Some architectural indications for the origins of the Central Anatolian Neolithic

by Güneş DURU

Introduction

My aim in this paper will be to discuss some of the architectural aspects of the excavated sites in the Central Anatolian Neolithic and to try to find out points which will help to understand the characteristics of this period and which provide hints for the origins of Central Anatolian cultures.

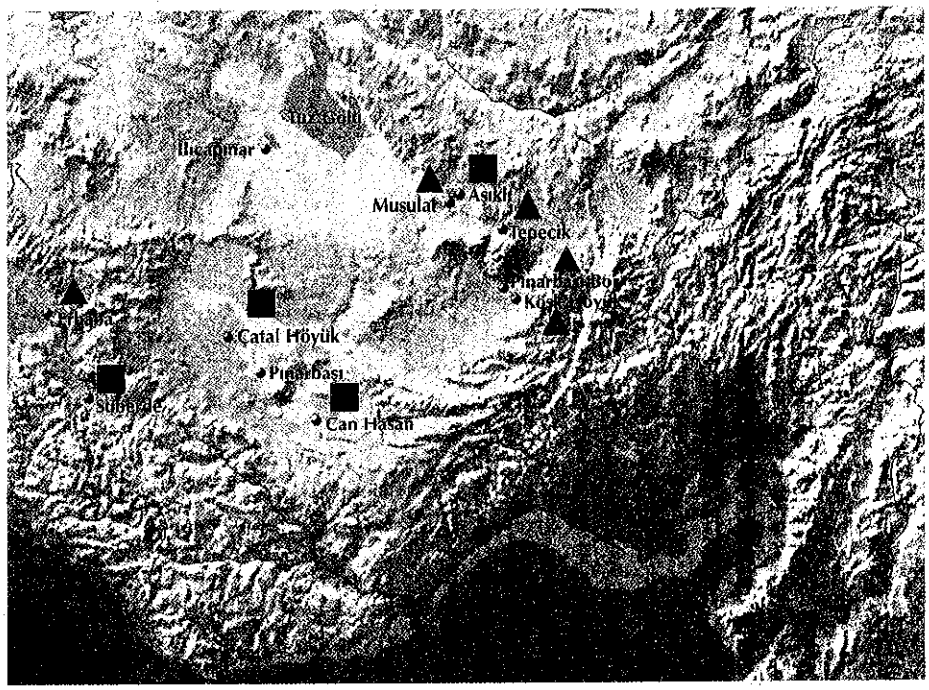
Central Anatolia geographically is defined according to the actual geographical regions of Turkey. Within these limits two different regions can be proposed due to the architectural characteristics of the present prehistoric settlements: Western Cappadocia on the one hand and the Konya region with the Beyşehir-Suğla region as its sub division on the other. The criteria in this paper will mainly be the building material and the landscape and the intra-site settlement pattern.

Western Cappadocia

The specific geological formation of the Cappadocian region today constitutes local regions that are defined due to their specific architectural characteristics in building material and in building system. The tufa formation with its easily worked character, with additions or modifications when needed, shaped the layout of the structures. Numerous volcanic formations underlay such a traditional architecture for the region.

Also in ancient times the main factor that determined the type of settlements was the volcanic formations. Today one can differentiate settlements that lie either directly on the bedrock of such a formation, on the slope of a volcanic valley, or directly on a volcanic cone (Duru 2000). Therefore so-called 'Cappadocian traditional architecture' can be summarised in general as an adaptation to the environment, the geological formation. The majority of the settlements are related to this volcanic bedrock and the building material of various volcanic rocks originates from such a formation.

When we look at the same region in prehistoric times, Aşıklı Höyük stands out as the earliest yet known site in West Cappadocia. It lies on the shore of the Melendiz River. This western part of Cappadocia has been formed by tufa cones, granite, andesite rock-hills due to volcanic activities (Esin 1998). The interesting situation, however, is that the main building material at Aşıklı is *kerpiç* (mud brick). Moreover, during the minimum 500 years of habitation at Aşıklı there seems to be a very strict understanding and tradition in the building material where continuities can be traced in intra-site settlement patterns. Such a behaviour – a conservative understanding – can be traced also in the lithic and bone industries as well as in burial customs.



Map of Central Anatolia. rectangles indicate archaeological sites with mud brick architecture; triangles represent sites with stone architecture.

At Aşıklı the buildings are constructed on top of each other (Esin 1996), while there is no significant change in the use of space. It seems that the people of Aşıklı did not give up their traditions and their 'houses' for hundreds of years. The intramural burial tradition may also be accepted as an indication of this conservative, fixed way of thinking, that is firmly related or connected to ancestors.

The *kerpiç* material, used without change for hundreds of years, starts only to be replaced with another material, limestone, at the latest phases of the settlement. The structures built with stone, or where stone started to be used as a new building material, are in special locations within the settlement. Although their functions are not clearly known, they are somehow different and are separated from the residential area (Esin and Harmankaya 1999:124-125). On the other hand, stone appears suddenly as a new element and stone masons as specialists in the latest phases of Aşıklı. The use of stone in specific locations within the settlement provides some hints: it is used in an area separated from the dwellings; where public buildings are located; where a retaining wall was built, or where a surrounding wall is located at the very east end of the site. Such specific locations of the use of stone urge us to think of a relation between stone and such structures. In this case the questions to be asked will be: the search for permanence or a need or obligation that led the people to use stone.

As far as we know, there were no fundamental or drastic changes in climatic conditions, although we do know of the existence of floods at Aşıklı, as is indicated by cultural deposits and layers with substantial structures sealed under an alluvial deposit (Esin 1999:13). Some evidence of disturbed walls (during the latest phases) also indicates such a flooding and/or erosion some time during the latest building phases of the Public Building (Building T) with its red plastered floor. If this is the case then it is possible that the Aşıklı people have preferred stone as a resistant building material, and continued renewing the *kerpiç* houses in their traditional way.

At this stage we have to look at the close environment, at the settlement pattern in the region where three more sites of the Aceramic Neolithic, namely Musular, Yellibelen and Gedikbaşı are located (Özbaşaran 2000:129). Such sites seem to emerge more or less at the same time, during the latest phase of Aşıklı, after 500 years of habitation, as satellites. Although it is only Musular which has started to be excavated, in order to understand the relation between these sites and Aşıklı and their functions, the other two also ideally need to be excavated. Musular lies on the bedrock, on a tufa formation (Özbaşaran 1999). Such a choice for such a different base seems to have happened after the partial destruction observed at the southwest part of Aşıklı Höyük. In other words, at present, what we have as evidence for such a change in the location is the flood observed at Aşıklı when people started to use stone next to *kerpiç*. The main building material at Musular is stone. Some of the structures exposed so far show similarities to the non-domestic buildings of Aşıklı. The red plastered floors are also seen at Musular with the same lime technology (Yalçın 2000). The stone building technique at Musular is more sophisticated. The bedrock provides a firm base for the structures; it is sometimes cut to obtain channels for drainage, sometimes it is cut as a wall and covered by upright slabs of stone as a pseudo-stone wall (Özbaşaran *et al.*, in press). A similar technique can be traced at Aşıklı in its eastern sector where such structures with unknown functions are located.

What is important in the Musular case is that the excavations have shown that it is not adequate to understand the complex structure of a Neolithic site by investigating the intrasite settlement pattern of a single site alone. In other words, understanding this pattern, Aşıklı and three more sites around, possibly with different functions, may help us to explain the dynamics that are not yet solved. However, the existence of such satellites shows that Aşıklı has to be interpreted together with its close environment as a whole. So, one can think for West Cappadocia, especially in the Aşıklı case, that the people had such a strong tradition – most probably emerging from a specific region or an origin – that this hindered them in adapting to their environment when they came to settle and that made them insist on their fixed concepts. It seems that these people – in order to exist in a new environment, having their own experiences and perceptions inherited from their ancestors – resisted or opposed the new landscape, the new material. It is possible that they combined these traits with local traditions and manipulated the new style that comes to the fore in later times at sites such as Tepecik, Köşk Höyük and Güvercinkayası (Bıçakçı 2001; Silistreli 1989; Gülçur 1997).

The Konya Plain

The other area is the Konya Plain, where Çatalhöyük (Mellaart 1967) stands as the key site. It lies on the alluvial fan of the Konya Plain near the Çarşamba River. The building material at Çatal is *kerpiç*, which is common for the whole region. For thousands of years neither the building material nor the size of the buildings changed. The layout of the buildings looks similar to Aşıklı, being close to each other; there are also not many passages or streets or open spaces left between the buildings. The entrance to these buildings also looks similar to Aşıklı. The tradition of building a house on top of the old one continues at Çatal (Hodder 1996:43-48).

Canhasan III is another important site of the same region (French 1972). It lies in the Karaman Plain on the alluvial fan of the Selereki river The building material is *kerpiç*. Besides *kerpiç*, the *pisé* technique is also reported. It is difficult to comment on the development of the building material as well as on the intrasite settlement pattern, but the pattern recognised in the exposed areas shows similarities with Aşıklı and Çatalhöyük, being closer to Çatal.

The Lakes Region

The Lakes Region of Beyşehir and Suğla has a somewhat different topography. Located west of the Konya Plain it is separated from the plain by a range of low mountains. Suberde (Bordaz 1969) lies near the Suğla Lake and it has been reported that it became an island from time to time with the rise in the level of the lake. The building material is *kerpiç*, but stone foundations are also used in some of the buildings.

Another site where stone was used is Erbaba (Bordaz and Bordaz 1982) lying close to Beyşehir. Here, some of the stone walls are even preserved up to one meter in height. To comment on the intrasite settlement pattern of these two sites is difficult due to the limited excavated areas.

Conclusion

Ian Hodder already stated: 'As families grow new houses are built using earlier walls. The concern is to stay close to the ancestors and the household gods with which they are associated' (Hodder 1996:48). I personally join in this statement for Çatal, and Aşıklı as well, thinking that the existence of a strong social or perhaps a religious link to the 'old' has firm effects on the reflection of these factors in the intrasite settlement pattern. The principle should be: to keep it the same, to preserve the old. The same concept (keeping the traditions or being conservative) may also explain the compact pattern, the dense, tight layout of the buildings. The enlargement of the sites in an organised way seems to be directly related with the same belief of belonging to the past; in this case in the horizontal plane.

It is obvious how late Aşıklı people started to use the natural building material of their environment. To oppose using stone as a building material can be attributed to the tradition of the region where they came from. To make such a generalisation, depending only on the building material, of course cannot be accepted; however what I would like to emphasise is that the use of a building material, like the pattern, may have other indications such as the beliefs/ideas of the people in addition to ecological conditions or chronological developments.

So the question of 'Where did they come from' rises, which is the main question of this paper. If we look at the building material the possible answers at present will be: somewhere from the region itself, that is the Konya Plain, or the Lakes Region (Burdur); or else from farther away, such as Southeast Anatolia or the East Mediterranean.

For the Konya Plain we can mention a long lasting *kerpiç* tradition, persisting up to the present. Such a long living tradition lasts for thousands of years without a significant change. The use of stone in the Suğla-Beyşehir area can in this case be accepted as evolutionary. West Cappadocia on the other hand does not have any site earlier than Aşıklı at present. Although Palaeolithic sites are known in this region (Harmankaya and Tanındı 1996), we do not know the details. Therefore, to comment on the origins of Aşıklı is difficult and will be speculative. The obsidian workshop of Kaletepe, having earlier dates than Aşıklı, does not comprise any architectural features (pers. comm. by N. Balkan-Atlı and D. Binder). Sites such as Tepecik, Köşk Höyük and Güvercinkayası with stone architecture are chronologically later than Aşıklı.

In Southeast Anatolia it is known that mud was used from the beginning of sedentary settlements, although stone is the determinant and the basic element for building activities. It is

clear that it is not possible to conclude with a single parameter, and we have to consider the site pattern together with the building material. In my opinion, the pattern is not just a planning of the landscape or a division of the landscape, but it is the reflection of the social structure of a community. The excavations in Southeast Anatolia have shown a completely different pattern when compared to Central Anatolia. The plans of the buildings, the intrasite settlement pattern, the use of space are all distinctive and dissimilar. After all, the pattern in Central Anatolia indicates a clear 'similarity' between sites.

What I want to underline in this paper is: does this similarity imply a common origin for these sites? Çatalhöyük and Aşıklı, being the two key sites to answer this question, give hints from the architectural point of view for a common origin which is unknown at present but can be searched for within the region by future research. Actually Douglas Baird's surveys have already provided hints for late Pleistocene/early Holocene sites (Baird, this volume).

If the origin is to be searched for outside the region, another possibility will be the Eastern Mediterranean with its *kerpiç* tradition. However, in order to test this relation, we have to look to other aspects of these cultures, for example their beliefs and symbolism, which seem different as evidenced from the finds of Jericho and Ain Ghazal (Aurenche and Kozłowski 1999:67-69).

Discussion

Mihriban Özbaşaran: I think the significance of the settlement patterns and how they reflect the social organisation of a community is a good way to understand the differences or the similarities between cultures or cultural regions. While Güneş was trying to find out hints for the origins of Central Anatolia, he mentioned the differences in settlement patterns between Central Anatolia and the Southeast. He said that the Central Anatolian intra-site settlement pattern is tightly packed, and it contradicts with the Southeast. In the Southeast the buildings are situated separately or independently. So if we associate this arrangement of buildings, i.e., the intra-site settlement pattern, with the social structure, I think the Southeast symbolises individualism, and Central Anatolia symbolises the community itself as a whole. Looking to the non-domestic buildings in both regions and interpreting the red-plastered floor buildings of Aşıklı as public buildings, as already said by Güneş, the pattern may imply an egalitarian social structure, as was also indicated by Roger Matthews yesterday. Now if individuals are important in Southeast Anatolia, could we then go on and conceive the non-domestic buildings there as belonging to a special group or a chief or a leader? Could we talk of a ranked society in the Southeast? And the contrary for Central Anatolia? Cauvin interprets the presence of sanctuaries as one of the hallmarks of an egalitarian social structure. But Bar-Yosef writes that they may imply ranked societies as well. Secondly, if we think of the Southeast with skull cults and the Levant with plastered or modelled skulls of elites maybe, I think the idea of a ranked society seems more acceptable in the Southeastern case. On the other hand, one remembers Çatal of course with skulls also cut and apart from their bodies. But as far as I know, Hodder does not say that they belong to a special group, rather that they are a representation of being close to the ancestors. Therefore, if there is a 'skull cult' in both regions, the concepts should be different I think. The perceptions can be different, which confirms the difference in settlement patterns. I'd like to hear comments about this.

Harald Hauptmann: And one shouldn't forget that if you look at the Levant and Upper Mesopotamia, apart from these really planned villages, you also have sites with very dense, complex settlements. The later phase of Göbekli is such an example.

Mihriban Özbaşaran: I think Göbekli is functionally very different, isn't it?

Harald Hauptmann: It's different, yes. And if you look at the Levant, in Baja[1] and other sites, these are also quite different. We'll find in future, we have the impression, the same type. And there will be different groups of settlements also in that region.

Nurcan Yalman: Speaking about Central Anatolia, what is the difference between chiefdoms, egalitarian societies and ranked societies? Because I see Central Anatolian sites as quite controlled societies, continuing for thousands of years with the same styles, the same beliefs maybe. So I would say that needs some sort of control. So I don't know if we talk about egalitarian society under these conditions – whether they are not just obsessive about continuing in the same way, the same style, in the same place for thousands of years. Considering the settlement patterns of, for instance, Aşıklı and Çatalhöyük – there is a very strange continuation on top of each other. These sites are not changing a lot. Yesterday Roger was saying that we don't know about chiefdoms in Çatalhöyük, but as far as I can see there must have been a controlling system.

Roger Matthews: Your question, Nurcan, is in fact one of the great research issues in Central Anatolia. What is structuring the continuity of these codes practised through centuries at Çatalhöyük? I don't think we really have an adequate answer to that question yet. What I would like to say also related to that – Mihriban's idea of an emphasis on individualism in the Southeast, and on community in Central Anatolia, is a very interesting idea. I think you could actually more or less turn it on its head and say the buildings at places like Göbekli are actually communal buildings built by and for a community, whereas the buildings at Çatalhöyük and Aşıklı are individual buildings.

Wendy Matthews: Concerning the differentiation within buildings at Çatalhöyük, Ian Hodder and Tim Ritchey in volume 1 of the Çatalhöyük project compiled a graph of the buildings at Çatalhöyük based on Mellaart's material, showing an increasing complexity but no big divide between more complex and less complex buildings, so that the attributes selected for that could be questioned. But one of the differentiations which is quite significant within the buildings is the presence of burials within them and what this means. Like Building 1 had 70 people buried underneath the floor, thereabouts. Yet there are other buildings which have none. And I think this is perhaps quite an important social focus on differentiation between buildings. And I also want to point out a shared technology between the Levant, Southeast Anatolia and Central Anatolia, which is the fired lime-plaster floors. These are present at Aşıklı Höyük but also at the earliest levels of Çatalhöyük; from the deep sounding there are fragments of them. Mellaart also records finding them at Levels XII and XI. Later on at Çatalhöyük, they are just mixing the soft lime with water.

1 [EDITORIAL NOTE]: Baja, a Late PPNB site in Jordan.

Frédéric Gérard: What I found really fascinating in Güneş' talk was the question of the new hypothesis on Central Anatolian origins. It is true that there was a direct physical link between the earliest settlements in Central Anatolia, at least in the Cappadocian area (Aşıklı), and the Levant due to the obsidian 'trade' through the Cilician Gates. Alternatively, it is very interesting to consider the hypothesis that the Aşıklı people did *not* come directly from the Levant, but that they are a direct product of the evolution of the Central Anatolian societies, and that they still reveal in certain architectural practices their older roots. The original link would then much more be found in the Konya area, or even in the Beyşehir-Suğla Lakes area. This hypothesis is changing the way we use the parameters of the Central Anatolian origins. I want to ask Güneş to develop a little bit this hypothesis. Do you have an idea, even if there is a probable acculturation of the newcomers with an important Epipalaeolithic substratum, from where these new people came from at first? What could serve as an alternative to the traditional paradigm of people coming directly from the Levant thought the Cilician Gates?

Güneş Duru: It is very difficult to say something. We have very limited information about it. But why not indeed the eastern Mediterranean during the Epipalaeolithic, and then by way of the sea? Perhaps Cyprus will supply data on this issue.

Laurens Thissen: What I always find irritating, if I may say so, in trying to find solutions for origins is to look away from the place where you are. To look for other regions. Not to consider the paradise itself which exists on the spot. And not to consider the origins of settlements in the locations themselves, in the regions themselves. I don't really see why people would pick up their things and travel for a long way and then build a whole village there. I don't see any logic in that.

Nur Balkan-Atlı: I agree with you, but in the case of Aşıklı, I feel the same as Güneş. Where you have an abundance of stones, why build in *kerpiç*? If the people are not coming from elsewhere, if they are local, in that case we should look for the reasons of using *kerpiç* where they have an abundance of stones everywhere in the region.

Peter Kuniholm: One question you might ask is that why do people build in *kerpiç* and the answer is, because it is there. And I wonder if anybody has ever taken the trouble to get an engineer and start, vector out from Çatal or Aşıklı, go north, south, east, and west and look at the quality of *kerpiç* blocks. And see whether the clays are better or worse in other areas. If you were to migrate for example from Aşıklı Höyük to the area of Hopa on the Black Sea and try to make a *kerpiç* house, it would fall down. It's just no good. As Catherine was talking yesterday, as she was showing the marls and clays and all the rest of it, this is great stuff for making *kerpiç*. But there are other places where you try to use that same technique and it would get you absolutely nowhere. So, again it is there. And it's a good thing to build with. And it is cheap.

Harald Hauptmann: Sumerians also liked to build in stone, if they would have it.

Catherine Kuzucuoğlu: A comment on *kerpiç*. Evidently, when you are in a stony and volcanic area like Cappadocia you will use stone for your buildings. And when you are in an area like the Konya Plain, you will use *kerpiç* for your buildings. What is striking about *kerpiç* is that you have to build your house every fifty years, because, even in a place like the centre of the Konya Plain where it rains today something less than about 280mm per year, you have to

change it and rebuild it every fifty years. When you look at Aşıklı, you have these people having most probably more rain than today in the Konya Plain, and insisting on building in *kerpiç*. I say insisting, because it was so difficult in a way to maintain the *kerpiç* system. And that all through some 800 years. It is much easier in the Konya Plain, and even in the Konya Plain people still have to spend a lot of work on it, rebuilding every two generations today their *kerpiç* houses. The *kerpiç*, and on the other hand the stone, has something to do with the perception of the duration of time.

Güneş Duru: We have very important data for Aşıklı. I mean, they do not use stone for their houses, they use stone for surrounding walls, and for the public building but not for houses. This is an important key, I think.

Eleni Asouti: I just want to point to another characteristic of mud brick as a raw material for building houses. For example, we know from Çatalhöyük that probably no single house stayed unmodified throughout its lifetime. Modifications, internal modifications and rearrangements were a constant characteristic of architecture and individual building development there. I am not so familiar with the Aşıklı material, but maybe this emphasis on using mud brick has also such a functional aspect there. Have you considered that? Because mud brick is obviously much more amenable to modifications than I suppose stone.

Marcel Otte: I would like to stress the importance of architectural traditions. Look, for instance, now in places where there are two different communities, like in the Crimea or in Central Asia. You see there that the Russians have their own architecture made of wood, but that the Cossack or the Crimean people build in stone. It is just a question of tradition and values deep inside their minds. It's not a question of raw materials. Because the way of building is the way also of conceiving the self as a society and towards the others.

Bleda Düring: I am interested in this distinction you make between stone buildings and mud-brick buildings. One important thing is that we have to remember that mostly we are looking at the foundations of buildings only. I am not sure for Aşıklı, but I know from Köşk Höyük and Hacılar and Kuruçay a bit further to the west, where you have stone foundations with mud-brick superstructures. And in that sense, I don't think there is any difference between how long the buildings lasted. Because they were not entirely built of stone. What we do see is that sites with mud brick only –, that the buildings are always founded on top of their predecessors. So from a purely functionalist perspective, they don't really need any stone foundation. They have this continuity. And I am wondering whether we can we make a distinction between sites where buildings are built in a different place than the predecessors, where they use stone foundations; and sites on the other hand where they always build houses on top of each other, where they use mud brick.

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