

Given 60 years of occupation on average per building, with an average group of inhabitants of about four persons, a total of 1.8 burials is too low to account for all of the death cases among the inhabitants. From the new excavations it would seem that 35% of all the burials were infants (below the age of two), 27% were children (between two and 19 years old) and 38% were of adult age. While it would be hazardous to calculate a life expectancy from these numbers, they seem to suggest that of those buried in the settlement 62% died before the age of 19.[4] That number seems incompatible with 1.8 burials over 60 years with a population of four.

From the hypothetical calculations based on the use-life of buildings and the number of occupants it seems highly unlikely that everybody was buried intramurally at Çatalhöyük. The hypothesis of Mellaart and Todd (Mellaart 1967: 206; Todd 1976: 67, 72) that some kind of selection must have taken place, regarding who was buried within the settlement, and who was treated in other ways, is corroborated by the calculation.

The distribution of burials over the buildings at Çatalhöyük is uneven and varies dramatically between buildings. The idea that the intramural burials represent the deceased inhabitants of a building (Mellaart 1964: 92–3; 1967: 205) can be discounted since the majority of buildings seem to have contained no burials at all. In total, 54 of the 253 excavated buildings contained burials, amounting to some 21%. Thus it seems that one in five buildings was appropriate for burials.

At this point it could be argued that it is possible that Mellaart's workmen, who often worked without supervision, accidentally destroyed some of the burials before they were documented. If this were the case, the one in five ratio would not be very meaningful.

[4] The percentages of the new project are used because they are held to be more reliable (see section on burial data from the Çatalhöyük Research Project).

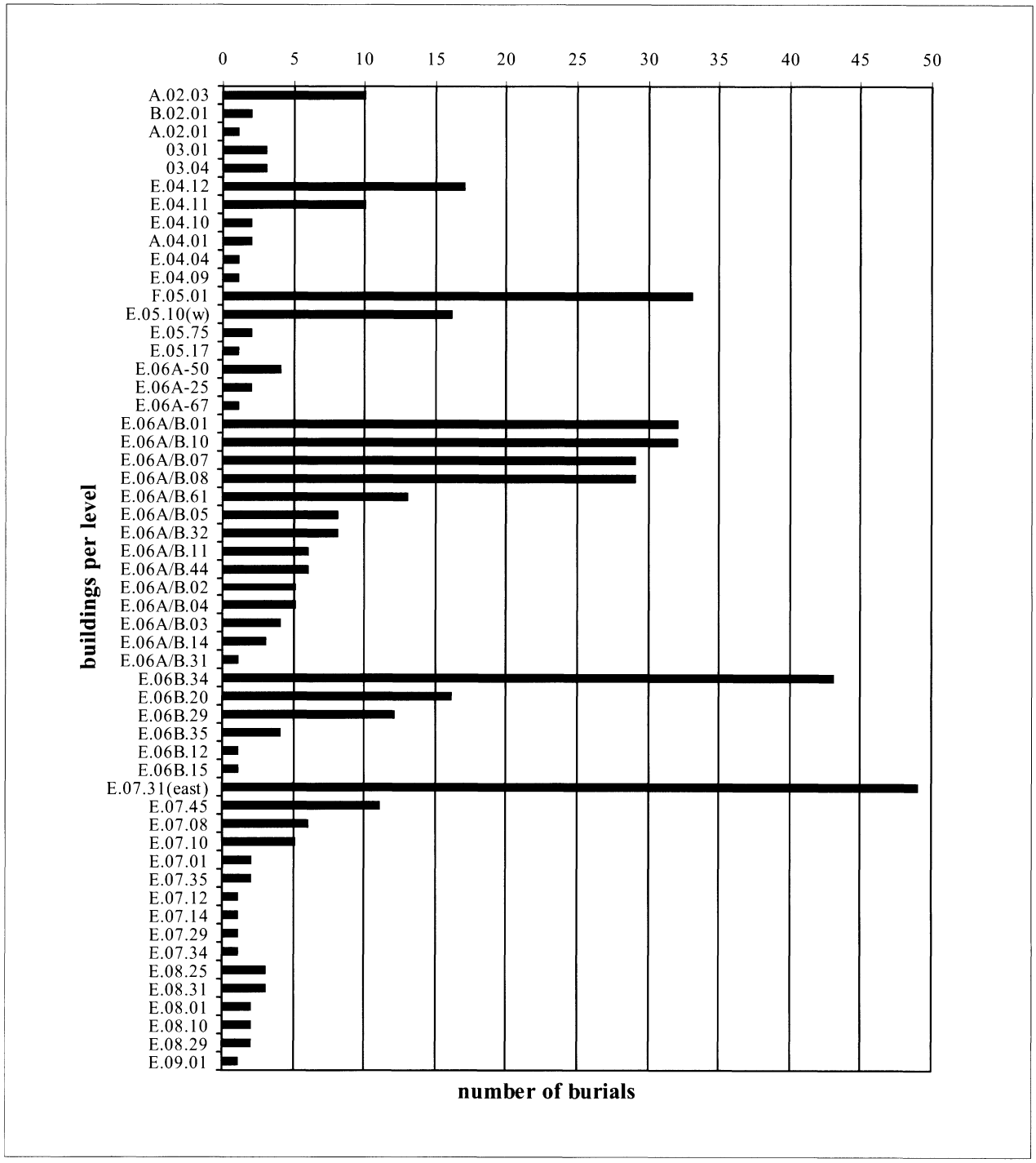

Fig. 1. Distribution of Çatalhöyük burials by building

However, it seems highly unlikely that large clusters of burials were destroyed in such a manner. In this respect, it seems possible that the number of buildings with one to three burials may have been higher than reflected in fig. 1. The current excavations at the site will help to elucidate this point in the future. To my mind it seems unlikely that the proportion of buildings that contain burials would rise to 100% using more careful methods of excavation. A selection of the buildings was probably used for burial practices, even if that proportion may have been higher than one in five. This idea can be corroborated to some degree by circumstantial evidence. First, mouldings too were only found in a minority of the buildings excavated at Çatalhöyük, suggesting that considerable differences existed with regard to how buildings were perceived (Düring 2001). Second, in the only other site with similar burial practices that has been excavated intensively, Aşıklı Höyük, a similar situation is documented (Esin, Harmankaya 1999: 126). In the approximately 400 rooms excavated only 70 burials were found. In the deep sounding 4GH only five burials seem to have been found, although over 60 floors were removed in this trench.

If we accept for the time being the hypothesis that only a portion of the buildings at Çatalhöyük contained burials, we can outline two possible explanations to account for the uneven distributions of burials over the buildings. First, there is the possibility that only the inhabitants of the buildings containing burials were buried. This would suggest some kind of differentiation of the inhabitants of the site into groups that were treated in distinct ways. Second, there is the possibility that some of the people living in buildings without burials were inhumed in the 'burial buildings'. In this model there is a differentiation of buildings, rather than people, into distinct categories. There are a number of arguments that seem to support the second hypothesis, rather than the first.

A closer look at the distribution of burials over buildings reveals that they cluster in a few buildings (see fig. 1). There is a large number of buildings that contain only one or two burials, whereas seven buildings contain over 25 (F.05.01, E.06A/B.01, E.06A/B.10, E.06A/B.07, E.06A/B.08, E.06B.34 and E.07.31-east). These seven buildings contain 53.5% of the burials (247 burials in these buildings against a total of 461 burials assigned to all buildings), constitute only 13% of the buildings containing burials and 3% of the total number of buildings at Çatalhöyük.

On the other hand, many buildings contain only one or two burials (see fig. 1). In those cases in which only one or two burials were present, it seems unlikely that all of the building's inhabitants were buried there. Theoretically, it is possible that only people of a certain age or status were buried, for instance elderly males or females. However, since the burials in buildings with a small number of burials include all age categories and both sexes (see table 2), it seems that this kind of selection did not occur. Thus, the first possible explanation, in which only inhabitants of certain buildings were interred intramurally, seems unlikely. To my mind, this does not exclude the possibility that inhabitants of certain 'ritually elaborate buildings' might have had a higher chance of ending up being buried intramurally.

The second possible explanation, in which certain buildings are more appropriate for burying people than others, but may have served a wider community than solely their inhabitants, seems more plausible. The buildings with the highest population of individuals in the records of Ferembach and Angel, E.07.31 (east) and E.06B.34, with 49 and 43 burials respectively, have too many burials to be accounted for solely by the death rate of their inhabitants (for a similar argument regarding building 1, North Area, excavated during the current project, see Hamilton [1998: 8-a]).

On the basis of the assumed building population of about four people, and a building life span of 60 years this would imply a death case every year and two months (E.07.31), or every year and three months (E.06B.34), which is implausible in a family of four. Of course, it is possible to suggest that these specific families were larger than average, or that the buildings they occupied lasted longer than other buildings, but there is little to base such suggestions on.

Furthermore, I have demonstrated elsewhere (Düring 2001: 10) that buildings containing many burials are generally those containing mouldings, such as horned animal heads or figures attached to the walls. Most burials are thus located in buildings that stand out by their 'ritual elaboration'. This does not imply that every building containing mouldings had a large number of burials, merely that there is a correlation between burials and mouldings. Along similar lines, a connection has recently been posited by Hodder (1998: 76) between wall paintings and burial rituals. Burial practices were part of a set of ritual practices that seem to have served a wider community than the inhabitants of a specific building.

The question of who is buried in buildings that contain the largest number of burials is of considerable interest, since it is related to the view put forward by some scholars that Çatalhöyük was a society dominated by women (Gimbutas 1991). The seven buildings that contain the largest populations of burials (F.05.01, E.06A/B.01, E.06A/B.10, E.06A/B.07, E.06A/B.08, E.06B.34 and E.07.31-east), are presumably those that

Building	**Total**							
		Adults				*Adolescents*	*Juveniles*	*Indet. age*
			M	F	Indet. sex			
A.02.01	1	-	-	-	-	-	-	1
A.02.03	10	7	4	3	-	1	2	-
B.02.01	2	2	-	2	-	-	-	-
03.01	3	-	-	-	-	-	-	3
03.04	3	-	-	-	-	-	-	3
A.04.01	2	-	-	-	-	-	-	2
E.04.01	1	-	-	-	-	-	-	1
E.04.04	1	1	-	1	-	-	-	-
E.04.09	1	-	-	-	-	-	-	-
E.04.10	2	-	-	-	-	-	-	2
E.04.11	10	9	4	5	-	-	1	-
E.04.12	17	6	-	6	-	-	2	9
E.05.10(w)	16	15	?	?	?	-	1	-
E.05.17	1	-	-	-	-	-	-	1
E.05.75	2	2	2	-	-	-	-	-
F.05.01	33	16	9	7	-	-	3	14
E.06.A.25	2	1	-	1	-	-	1	-
E.06.A.50	4	2	-	1	1	-	2	-
E.06.A.67	1	1	-	1	-	-	-	-
E.06.A/B.01	32	12	3	7	2	1	8	11
E.06.A/B.02	5	3	2	1	-	-	2	-
E.06.A/B.03	4	1	-	-	1	-	2	1
E.06.A/B.04	5	3	-	3	-	-	2	-
E.06.B.05	8	2	1	1	-	-	-	6
E.06.A/B.07	29	13	-	10	3	1	13	2
E.06.A/B.08	29	20	6	14	-	2	2	5
E.06.A/B.10	32	-	-	-	-	-	-	32
E.06.A/B.11	6	4	3	1	-	-	2	-
E.06.A/B.14	3	1	-	1	-	-	2	-
E.06.A/B.31	1	-	-	-	-	-	-	1
E.06.A/B.32	8	-	-	-	-	-	2	6
E.06.A/B.44	6	3	-	3	-	-	2	1
E.06.A/B.61	13	3	1	2	-	-	1	9
E.06.B.12	1	-	-	-	-	-	-	1
E.06.B.15	1	-	-	-	-	-	-	1
E.06.B.20	16	14	8	4	2	-	2	-
E.06.B.29	12	9	4	5	-	-	2	1
E.06.B.34	43	26	15	10	1	3	10	4
E.06.B.35	4	2	1	1	-	-	2	-
E.07.01	2	2	1	1	-	-	-	-
E.07.08	6	-	-	-	-	-	-	6
E.07.10	5	5	4	1	-	-	-	-
E.07.12	1	1	-	-	1	-	-	-
E.07.14	1	1	-		-	-	-	-
E.07.29	1	-	-	-	-	-	1	-
E.07.31(east)	49	38	25	13	-	-	8	3
E.07.34	1	-	-	-	-	1	-	-
E.07.35	2	1	-	1	-	-	1	-
E.07.45	11	5	1	4	-	2	3	1
E.08.01	2	1	-	1	-	-	1	-
E.08.10	2	1	-	1	-	-	1	-
E.08.25	3	2	1	1	-	-	1	-
E.08.29	2	1	-	1	-	-	1	-
E.08.31	3	2	2	-	-	-	1	-
E.09.01	1	1	-	1	-	-	-	-

Table 2. Locations of burials excavated by Mellaart at Çatalhöyük, on the basis of the notes of Ferembach and Angel, and the data published by Mellaart

were most important in the symbolic practices surrounding burials. Looking at the type of inhumations amongst these burials, it can be summarised that, first, all age groups are present in these buildings (fig. 2). Adults constitute about half of the burials in these buildings, but juveniles and adolescents are also commonly found.

Second, amongst the sexed adults, male and female skeletons are present to the same degree (fig. 3). The distributions of age and sex seem to suggest that neither age nor gender were central to the burial practices performed in these buildings. A range of factors may have influenced who was buried in these buildings, including among other factors, the status of the deceased, ancestry, the circumstances of death and the time of death (Binford 1972; Parker Pearson 1982). However, it is impossible to determine which factors were important and why. A more fruitful angle from which to view the burial practices is to consider how they were important for the inhabitants of Çatalhöyük. Burial ceremonies bring together groups of people, and may act to solidify their relations. At Çatalhöyük, the inhumation of some individuals in buildings that apparently had some special significance to a community beyond the individual household, may have been a powerful means of creating and maintaining networks of social relations (compare Kuijt 1999).

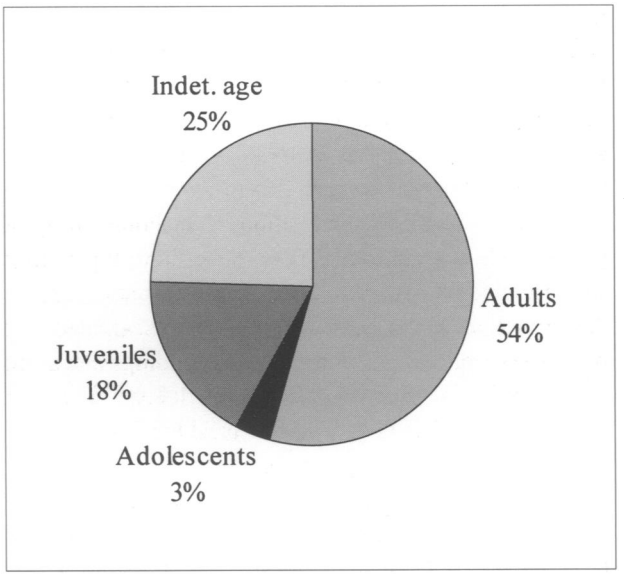

Fig. 2. Age distribution in buildings with more than 25 burials

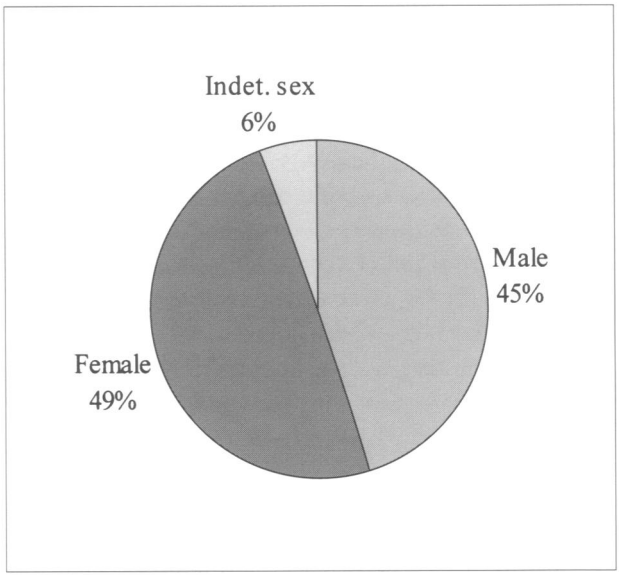

Fig. 3. Sex of adults in buildings with more than 25 burials

Burial data from the Çatalhöyük Research Project

No comprehensive publication on the burials excavated during the current Çatalhöyük Research Project has as yet appeared, but some publications are forthcoming (Andrews et al. in press; Molleson et al. in press). So far, only two buildings have been excavated in their entirety (buildings 1 and 3, located in the North and BACH Areas respectively) in the new excavations. In addition, a number of buildings were investigated in the South Area, most of which were excavated earlier by Mellaart. The 'limited' size of the exposures as well as the partial excavation of some of the buildings makes a discussion of the burial distribution over buildings difficult at the present stage.

Despite these limitations, two factors seem to stand out in the burial records. First, a much higher percentage of juveniles, including neonates and children, is present than in the burial record of the 1960s excavation (Molleson et al. in press: table 14.3). For example, in building 1 over half of the individuals are neonates, juveniles and adolescents, compared to ca. 24% in the records of Ferembach. This difference is probably due to the more careful methods of excavation and recovery practiced by the excavators and the physical anthropologists involved in the current project.

Second, the two completely excavated buildings, buildings 1 and 3, vary enormously in 'burial density'. Building 1 contained 62 burials (Andrews et al. in press), as opposed to the eight found under the floors of building 3 (Lori Hager, personal communication, July 2003), and none in building 2. These numbers suggest that the differences that characterise the Mellaart burials are similarly encountered in the new project. In addition, the new excavations show the same mixed burial practices, including all age categories and both sexes that existed in the Ferembach files.

Conclusion

The burials excavated at Çatalhöyük in the 1960s by Mellaart and his team are of great importance for our understanding of Çatalhöyük in particular, and Neolithic societies of Anatolia in general. The interest in the burials of Çatalhöyük is rooted in massive evidence for a tradition of intramural inhumation, an elaborate array of grave goods and a posited link to scenes in wall paintings supposedly showing vultures pecking humanoid figures. According to Mellaart, the dead were excarnated and buried at specific times of the year in buildings that acted as family burial sites. Furthermore Mellaart discusses gender specific burial goods and burial locations.

Although the burial practices have been discussed by a number of authors, it was only in the wake of the new research project at the site that Mellaart's interpretations have been scrutinised. The idea that those people of Çatalhöyük who were buried in the settlement were excarnated, and that the burials were secondary burials, is no longer tenable today (Andrews et al. in press). Hamilton (1996) has shown that many of the gender patterns Mellaart saw in his evidence, such as gender specific grave goods and burial locations, are problematic. Despite such critiques, a collation of the burial data in total remained to be presented.

This paper quantifies the burial data on the basis of the notes and the manuscript of Ferembach, providing for the first time evidence on both the age and sex of the burials excavated in the 1960s. Furthermore the burials are assigned to the buildings from which they derive on the basis of Ferembach's, Angel's and Mellaart's records. The presented data are somewhat problematic, but are considered appropriate for global analyses of burial practices. On the basis of the data presented, it is possible to discuss burial practices at Çatalhöyük more accurately than has been possible previously.

The first issue that is clear, is that only a selection of the people living at Çatalhöyük were buried in the settlement, at least in the part excavated by Mellaart. Second, all age groups and both sexes were interred intramurally, indicating that the selection of individuals was not on the basis of age or gender. Third, only a 20% minority of the buildings contained burials, suggesting that some buildings were more appropriate for inhumation than others. Fourth, among the buildings containing burials, there is a minority of 'ritually elaborate buildings' that contain the majority of burials. Fifth, the small numbers of individuals in the buildings with burials at the lower end of the scale make it clear that not all inhabitants of such buildings were buried within them. Sixth, the large number of people interred in the 'ritually elaborate buildings' point to the fact that individuals not living in these buildings must have been buried in them. Seventh, the distribution of ages and sexes in the buildings containing over 25 burials do not show any preference for certain age categories or sexes, indicating that other factors may have been important in the selection of individuals for burial in these buildings.

The patterns found in the burial data presented are compatible with the data obtained in the new excavations at Çatalhöyük. Although markedly higher percentages of juveniles are found in this project, probably due to more careful methods of excavation and recovery, the burials are similarly of mixed ages and sexes. Furthermore, large differences occur in burial density from one building to the next, which fits well with the asymmetric distributions noted in the Mellaart archives.

In conclusion, we can state that the burial practices of Çatalhöyük differ in a number of respects from the model outlined by Mellaart and accepted by most scholars subsequently. Burials occur mostly in a small group of 'ritually elaborate buildings'. Thus it seems Çatalhöyük burials do not relate only to the family units inhabiting individual buildings. Some form of selection took place, because only a minority of the population was buried in the settlement. This selection does not seem to relate primarily to age or sex, since all age categories and both sexes are present in the records. We can only guess at the factors that were the basis of this selection, but by contrast we can be fairly sure that burial practices at Çatalhöyük were an important element in the production and reproduction of social relations, drawing together people beyond the level of the household.

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