The purpose of this paper is to set the archaeological evidence for Byzantine Beirut within the wider theoretical debate about the decline of urban life in the sixth and seventh century eastern Byzantine Empire. Achieving a better understanding of the Byzantine city constitutes an important first step in developing the picture of the emergence of the medieval city of Beirut, the frontier town on the Muslim Eastern Mediterranean. In this context, the discussion will concentrate on the transformation of the urban landscape in the mid-sixth century, in the periods preceding and following the infamous earthquake of 551 AD.

A century previously, in AD 448-450, Beirut had acquired the title metropolis, joining neighbouring Tyre in the illustrious ranks of the premier cities of the ancient world. Arguably, at this point in time, both Beirut and the Byzantine Empire were reaching a height in prosperity. This was, however, a world on the brink of upheaval. The onset of the mid-sixth century brought about calamities such as the Persian invasions and the subsequent payment of tribute, Justinian’s expenditures on war and public building programs and the outbreak of the plague in 542 AD. Parts of the empire were also hit by a series of earthquakes, of which the most destructive, in 551 AD, hit the coast of Phoenicia.

Within a century, the city lost its famous school of law and by the eighth century Beirut, far from its former glory, was arguably little more than a small agricultural town in a frontier zone between two warring empires. It is not enough to seek explanation for this transformation in earthquake and conquest alone. Cities can be restored, and economies rebuilt. Beirut, like other cities within the region changed because the world was changing: the study of these urban transformations has a critical part to play in our understanding of the differences between the ancient world and the modern one. The evidence recovered from the recent excavations in Beirut has the potential to make a significant contribution to research in this field, although much of the most important material has yet to be studied. This is particularly the case for the finds assemblages and the testimony that they offer to our understanding of altering patterns of trade, production and consumption. For the moment, a summary review of the principal topographic changes must suffice. Here we wish to describe a chronology of urban change, focusing on the evidence of the earthquake and its aftermath, and place this evidence within the context of current academic debate.
The End of Antiquity: transformation or decline?

Several recent studies have tackled the issue of the ‘end of the ancient city’, and the Eastern Mediterranean has inevitably been the focus for much of this research. Hugh Kennedy has been taken up as the main proponent of an early ‘medievalization’ of the classical cities of the eastern Roman Empire and his work has established something approaching a new orthodoxy. He has set out his views on the transformation of the classical city into the medieval madina in a series of seminal articles. His views have often been challenged, if sometimes these criticisms are based on a partial reading of his work. In ‘From Polis to Madina,’ Kennedy saw that the eastern Roman empire witnessed a continuity in urban life accompanied by a discontinuity in urban form. This transformation of the classical ideal of the urban form started in the last Byzantine century. In a second 1985 paper, ‘Last Century of Byzantine Syria’, Kennedy argued that the ‘decline’ observed in the cities and countryside of Syria did not date to the decades of the Islamic conquest but rather needed to be pushed back to the mid-sixth century, namely after 540 AD. This argument was based on a host of ‘archaeological’ sources but also relied extensively on the historical and epigraphic evidence. This transformation involved the abandonment of theatres, reduction in size of bath houses, and changes in street layout. These alterations to urban form followed in the wake of a series of calamities such as the plague, earthquakes and the Persian invasions, but also illustrated changing cultural values such as the change in the pattern of patronage. Nevertheless, he acknowledged that this decline cannot be observed in all of the regions of the empire and thus, in a later article, Kennedy provided a more nuanced view of the fate of the classical near-eastern cities. He argued that, after the Islamic conquests, the cities of the Near East witnessed one of three fates; some thrived such as Damascus and Aleppo, others had already declined and a third group, mainly inland cities continued their existence unaffected. In Kennedy’s opinion the coastal cities were the main group of cities that had suffered from a period of decline prior to the Islamic conquest.

As mentioned earlier, a number of scholars challenged the idea of a progressive decline of urban living and prosperity in the sixth and seventh century. Archaeologists and historians such as Ward-Perkins and Liebeschuetz are the main representatives of a school of thought that places greater emphasis on the ruptures that attended the collapse of Roman-Byzantine power at the hands of Barbarian invaders, and sees the failure of the Roman city in the failure of Roman civic institutions. On the other hand, a tendency to rehabilitate the late Byzantine period and see it in a period of sustained prosperity has also emerged. The archaeologist Magness is one of the latest to challenge Kennedy’s identification of a period of economic decline in late sixth century and early seventh century Syria and Palestine. Based on archaeological evidence, she argues that the post mid-sixth century decline argument is not tenable, with the exception that most significant change takes place after the Roman-Byzantine period. One of the more relevant examples deployed by Magness is that of Caesarea, one of the coastal cities singled out by Kennedy as an example of declining cities. In this case, Magness states that the published archaeological evidence demonstrates that, contrary to Kennedy’s claim, Caesarea continued to flourish as a commercial and industrial center during the second half of the sixth and first half of the seventh centuries. The large quantities of coins and pottery, especially amphorae and imported fine wares, indicate that a large volume of trade passed through Caesarea at this time. The richly decorated villas outside the walls reflect the opulent lifestyle of those benefited from the city’s prosperity.

In sum, whilst there is little dispute that change took place, there are divergent views on the chronology and scale of change. This in turn allows scholars to seek different causal explanations. Some of these different readings of the evidence can be attributed to the fact that trajectories of change were not uniform, as is recognized in most of the studies referred to here. Others relate to different conceptions of the relative importance of the different classes of evidence being studied: patterns of trade may continue unaltered as urban landscapes are transformed, and vice versa. The case-study of Beirut can not, therefore, provide conclusive evidence in favour of any particular argument. There is a clear need, however, to develop coherent studies of how individual cities changed and use these to test and develop new models.

The Archaeology of Byzantine Beirut

The city devastated by the earthquake of 551 AD was not the neatly ordered grid-plan city depicted in Lauffray’s much reproduced map of Roman Beirut. The landscape of the classical city was the product of many centuries of incremental change and growth, and responded more to the constraints of the topography of the area than to any imagined Hippodamian ideal.

The wealth of late antique Beirut hinted at in the literary sources finds ample confirmation in the archaeological evidence. Residential quarters populated in the fifth and early sixth century have been revealed in excavations throughout central Beirut. The locations of Roman cemeteries suggest that at its greatest extent metropolitan Beirut covered an area of at least 1.5 km by 0.8 km. The core of the Roman city was provided by a series of public buildings built in the area of the supposed Roman Forum. The most imposing of these buildings known from archaeological study was the so-called civic basilica. According to the observations made by Lauffray, this building, erected in the first century AD, survived in use into the sixth century AD when it was furnished with sumptuous new mosaic pavements. Lauffray considered this building Beirut’s principal civic basilica. If this were the case it is likely to have lost most, if not all, of its juridical functions to the parallel institutions of the Christian church prior to its sixth century restoration. Thorpe has alternatively suggested that the struc-
ture formed part of the ‘imperial’ baths uncovered west of the ‘Umari mosque. In this case, the large structure would have been a large entrance hall associated with a gymnasium 14. This suggestion might account for the architectural longevity of the structure, and for some of the particular design features encountered, but remains highly speculative.

Other features of the Byzantine city revealed in recent excavations include the remains of at least two other public baths, a series of porticoed streets, and the hippodrome 10. The public architecture of the sixth century city would also have owed much to the church. Some aspects of Christianization of Roman Berytus are addressed in Linda Jones Hall’s *Beirut in Late Antiquity*, but we still lack a reconstruction of the urban fabric of the city based on archaeological evidence. The sources mention five main churches: the Anastasia church and the Theotokos being the main ones, along with the church of St Judas and two martyría 15. The Anastasia was built by Eustathius, bishop of Berytus, in the first half of the fifth century. Jones Hall indicates the possibility that Eustathius named his new cathedral after an older church 16. According to the sources the church of the Theotokos was located in the same area as the Anastasia and used by the students of the Law School.

Various attempts have been made to identify remains of these and contemporary ecclesiastical buildings within the Byzantine city, although all published speculations on this matter are advanced on the basis of rather slender evidence. The discovery of a ‘chancel’ screen and a large slab with an engraved cross at the site of the post office south of rue Faïhre al-Din has been seen by some as the site of a church. However, as indicated by Lauffray himself, stone screens were used in civic and domestic structures as well as in religious contexts. Additionally, the layout of the remains uncovered in the area, although dating to the Byzantine period, do not conform to known plans of Syrian Byzantine churches. Curvers has recently suggested that excavations on a site east of the Greek Catholic church of St Elie revealed the remains of the Episcopal complex, but the monumental foundations found here are open to alternative interpretation 17. Finally, it has been hypothesized that the Crusader cathedral, currently the ‘Umari mosque, was built on the remains of an earlier Byzantine church. Again, the remains observed were too fragmentary for this to be established 18. The lack of information on the location of the main Beirut cathedral means that we do not know if the Christianization of the city resulted in any shift of focus in the configuration of public space, as has been observed in other major cities of this period such as Antioch 19. Arguments about urban continuities and discontinuities in Beirut are impoverished by this lack of information on the Christian topography of the city at the time of the earthquake.

Another celebrated feature of the late antique city, Beirut’s Law School, has been both a curse and a blessing for the archaeologist. In the reign of Justinian, the school was given, like Rome and Constantinople, a monopoly over juridical teaching 16. While it has generated a healthy interest in the city’s Byzantine past among both the historian and the archaeologist, it has generated a counterproductive hunt for the premises of the Law school.

A further aspect of the religious and sacred landscape of Beirut is that of the cemeteries and burial grounds. The literary evidence is meager. Jones Hall mentions that “tombs” were said to be located within the grounds of the second martyrion 17. The question remains whether this building would have been inside the late Byzantine settlement or on its outskirts. The information compiled by Barbara Stuart, from archival sources and from excavations, provides information on the Roman period burials. There is no clear indication of Byzantine period burials 20.

One of the most surprising features of the current programme of archaeological study is that it has yet to provide any evidence for Beirut’s Byzantine town walls. The known literary sources are similarly silent on the subject. We are equally ignorant about the architecture of the Roman and Byzantine port although it seems likely that some elements of the Medieval port were built from the remains of late Antiquity.

This brief review can not do justice to the wealth of evidence now available for the study of Beirut in the fifth and early sixth centuries. Although most of our evidence concerns the streets and houses of this thriving metropolis, we also have some understanding of the public landscape of the city. There is no similar body of evidence available for the study of the late sixth century settlement, and this is largely a consequence of the material effects of the earthquake of AD 551. Recent archaeological excavations suggest that the ancient sources did not exaggerate in their description of the calamitous consequences of this natural disaster.

The earthquake of AD 551

“… the lovely city of Berytus, the jewel of Phoenicia, was completely ruined and its world-famous architectural treasures were reduced to a heap of rubble practically nothing but the bare pavements of the buildings being left. Many of the local inhabitants were crushed to death under the weight of the wreckage … The restored city was very different from what it had been in the past, though it was not changed beyond recognition, since it still preserved a few traces of its former self” 21.

Suitably impressed by Agathias’ dramatic account, and in the face of abundant Byzantine ruin, it is no surprise that many archaeologists claim to have uncovered evidence of the earthquake in Beirut 22. Lauffray was the first to interpret his findings along these lines. He noted that the collapse of the southern façade of the civic basilica may have been a consequence of the earthquake 23.

The recent excavations have provided us with closely dated stratigraphic sequences on a variety of sites that confirm beyond doubt that earth-
quake damage was widespread. The excavation team led by Saghieh-Beydoun recorded evidence of earthquake damage to structures and soil horizons in the area of Martyrs Square. In addition to this geological evidence, destruction layers uncovered by the same team in the zone of Beirut’s harbour, by Hans Curvers, revealed charred mosaics and timbers, suggestive of fire destruction, alongside animal remains and human bones among the debris of a collapsed wall. These destruction levels contained pottery dated by Hayes to the early sixth century.

A layer of ash and charcoal was also found to mark the end of Byzantine occupation on at least one of the sites excavated on the ancient acropolis of Beirut, the site of the Bronze Age tell. This may be further evidence of fire destruction dating to the period after the earthquake.

In the area of the Souks evidence of possible earthquake damage included cracked thresholds in the House of the Fountains. The destruction horizons of this building also included a coin hoard, which had probably been stored in a small box, and a hanging bronze polycandelon (a sort of chandelier) that had fallen onto a mosaic floor. These horizons included burnt material and collapsed structures and are closely dated to the mid-sixth century by a large assemblage of pottery and coins. It is clear that this building was destroyed in the earthquake, and similar evidence was recovered from several other buildings excavated in this area. A street-side portico that gave access to rows of shops and workshops, was found in the southern part of the excavations. The mosaics floors laid within this portico dated to the sixth century and had been sealed by deposits of charcoal, fire-scorched ceramics and pots disturbed by heat, alongside residues of building clearance or the trample from robbing. There is, therefore, a growing body of evidence for the destruction of buildings in the middle of the sixth century in a process that involved the collapse of walls and ceilings, and following which fires may have broken out in most neighbourhoods. This evidence is in close accord with the description offered in the near contemporary account of Malalas who describes how fires burned and flared amongst the ruins for almost two months after the disaster.

Malalas also described a devastating tsunami that accompanied the earthquake. Excavations within Beirut’s harbour, by Hans Curvers, revealed deposits that may relate to the after-effects of the tidal wave. Today, as in the past, the coastline is rocky and beaches only survive in a few unusually sheltered locations. In the excavations, thick deposits of waterlain ‘mud and silt’ had accumulated over the sea-scoured bedrock beneath the Ottoman harbour. These deposits contained branches from trees and considerable quantities of un-abraded Roman pottery which, according to Paul Reynolds, included sixth century amphorae. A beach deposit of sand overlay these silts and was in turn buried by construction dumps associated with the construction of the Ottoman harbour. It seems likely that material washed into the harbour in the wake of the tsunami had not subsequently been scoured clean by the action of waves, suggesting major changes to the configuration of the port. It is not clear if this was the product of damage, or post earthquake re-organization.

Reconstruction after the earthquake

Upon hearing news of the destruction of Beirut, Justinian is reported to have dispatched a functionary, Mathanios the statekate, to organize the process of reconstruction. An inscription found in Beirut and mentioning Mathanios offers supporting evidence. What these sources do not tell us, however, whether the reconstruction effort was successful. Jones Hall draws our attention to references to reconstruction and rebuilding, giving particular emphasis to the account of a pilgrim, Antoninus of Italy, who describes the city as splendissima. The archaeological evidence does not, however, seem particularly splendid and Jones Hall paints a rather over rosy picture of the late sixth century city.

The excavations suggest that many parts of the city were left in partial ruin, with patchy evidence for rebuilding. A preliminary review of the findings does not reveal a clear pattern, in that no districts appear to have been either wholly abandoned or wholly restored. Throughout most of the city, however, the streets appear to have been cleared of debris and made usable. The sites where there is least evidence for rebuilding over the ruins are usually those of houses and shops in the backstreets and more peripheral parts of the city. Dumps of pottery of the post-earthquake period are not uncommon, and illustrate both the presence of occupation in nearby houses, and of disused open spaces where piles of broken pottery could be left standing.

One of the most closely studied areas lies east of the main North-South colonnaded street of the Byzantine city (described as the ‘cardo’ in some archaeological reports), and this seems to show a mixed pattern of abandonment and continued occupation. Structures may have been built within the covered portico of the colonnade as early as the fifth century, as is suggested by a series of plaster floors found here. But the street itself remained in use, and an Umayyad coin hoard was found associated with late or post-earthquake structures nearby. Indeed, it is possible that the eleventh century account of an arch spanning a street at the entrance to Beirut, made by the Persian traveler Nasir-i Khusrau, refers to a tetrapylon placed at the junction of this portico with another major colonnaded street. Houses to the east of the colonnade fared less well.
room in one of the buildings in this area contained a large range of objects: bronzes, mortars and pestles, and amphorae. Hayes has dated this assemblage to the early seventh century, and his account supports the identification of this deposit as a rubbish dump in an area that had not recovered from the earthquake.  

The excavations located somewhat further to the east, in Place des Martyrs, exposed deposits associated with the earthquake followed by a period of abandonment associated with cyclic accumulation of sediments. A similar pattern of abandonment is seen in the nearby French excavations. In this case however, the archaeologists do not directly tie the desertion with the earthquake but simply point out that the area was abandoned before the Umayyad period. Post-earthquake pottery dumps have been found on some adjacent sites and show that the abandonment could not have been total. Bouzek has consequently argued that the sector was occupied in the Umayyad period, on the basis of finds of imported Egyptian pottery, and witnessed gradual degradation rather than sudden abandonment. The only clear evidence of structural activity is, however, largely restricted to the repair of streets. In the excavations in Place des Martyrs by Arnaud no clear evidence for the earthquake was found but a road, probably first laid out in the Hellenistic period, was maintained well into the post-Classical period. The street was re-paved on a number of occasions and three bases for the construction of a portico encroached on the street paving. Arnaud suggests that these were post-Umayyad date, whilst the last phase of repair of the paved road surface was thought to date to the Fatimid period.  

A similar picture emerges from studies in the Souks, on the western side of the city. A portico, fronting onto a colonnaded street leading to the likely site of the hippodrome, had been burnt and damaged at the time of the earthquake. The handsome mosaic pavements were not replaced or repaired, but trample horizons associated with building clearance and robbing was present in one of the small shops found behind the Byzantine portico. This occupation was not long-lived. Several of the large sunken storage vessels (dolia) used in the late antique shops and workshops on the Souks site contained the skeletal remains of small mammals. The faunal remains are still in the process of being studied by James Rackham, but preliminary findings suggest that the remains are those of animals normally associated with gardens and open areas. Species more commonly found in urban contexts were scarce. It appears that these animals had been trapped in these storage vessels sometime after the abandonment of the houses within which they were located, although we do not yet know exactly when this happened. This once intensely urban landscape must have included areas of cultivation or wilderness for these animals to have established themselves, whilst the storage vessels must have remained sufficiently open and accessible to have served as pitfall traps.  

Most areas studied in the Souks excavations appear to have been left in ruin, but at least one of the smaller alleyways was cleared of rubble. Drains here contained pottery post-dating the Arab conquest and it is possible that some structures here may have been restored. One of the Byzantine buildings alongside this alleyway survived sufficiently intact for a group of Abbasid amphorae to be placed in the corner of the room (fig. 4). This area was later developed for housing, with remains of structures of Abbasid, Fatimid and later dates recorded during excavations in the south-east corner of the Souks. These structures were poorly preserved, but in some instances encroached onto and disrupted the course of alleyways first laid out in the late Iron Age and that had been restored to use after the earthquake.  

So far this discussion has concentrated on the evidence of Beirut’s houses and streets. Less is known of the post-earthquake history of the principal public buildings. The dereliction of the portico found in the Souks might suggest that the hippodrome with which it was associated may also have been disused, but this can not be established. The fate of one building can, however, be described in detail. The ‘imperial’ baths to the south of the Souks were repaired, and contain construction horizons of Umayyad date. By the eleventh century the southern range of heated rooms had gone out of use, but the northern rooms continued to be used. There is even evidence that the baths continued to function in a reduced form into the Mamluk period. From this rather slender evidence it seems likely that the aqueduct feeding these baths had also been restored, and this is perhaps the area where most of the public investment in the reconstruction effort was directed.  

Beirut in decline  

The above discussion has concentrated on structural evidence from the city itself. As has already been mentioned this is only a partial picture of what can be learnt from the results of the recent excavations, and the detailed publication of the artefactual and ecofactual assemblages will add significant new information. For instance the pottery recovered from the excavations in the Souks shows significant changes in the range and character of goods being imported into the city after the earthquake, although there was no fundamental disruption of supply. Recent stud-
ies have also concentrated rather exclusively on what was happening within the city itself, and the situation may have been somewhat different in the surrounding countryside. Indeed, the earthquake may have encouraged a population shift and seen more investment in rural property than in urban holdings. In some respects, the evidence from Beit Meri, Khan Khaldeh, and Khalde Choueifat, Jnah can be considered as a reflection of continuing prosperity of the countryside. Hall Jones also reminds us that the surrounding countryside was the locus of early christianization and the implantation of monasteries, two of which are at least mentioned in the literary sources. The evidence from these sites show a continuity in building activity, including church building and oil extraction, as represented by olive presses, well into the seventh century.

Although these supplementary sources will allow for a more nuanced description of the changes of the sixth century, they are unlikely to significantly alter the main conclusion drawn here: namely that the Beirut restored after the earthquake was a pale shadow of the former city. The significant fact is not that Beirut was destroyed, but that its rebuilding did not restore it to anything like its former magnificence. In good times cities have powerful properties of recovery, as migrant workers made good population losses and new economic and social ties were built. In the mid-sixth century, however, the economic and political circumstances did not encourage urban revival. Beirut may also have suffered from Justinian's preference to draw power and influence back to the imperial capital at Constantinople, diminishing any real chance of a revival of the famous school of law – such an important contributor to the social and economic life of the city prior to the earthquake.

Beirut after the earthquake was, however, a functioning city. It had an urban population that made use of the restored streets and baths, and was capable of importing pottery and producing rubbish. This city drew visitors prepared to call the city splendid, even if such descriptions may have been inspired by former glories than present attractions. The model presented here is one of 'continuity' but degradation of urban infrastructure, and the evidence presently available suggests that the Umayyad period contributed little to the overall urban design of a city that had never fully recovered from the earthquake. The archaeological studies summarised here suggest that the fabric of the late antique city, in so far as it escaped the devastation of the earthquake and the reforms of the church, remained little changed until much later. On both the Souls site and in the area of Place des Martyrs there is evidence of topographic continuity down to the Abbasid or Fatimid period, when urban growth may have been accompanied by some encroachment onto previously public space. It must be recognized, however, that both of these areas may have been considered somewhat peripheral to an urban core built around the public architecture of the Roman and Christian city.

This description finds little place for the Arab conquest, but this is because it depends so heavily on the particular evidence of the urban topography. The work being undertaken on the pottery and other finds illustrate some major changes in the organization of both production and trade within the region. New approaches to rural production are suggested by the fact that the Beirut amphora – a local product probably associated with local viticulture that had been established from the period of Roman annexation - ended abruptly with the Arab conquest. From this period all amphorae were imported, from Egypt and elsewhere. If, therefore, the purpose of this study is to identify continuities and discontinuities, then we must accept that these will be differently described according to the sources being consulted.

The archaeology of early Islamic Beirut

This model of topographic change in Beirut presented here is, however, only tentatively advanced. In particular much more work needs to be done on the Islamic sequences occasionally encountered in the excavations in central Beirut. The recovery and study of Islamic period remains, although of a very limited nature, can be traced back to the study of the medieval fortifications by du Mesnil du Buisson, who offered a complete architectural study of the surviving walls and gates of the city of Beirut at the turn of the twentieth century, ahead of the major urban improvements of the Mandate authorities. The only other record of medieval remains is that of the Beirut municipality excavations. In this instance, the archaeologists to their credit, recorded according to the standards of the time, both the medieval and pre-medieval remains.

Consequently, the Beirut Central District excavations represented a unique opportunity to reveal and rescue the forgotten medieval and Islamic past of the city of Beirut. Much of the remains already recovered is now stored in the warehouses and archives of various Lebanese and Overseas institutions. A few studies devoted to aspects of the medieval archaeology of Beirut have appeared in the pages of Lebanese publications. These attest to the survival, recovery and study of aspects of the Islamic period in Beirut by some of the archaeologists involved in the current investigations.

The available information on any aspect of Islamic Beirut, whether early, crusader or pre-modern is fragmentary at best. A study of any comprehensive aspect of Islamic Beirut will require a re-examination of museum and university archives and the collation of information scattered in numerous preliminary excavation records. Future understandings of the transition from late antiquity into the post-classical world require the post-classical perspective that such study can provide.
1. H. Kennedy, 1985, "The Last Century of Byzantine Syria: A reinterpretation", Byzantinische Forschungen, 10, p. 141-83. This article, in addition to his "[From Polis to Madina: Urban Change in late antique and early Islamic Syria] and more recently, L. Lavan and
3. Ibid, 213.
10. Ibid, 172-173.
23. A similar occurrence of smashed polycandelon has been reported in the excavations of the Place des Martyrs (in Bey 002), where it is also likely to have fallen to the ground in the earthquake or its immediate aftermath. See C. Aubert, 1996, "Bey 002. Rapport Préliminaire", BAAL, 1, p. 60-97.
25. We are grateful to Hans Curvers for allowing us access to his excavations and for being able to publish these observations prior to full publication.
27. This east-west aligned colonnaded street was found in excavations conducted by Hans Curvers in advance of the construction of the Muhammed el-Amin Mosque, and the junction of the two colonnades is marked by the Roman columns reconstructed to the west of the Maronite church of St Georges.
30. BEY 002: C. Aubert, 1996, p. 73-77.
32. We are very grateful to James Rackham for allowing us to publish this brief note on the basis of his ongoing study of the material, and prior to definitive publication.
33. BEY 006, Area 3.
34. Paul Reynolds has described how the relative quantities of some types of imported amphorae (LRA 5) encountered in deposits of the late 6th to early 7th centuries drop markedly with respect to those of the late 9th-10th centuries. Similarly he observes how the earthquake may have put an end to local cooking ware production and encouraged importation from alternative sources. Kevin Butcher's study of the coinage of this period concludes that the supply of coinage seems to have been modest for many decades prior to the earthquake, and that it is therefore difficult to discern anything new in what looks like an established pattern. Only in the last years of Justinian are there faint indications of a revival of supply.
35. These observations derive from Paul Reynolds' work on the Beirut pottery.