

# Rural Byzantine Landscapes of the Eastern Mediterranean: New Approaches to Characterisation and Analysis

Byzantine studies of the past few centuries have been relatively outmoded and overly conventional in their methods and interpretations in comparison to other disciplines<sup>1</sup>. Over the past couple of decades, however, Byzantine studies have expanded and begun to explore more stimulating ideas. This has included such divergent themes as emotions in Byzantium<sup>2</sup>, attitudes to new and unborn babies<sup>3</sup>, Byzantine book culture and literacy<sup>4</sup> and Byzantine views of God and the universe<sup>5</sup> alongside more traditional studies. Although Byzantine studies have begun to explore a wide range of new and exciting ideas over the past few decades, Byzantine archaeology has fared less favourably. Effie Athanassopoulus believes that the existence of written records for the Byzantine era has »relegated this segment of the past to history«<sup>6</sup> as opposed to archaeology. As a result, Byzantine archaeology has gained little scholarly interest in comparison to Mediterranean archaeologies of preceding periods<sup>7</sup> and it has yet to engage with many approaches and methods that have yielded rewards for other historical periods. The Byzantine Man and his Environment conference in Mainz recognised these inequalities and aimed to tackle this deficiency by bringing together scholars of different disciplines and proving them with the opportunity to present their methodologies, results and potential of their studies. This specifically aimed to consider aspects of »perception« and »appraisal« of the environment which is often ignored when studying the Byzantine environment. The growing international recognition of Landscape studies highlights the neglect of landscape in particular in contemporary Byzantine archaeology. International initiatives such as the European Landscape Convention, the new International Landscape Archaeology Conference, held first in 2010, and the importance of landscapes in the UNESCO World Heritage List emphasise how integral landscape analysis has become to 21<sup>st</sup> century archaeological investigation. With recent developments in archaeological and remote sensing techniques our knowledge of the rural context of the Early Byzantine Period can be enhanced. It is essential that Byzantine studies

begin to consider new approaches to the organisation of landscape and how it is experienced, in order to move beyond a »dehumanised history« and develop an up-to-date Byzantine Archaeology of the 21<sup>st</sup> century. This paper addresses these issues by exploring new methodological approaches to landscape investigation, combining landscape interpretation methods with traditional archaeological survey results in a new and innovative way. The principle aims of this paper are:

1. To present new methodologies for analysing rural Byzantine historic landscapes.
2. To apply a unique combination of archaeological theory and innovative methodological approaches to existing and newly created data.
3. To uncover new understanding of the organisation of the Byzantine and preceding landscapes in order to analyse these landscapes as an expression and effector of social identity.

This paper also approaches the questions of whether it is possible to uncover the Byzantine landscape in sufficient detail and if the methodologies employed are effective on eastern Mediterranean regions.

The heart of this analysis is a detailed historic analysis of the spatial composition of the landscape of a case-study area (**fig. 1**). To achieve this, Retrogressive Landscape Analysis and Historic Landscape Characterisation (HLC) has been implemented. These modern techniques map the historic processes that shape the landscape. These methods are combined with the results of ceramic survey to provide further chronological definition to the historic landscape study. This is a unique and innovative methodology that has not been previously attempted in historic landscape analysis. This methodology draws on research generated by the international Pisidia Survey Project and original fieldwork by the author to explore the relationships between different HLC zones and the ceramics found within the landscape.

1 Kourelis, Monuments XXVIII.

2 Hinterberger, Emotions.

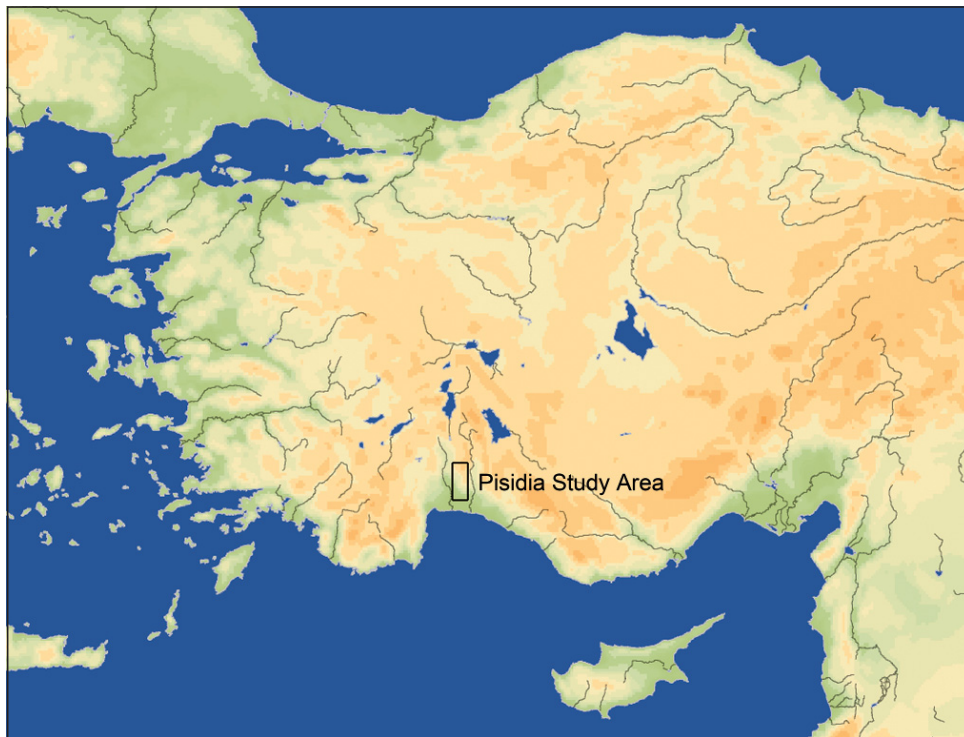
3 Davies, Attitudes.

4 Holmes/Waring, Literacy. – Waring, Byzantine Book Culture.

5 Cunningham, God and the Universe.

6 Athanassopoulus, Historical Archaeology 81.

7 Crow, Archaeology 47.



**Fig. 1** Pisidia study area, Turkey. – (Map K. Green).

## Why study landscape?

There are lots of practical reasons to investigate landscapes. At the simplest level we first have to find sites before they can be studied<sup>8</sup> and the best way to do that is to look at the landscape. I believe that the study of landscape is an important aspect of archaeological investigation of past cultures for more fundamental reasons. The landscape itself is a source of information. As Nico Roymans asserts, landscapes are intricate, complex and multi-layered products of social dynamics and cultural practices and to fully understand a culture it is necessary to identify the perception and organisation of its space<sup>9</sup>. Space and therefore landscape »forms the framework of our existence«<sup>10</sup> and is consistently interwoven with the process of expressing meaning derived from the human mind and formed according to the functional or cognitive ideal<sup>11</sup>. Landscape is a lived experience, as expressed by Tim Ingold<sup>12</sup>, organised in relation to the actions that are conducted within it. People do not just live on the land – they live through a series of meaningfully constructed landscapes<sup>13</sup>. Their perceptions shape how they see the environment, and the environment, in turn, shapes cultural perceptions of the landscape<sup>14</sup>. As a result of this, meaning can be found in

the patterns of social relationships that leave discreet yet intricate and often difficult to distinguish marks on the landscape<sup>15</sup> with settlements, roads, monuments, earthworks, forming the framework for human social cognition. Through the ordering of spaces within the landscape we experience our role and place in society<sup>16</sup>. Understanding landscape and studying the organisation of a culture's social space is integral to understanding perceptions and cultural behaviour of past peoples. Over the past decade archaeological researchers have advanced the study of the perceptions and experiences of past people by studying the organisation of social space<sup>17</sup>. People create characteristic individual spaces that can be seen reflected in the material record which varies culturally<sup>18</sup>. These can differ according to class and social status: for example higher status can be reflected in large household space or prominent location in a settlement. In the Byzantine world the importance and status of the church is frequently seen reflected in the size and prominent placement of churches<sup>19</sup>. Through the symbolism implicit in the organisation of settlements and landscapes, day-to-day social interactions can be observed. The acquisition of these »cognitive maps« by

8 Cherry, Cyprus 23.

9 Roymans, Mythical Landscape 2.

10 Fraassen, Philosophy of Time and Space 3.

11 Altenberg, Experiencing Landscapes 24. – Harvey, Condition of Postmodernity 239.

12 Ingold, Weather-World 126.

13 Vavouranakis, Burials 237.

14 Ashmore/Knapp, Archaeologies of Landscape 6.

15 Baker, Ideology and Landscape.

16 Bourdieu, Theory of Practice.

17 Bradley, Significance of Monuments; Archaeology of Natural Places. – Nash, Semiotics of Landscape; Signifying Place and Space. – Roymans, Mythical Landscape. – Tilley, Phenomenology. – Delle, Archaeology of Social Space. – Ashmore/Knapp, Archaeologies of Landscapes.

18 Zubrow/Dalypp, Symbolic Behaviour 161.

19 Green, Settlements.

successive generations transforms this space into a communicator of cultural knowledge, »serving as what some neo-Darwinians call a »replicative« device, as well as a stabilizing force on the culture«<sup>20</sup>. As Tim Ingold has said, »Through living in it, the landscape becomes a part of us, just as we are a part of it«<sup>21</sup>. If society is viewed as a dialectic relationship between the agency of people and social structures<sup>22</sup>, the landscape is both the conduit and the consequence of it.

Theoretical approaches such as those discussed above are not new in the world of archaeology but have rarely been approached in relation to Byzantine landscapes or indeed Byzantium. Limited exceptions can be seen in Late Antique archaeology<sup>23</sup>. Recently however, there has been interest in developing new approaches in Byzantine archaeology. The 2011 Society for the Promotion of Byzantine Studies Symposium on »Experiencing Byzantium«<sup>24</sup> is an example of this. In order to move beyond a dehumanised history as suggested at the beginning of this paper these forms or approaches need to be explored in order to expand our knowledge of the Byzantine world. Before this form of analysis can take place the landscape has to be unravelled. The intention of this paper is to present a new methodological approach to landscape analysis.

## Methods for a Historic Landscape Analysis of an Eastern Mediterranean landscape

The case-study area used in this Historic Landscape Analysis is located in the Turkish province of Antalya in the ancient region of Pisidia near to the border with Pamphylia (fig. 1). The following will provide a discussion of the methodologies used to study the landscape of this Pisidian case-study area.

### Retrogressive Landscape Analysis

One way in which the development of the landscape can be analysed is through Retrogressive Landscape Analysis. This technique unravels the physical and chronological relationships between different elements in the historic landscape. This is achieved by studying the relationships of »horizontal stratigraphy« between cultural features to establish the order in which they were created<sup>25</sup>. Much like how wall sequences are determined in archaeological excavation, landscape features such as pathways, field boundaries, terraces and walls are examined to determine if they have any relationships such as overlaying, underlying or abutting features which can

provide a chronology for their creation. **Figure 2** presents a sequence of images that portray how this technique can be used to deconstruct the landscape. The first image highlights all the landscape features recognisable within the modern landscape. The following images gradually unhighlight overlaying features until the last image in the sequence reveals the earliest features recognisable in the landscape. This process of Retrogressive Landscape Analysis can be carried out repeatedly across all landscape features to discover a relative chronology for their construction. This technique has early origins but has not been recognised as a specific methodology until recently<sup>26</sup>. Already Flinders Petrie explored this technique when he recognised that the relationship between Roman roads and landscape features would enable a deconstruction of the chronology of the landscape<sup>27</sup>. Today Retrogressive Landscape Analysis is often carried out on British projects, although under a variety of different names. It is popular with Royal Commission on the Ancient and Historical Monuments of Scotland, English Heritage and field surveyors. Susan Oosthuizen describes the development of this technique and lists in detail the methods of deconstructing the landscape using the example of the Cambridgeshire landscape<sup>28</sup>. Oliver Rackham's and Jennifer Moody's book »The Making of the Cretan Landscape«<sup>29</sup> has been highly influential in the recognition of this technique as a useful tool for the investigation of Mediterranean landscapes.

This technique does not provide definitive dating evidence, and terraces and field boundaries are notoriously difficult to date<sup>30</sup>. However, landscape features may contain some form of material evidence that can be dated. So in these cases it is possible to map out the chronological development of the landscape more exactly. For example, in the area of the Pisidia case study a water mill contains 5<sup>th</sup> century pottery in the mortar of its walls. This provides a *terminus post quem* for the construction of the walls. Another example is a stone terrace which has a 300 year old olive tree growing from it. This implies that the terrace was already in existence before the tree started to grow and most likely it had also been abandoned by this point. This dating method is described by Oliver Rackham and Jennifer Moody in regards to discovering a *terminus ante quem* for the abandonment of Cretan terraces by counting the annual rings of invading trees<sup>31</sup>. This form of relative dating has also been used to date terraces to the Early Byzantine period in Naxos, Greece. In this case, a Retrogressive Landscape Analysis revealed that Early Byzantine churches were constructed on top of terraces providing a *terminus ante quem* for when the terraces could have been constructed<sup>32</sup>. Other sources such as the descriptions of an-

20 Donald, *Material Culture and Cognition* 181.

21 Ingold, *Temporality* 154.

22 Ashmore/Knapp, *Archaeologies of Landscapes* 6.

23 Lavan/Bowden, *Theory and Practice*.

24 Nesbitt/Jackson, *Experiencing Byzantium*.

25 Crow/Turner, *Silivri* 168.

26 Bowden/McOmish, *British Tradition* 25.

27 Petrie, *Proceedings* 170.

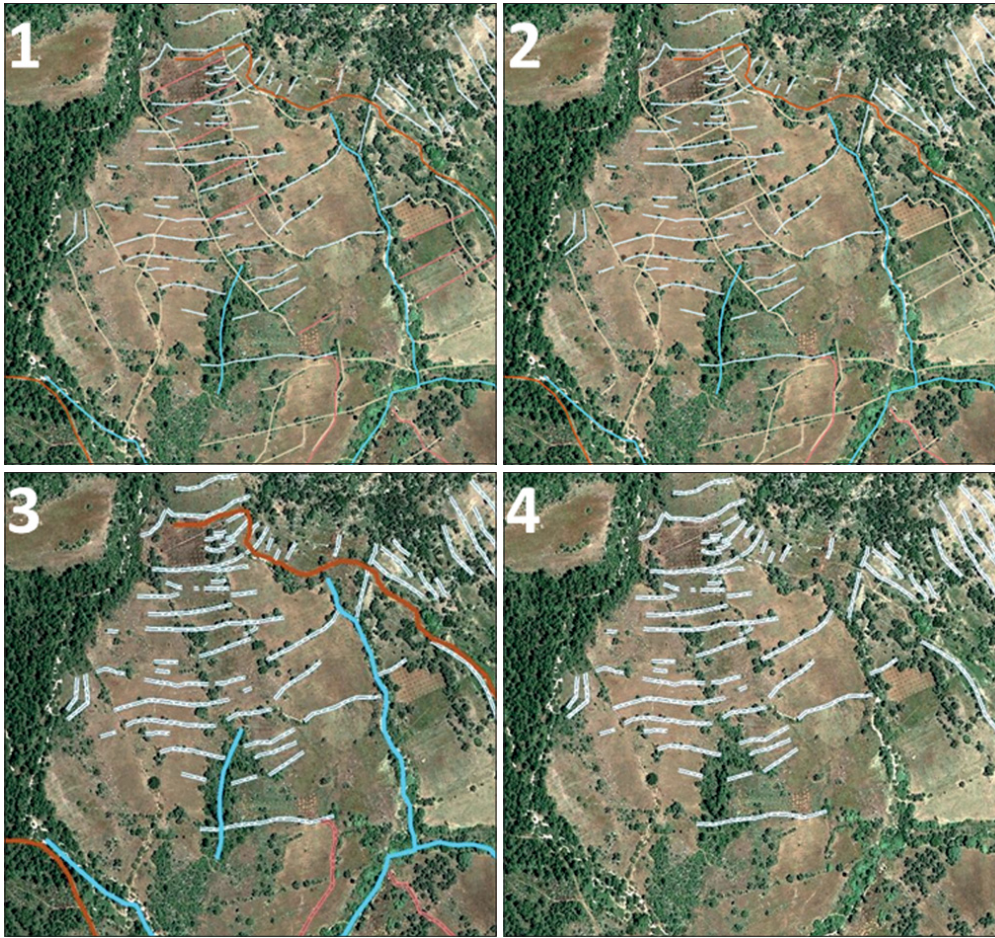
28 Oosthuizen, *Landscapes Decoded* 77.

29 Rackham/Moody, *Cretan Landscape*.

30 Gibson/Wilkinson, *Yemen*.

31 Rackham/Moody, *Cretan Landscape* 143.

32 Crow/Turner/Vionis, *Naxos*.



**Fig. 2** Retrogressive Landscape Analysis exemplar. – (Map K. Green).

tiquarian travellers, hagiographic sources and archaeological reports can also be consulted for this purpose. For example, descriptions or sketches of early travellers can provide a *terminus post quem* or a *terminus ante quem* for landscape features they portray<sup>33</sup>.

The Retrogressive Landscape Analysis of the Pisidia case-study area has provided a lot of stimulating information about the development of the landscape. The full details of the analysis can be found in the final project write-up<sup>34</sup>. One of the most significant results is that the landscape within its current configuration carries features that represent its longevity. Retrogressive Landscape Analysis can be complicated and it can use a wide variety of sources, but it does help to provide a framework for anthropogenic landscape manipulation. The dialogue between landscape and human society is intricate, complex and multi-layered. Retrogressive Landscape Analysis can reveal this complexity and the multi-layered nature of the landscape. Providing a new way to look at and understand landscapes it helps to construct frameworks for their theoretical exploration and their management. However, this

methodology is still not widely adopted by landscape surveys in the Eastern Mediterranean.

### Historic Landscape Characterisation (HLC)

The development of the HLC technique began in the late 1980s when British archaeologists began to recognise that although individual monuments in the UK might be well protected, the approaches to conserve, manage and understand the landscape were inadequate<sup>35</sup>. Today, HLC is frequently employed in western European Landscape archaeology<sup>36</sup> and has recently been pioneered in Byzantine archaeology by Sam Turner of Newcastle University and Jim Crow of Edinburgh University<sup>37</sup>. The technique examines the groupings and patterns of all historic features within the landscape to determine the predominant historical character of an area. Retrogressive Landscape Analysis can be used to inform a HLC. The methodology uses generalising mapping techniques to characterise individual areas of the landscape into HLC

33 Green forthcoming.

34 Green, Landscapes.

35 Fairclough, Introduction 1.

36 For Denmark see Møller, Danish Farmers. – For England see Aldred/Fairclough, Historic Landscape Characterisation. – For Germany see Ermischer, Spessart

Goes Europe. – For Iceland see Aldred, Identifying and Assessing Landscape. – for Scotland see Dyson-Bruce et al., Historic Land Use Assessment.

37 Crow/Turner/Vionis, Naxos. – Crow/Turner, Silivri. – Turner/Crow, Unlocking Historic Landscapes.

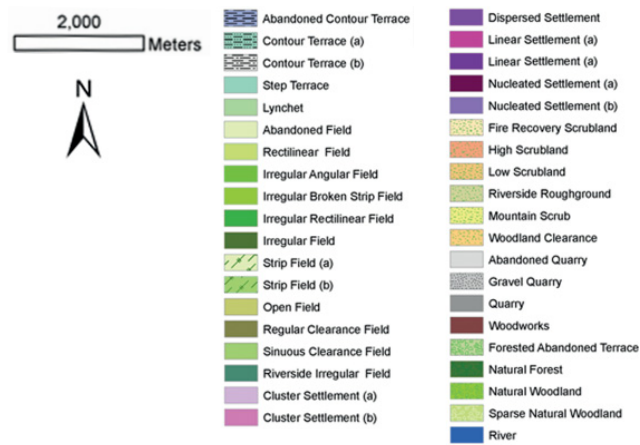
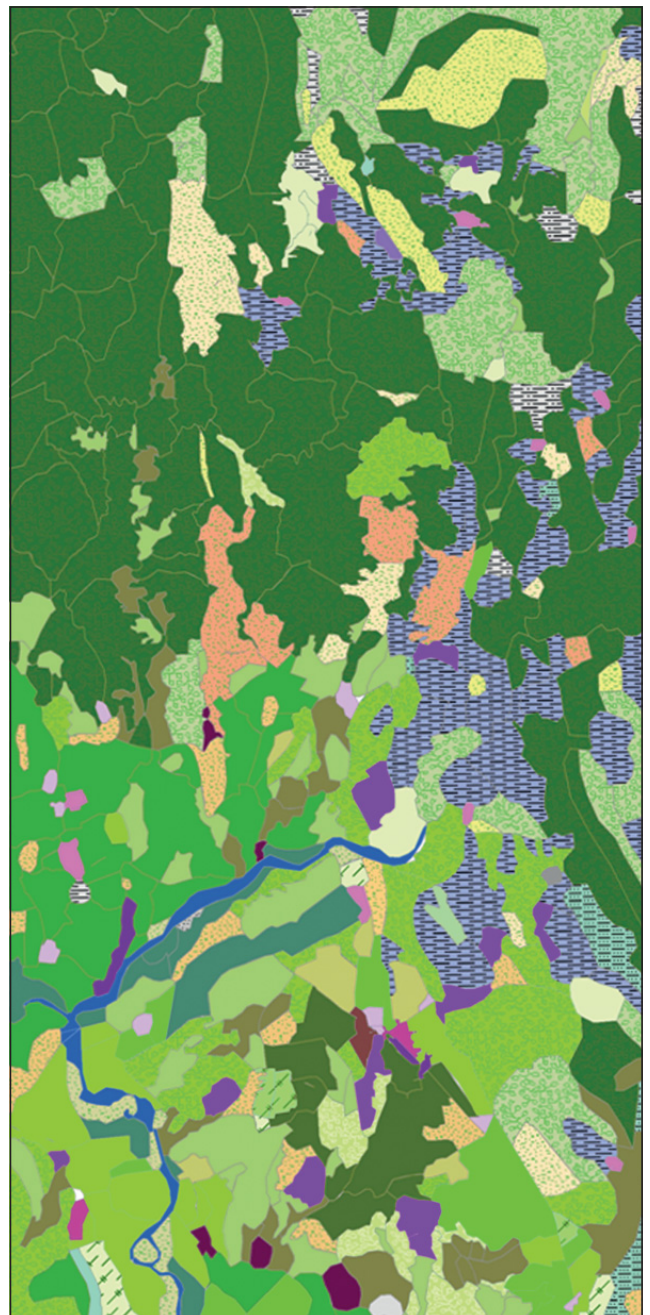


Fig. 3 Current HLC of the Pisidia study area. – (Map K. Green).

types, based upon the landscape features that are identified in each area<sup>38</sup>. Examples of landscape features can include field boundaries, terraces or crop markings, to name just a few. A Geographical Information System (GIS) is used to implement the methodology and combine the multiple data types. The basic premise of the HLC methodology is that it recognises that all elements of landscape, not just specific sites, have historical significance.

Figure 3 presents the current HLC types of the Pisidia study area. The landscape has been divided up into different areas of HLC zones, each of which are represented by a different colour, revealing the complexity of the landscape. The HLC types are significantly related to the geology of the landscape, as the distinction between the mountainous northern terrain and the flat southern plain clearly illustrates. The Aksu River runs from the south of the Pisidia study area in a northwesterly direction. It is joined by the Kuçukaksu River from the east, both streams are clearly represented in the HLC image. The line of the Kuçukaksu River can be seen as a defining point in the landscape between the northern and southern areas. South of the river there is much more HLC variety related to cultivated land. Eleven different HLC types have been identified relating to agricultural fields («Irregular Rectilinear Field», «Riverside Irregular Field», «Irregular Field», «Irregular Angular Field», «Modern Strip Field (a)», «Byzantine/Ottoman Strip Field (b)», «Open Field», «Sinuous Clearance Field», «Regular Clearance Field», «Rectilinear Field», «Abandoned Field»). Whereas north of the Kuçukaksu River only four agriculturally related HLC types could be identified («Irregular Rectilinear Field», «Regular Clearance Field», «Sinuous Clearance Field», «Abandoned Field»). Although the areas north and south of the Kuçukaksu River have different characteristics their historic character appears to represent similar periods in time. A notable amount of modern types is found closest to the river suggesting this area has under-



gone the most change. The high proportion of modern fields along the riverside certainly is a result of the better availability of irrigation. In the northern region of the study area the main HLC types fall under a broad woodland category. This is sub-divided into areas of «Natural Forest», «Sparse Natural Woodland» and «Forested Abandoned Terrace». The latter, as well as the «Abandoned Contour Terraces» were mainly found along the sides of the valleys particularly in the northeastern area of the study region. The large amount of landscape classified as «Forested Abandoned Terrace» and «Abandoned Contour Terrace» reveals that a significantly

38 Turner, Historic Landscape Characterisation 390.

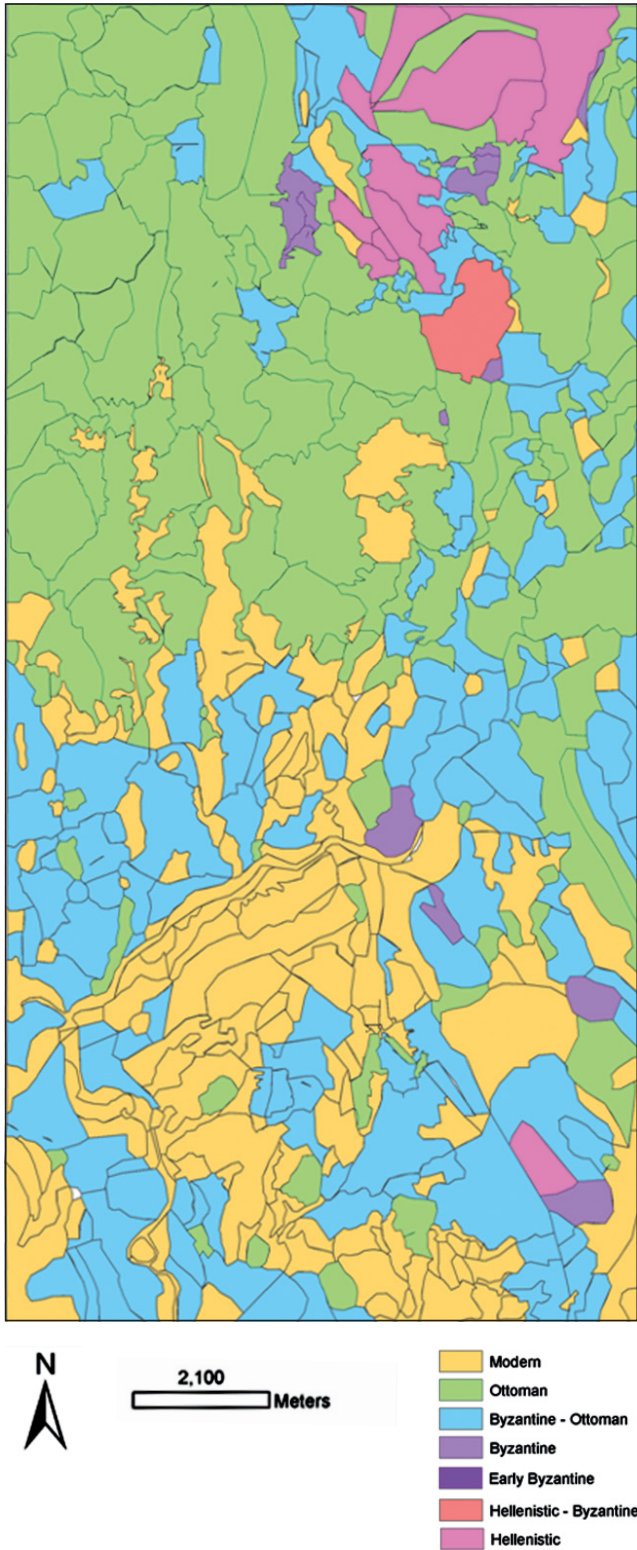


Fig. 4 The earliest HLC data ranges for the Pisidia study area. – (Map K. Green).

larger proportion of the landscape in this area was cultivated in the past in comparison to the present. It must be noted that the areas of »Natural Forest« in the northwestern case

study area are difficult to access and could cover landscape features that are currently unknown, with their dense vegetation concealing further terrace cultivation in the past. This is likely as the Pisidia Survey Project, whose data is a major source of information for this HLC, have recognised an abundance of ancient features such as abandoned terraces and ancient building in forested areas, even though it had generally focused on more accessible locations. The HLC reveals areas of »Rough Ground« such as »Mountain Scrub« and »Riverside Scrub«. These areas are parts of the landscape that were not useful for other purposes. However, »Low« and »High Scrubland« can appear in areas that can be cultivated and a move is being made to reclaim these. Hence, they are likely to become exploited in the future. For example, »Modern Sinuous Clearance Fields« and »Regular Clearance Fields« can be seen to have eaten into areas of previous »Natural Forest« and »Rough Ground«. These areas are often in transitional zones and reveal a modern increase in cultivated land. The settlements characterised by the HLC are scattered frequently in the southern half of the Pisidia study area. These settlements are of different HLC types with no type dominating. The settlement pattern in the northern half of the Pisidia study area is slightly different which can be related to the landscape topography. Settlements in this area are found within valleys and are rarer and smaller, with less modern influences.

The results of the HLC have revealed a depth of history that previously had not been acknowledged. It would have gone beyond the scope of this paper to include descriptions of each HLC type but many of these polygons have significant recognisable time depth. This was determined through Retrogressive Landscape Analysis, survey data and ground truthing. One of the most noteworthy HLC results is that overall, despite the intensification of farming methods and the modernisation that the region has undergone in the past few decades, a large proportion of the landscape is of a HLC type that pre-dates the Modern era. **Figure 4** presents the earliest data ranges that can be applied to each of the polygons. This image reveals that a considerable amount of the study area can be associated with activities in the Byzantine and Ottoman periods. Maps of previous HLC types have also been created to provide time slice mapping of the landscape. The HLC of this Pisidia study area was conducted as part of a Ph.D. project, which is available on the Archaeology Data Service, for more detailed exploration of the HLC results<sup>39</sup>.

### Pisidia Intensive Survey 2011

An innovative approach has been developed by the author, which utilises the results of archaeological surface survey analysing HLC. This new technique provides a further level of

39 Green, Landscapes.

chronological definition to the Historic Landscape Analysis of each case-study area. For this purpose survey data had to be collected. In the summer of 2011 the author led a team of undergraduate and postgraduate students from Newcastle University in the undertaking of a systematic surface survey of ten survey units across the Pisidia area. This was conducted under the auspices of the Pisidia Survey Project, directed by Lutgarde Vandeput of the British Institute in Ankara. This fieldwork was primarily carried out to inform the HLC of the region, but it also complemented other aspects of the Pisidia Survey Project and facilitated the project's investigation of the complex landscape development in the region. Each survey unit was specifically chosen because of its distinctive historic landscape character. The objectives of this surface survey were:

1. To record and process a representative sample of pottery and other artefacts present on the surface in each survey unit.
2. To confirm the HLC type and record the current surface cover and landscape topography of each survey unit.
3. To record the extent and the stratigraphical relationships of terraces and field boundaries within each survey unit.
4. To collate a digital dataset that will provide a platform for spatial analysis and allow the archaeological material recorded to be investigated at a variety of different levels.

To achieve these objectives a well-established intensive survey technique known as transect walking was used, adapted from the methodology applied by the Antikythera Survey Project<sup>40</sup>. This survey technique involved dividing each unit into straight lines spaced ten meters apart. Each transect line was then divided into ten meter divisions. The surveyors walked along the transect line and for each ten meter transect division, the surveyors recorded the amount of un-diagnostic pottery sherds and tile fragments observed within a one meter radius of themselves. The surveyors were also required to collect and bag any diagnostic pottery or lithics found in each ten meter transect division for further processing. The diagnostic pottery was processed by the Newcastle University team under the supervision of Maria Duggan. Small finds such as metal objects were recorded individually and GPS points taken. In order to fulfil objective two, the surveyors also recorded the surface coverage and land type and rated the visibility within each ten meter transect division. Alongside the transect walking the HLC type of each survey unit as a whole was identified, documented and photographed. Field boundaries and terraces were described and recorded using GPS, and any stratigraphic relationships between features were noted. This aspect of the survey directly complements Retrogressive Landscape Analysis. This exhaustive survey methodology is time-consuming but it enables a more detailed spatial analysis of the recorded material than is possible with less rigorous

methods. The data recorded during the survey was recorded in an Access database, and collated within the HLC GIS which enables the data to be spatially plotted. This allows questions, such as those regarding the quantity, type or date of the ceramics, to be comparatively explored across the area of each survey unit or across the whole survey area. The results of this surface survey revealed a significant proportion of Early Byzantine ceramic material in the study area while other periods were only meagrely represented. These results suggest extensive Early Byzantine activity in the region. The results of the ceramic survey alone, that is, the lack of earlier and later material, suggest that there was significantly less inhabitation of the landscape during the other periods. The information collected regarding landscape type, landscape topography, surface coverage, and visibility allows to explore relationships between these factors and the ceramics recorded. The data can then also be explored in relation to the results of the Retrogressive Landscape Analysis and the HLC of the case-study area. When the ceramic results were combined with the results of the HLC and the Retrogressive Landscape Analysis a relation between the land type and the amount of ceramics was noted. As expected, ceramics were found in higher densities within the vicinity of a known Byzantine site, but Early Byzantine ceramics were still found in low densities in areas not considered to have any Byzantine sites in the vicinity. This may be an indicator of manuring in the Byzantine period.

## Technique review

The results of each of the landscape analysis methodologies presented above provide vital information about the development of the Pisidia landscape.

The Retrogressive Landscape Analysis is particularly informative for unravelling the structural organisation of the landscape and providing a chronology for the landscape features. Alone, this methodology revealed that the landscape is made up of a complicated arrangement of features with clear markers of surviving landscape components extending back over several centuries. This reveals the longevity of the landscape features which in some case can be traced back to very early origins.

The HLC is a useful and flexible way of visualising the different areas within the landscape and their relationships to one another, particularly for a non-specialised audience. This method's ability to look at the landscape as a whole, not just at sites or areas of importance, recognises that all parts of the landscape have historical significance. It is a form of landscape archaeology that enables understanding and representation of landscapes in relation to their historical development<sup>41</sup>, and it can be used for multiple purposes from predictive modelling, to landscape management or the

40 Bevan / Conolly. Antikythera.

41 McNabb/Lambrick, Assessment 54.

theoretical investigation of the use of space. HLC provides a spatial framework that allows different disciplinary perspectives and different sources to be brought to bear on particular questions about the past. HLC can also be adapted as the landscape develops and be constantly reinterpreted.

Combined with the results of the Retrogressive Landscape Analysis, further time depth can be gained and the characterisations can become stronger. Chronologies gained by Retrogressive Landscape Analysis can be used to aid the HLC in creating time slices of the landscape.

Through the combination of HLC and Retrogressive Landscape Analysis it is thus possible to reveal the diversity and time-depth across the complex terraced and enclosed landscapes.

The results of the ceramic survey alone suggested a landscape of only Early Byzantine and modern occupation. However, the results of the HLC and the Retrogressive Landscape Analysis reveal this not to be the case. The latter revealed that the landscape has been manipulated, in some case on a significantly large scale, from the Byzantine period until the modern day. This means that the reasons for the large amount of Early Byzantine ceramic has to be considered in more detail in light of this information. It seems not to simply show a lack of habitation.

Alone, the methodologies have distinct drawbacks but combined they allow new interpretations to be developed about the past occupants of the landscape. This, in turn, provides the foundation for exploring how the organisation of that space influenced the experience of people in the past, and how peoples' perceptions, experiences and social actions influenced the creation of the landscape. This form of exploration is essential to improving the future understanding of Byzantine rural society. Space is a lived experience organised in relation to the actions that are conducted within it, and through the ordering of space we experience our role and place in society.

One of the key factors of landscapes is that they change, a process that will continue in the future<sup>42</sup>. HLC-based studies not only help archaeologists understand past landscapes, but also help planners and landscape managers shape future landscapes<sup>43</sup>. Understanding how places have developed in the past provides the knowledge landscape managers need to move beyond simply regarding cultural landscapes as »traditional«, with no appreciation of time-depth or historical processes. Better information about past changes and previous landscape character will help them decide what types of change are most appropriate for the future<sup>44</sup>.

## Discussion

From the combination of methodologies explored above we can state with some confidence that the landscape in the plain was cultivated in the Byzantine period. It seems highly likely that this area was the prime agricultural land of the study area. The evidence of this land being used in the Byzantine period suggests that the settlements in the vicinity too were occupied. These are likely to have been small rural cluster villages that were inhabited by the people that cultivated the land. Evidence for a significant town in the area is scant. The lives of the inhabitants of these settlements would have revolved around the seasonal calendar. Evidence from the intensive survey has revealed the possibility that manuring was an activity that was carried out by these inhabitants. This allows to build a picture of the daily activities conducted during the Byzantine period which will in turn allow an exploration of the perceptions and experiences of the people carrying out those activities.

The landscape analysis has revealed that the majority of the land cultivated in the flat fertile plain in the south of the study area was also cultivated in the past. In the northern area a different story is revealed. In this mountainous area the landscape in the past was much more exploited than in the present. The evidence of the contour terraces which can be dated in some cases as far back as the Hellenistic period shows that the landscape was adapted to provide as much profitable land as possible. The remains of grinder stones and press beds in the higher regions point to the area being an olive oil production region. The large scale of terracing suggests that in the past the main product cultivated was olives unlike in the modern period whose main products are vegetables, fruits and grain crops. The amount of terraces in the area would seem to suggest – if the vast majority were used to cultivate olive trees – that the production was on an industrial scale for the purposes of trade rather than to only supply the local population. Interestingly, the olive oil presses are found in areas much higher than the terraces, on top of hills and crags and in easily defensible and very inaccessible locations. This suggests that the population perceived a need to protect their olive oil production sites, albeit to the disadvantage of convenience. This reveals a lot about the mind-set of the populations in the higher regions. These people were either particularly cautious or were protecting their livelihoods from raiders. The distinctive differences between the northern half of the study area and the southern half can be explained by the geology. The difference in settlement patterns, however, may help add weight to the suggestion that these areas, in particular perhaps those north and south of the river, may have belonged to different administrative districts in the past and therefore developed slightly divergently.

42 CoE 2000.

43 Turner, Historic Landscape Characterisation.

44 Turner/Fairclough, Common Culture; Bolòs, PaHisCat.



The Byzantines that lived in this area were also craftsmen, producing red slip ware. The ceramic production sites are scattered across the southern half of the Pisidia study area, often located near water sources, in areas less suitable for agriculture and near to a clay source. The identification of these production sites provided new information about the rural life of the Byzantine inhabitants. What was an unknown area, considered as a relatively insignificant landscape during the Byzantine period, proved to be an area of major significance in the trade of the eastern Mediterranean and beyond. The production of the ceramic wares would have had a significant impact upon all the inhabitants of the area, if not directly, then indirectly from the better availability of trade goods, the monetary income in the region, or simply the great availability of ceramic vessels.

The high concentrations of Early Byzantine ceramics certainly suggest a different attitude towards ceramic vessels in the Byzantine period than the previous and later periods. The landscape developments prior to the Byzantine period and the evidence of significant earlier Hellenistic remains across the study area suggest that there was a not insignificant population in these periods. However, the Byzantine ceramics dominate strongly – very little else was found. This is not just because the Byzantine material is more viable, as the intensive survey was extremely careful of following a systemic strategy and collecting every sherd found, not just the easily identified ones. Instead, the reason for the high concentration of Early Byzantine ceramics is a result of different attitudes or activities taking place in the Byzantine period. One reason may be that the ready availability of ceramics from the nearby production sites made ceramic vessels more disposable, that in earlier and later periods ceramics were handled with more reverence and care. Another reason may be that rubbish was disposed of differently. A more likely reason is that in the periods prior to and following the Byzantine era a larger amount of other, perishable materials were used instead of ceramics. This in itself can provide a lot of insight into both Byzantine and other period inhabitants of the landscape.

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## Summary

This research has demonstrated that through a combination of Historic Landscape Characterisation, Retrogressive Landscape Analysis and Ceramic Survey it has been possible to reveal a great diversity and time-depth across the complex landscape of the Pisidia study area. By integrating a wide range of sources, we can create well-contextualised interpretations of past societies and places<sup>45</sup>. The historical records for the region are undetailed and the results of the ceramic survey alone suggest a dislocation of population, and yet from the landscape study there are clear markers of surviving landscape components extending back through the centuries. When considering the results of the ceramic survey a different story is told as compared to the HLC. The ceramic survey results suggest a limited period of activity restricted to the Early Byzantine period. However, when compared to the landscape analysis results, there is a much longer and more complicated history depicted. This highlights an extremely significant point that this paper wants to emphasise: ceramic surveys should not be carried out without some form of landscape analysis to contextualise the results. They can, however, add extra depth to HLC and the understanding of landscape development.

These modern techniques can provide a framework for how the landscape was structured and organised in the past. This framework can then be used to explore how the Byzantine landscape was physically organised – then a theoretical exploration of the landscape can commence. Finally, the results can be used to investigate why the landscape was ordered in this way, and what this organisation might tell us about the perceptions and experiences of the people living, working and travelling through the landscape.

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## Zusammenfassung / Summary

### Byzantinische ländliche Gebiete des östlichen Mittelmeerraums: Neue Forschungsansätze zu ihrer Charakterisierung und Untersuchung

Die wachsende internationale Anerkennung von Landschaftsstudien hebt hervor, wie sehr die Landschaft in der zeitgenössischen Byzantinischen Archäologie vernachlässigt wird. Landschaft ist eine gelebte Erfahrung, die einen Bezug zu den Aktionen, die darin ausgeführt werden, entwickelt; daher ist das Verstehen von Landschaften und die Erforschung, wie dieser soziokulturelle »Lebensraum« organisiert war, wesentlich um die Wahrnehmung und das kulturelle Verhalten von früheren Menschen zu verstehen. Es ist notwendig, dass die Byzanzforschung beginnt, neue methodische Ansätze zur Rekonstruktion der Organisation und Wahrnehmung von Landschaften heranzuziehen, um eine »entmenschlichte Geschichtlichkeit« hinter sich zu lassen und eine zeitgemäße Byzantinische Archäologie des 21. Jahrhunderts zu entwickeln. Dieser Beitrag widmet sich diesen Fragen, indem ein neuer methodischer Ansatz zur Landschaftsanalyse präsentiert wird. Eine sog. Retrogressive Landschaftsanalyse und eine Historische Landschaftscharakterisierung wurden angewandt, um die historischen Prozesse, welche die Landschaft einer Fallstudie in der Südtürkei prägten, zu rekonstruieren. Diese Methoden wurden innovativ mit den Resultaten eines Kera-

miksurveys verbunden, um eine höhere chronologische Auflö- sung für diese historische Landschaftsstudie zu ermöglichen.

### Rural Byzantine Landscapes of the Eastern Mediterranean: New Approaches to Characterisation and Analysis

The growing international recognition of Landscape studies highlights the neglect of landscape in contemporary Byzantine archaeology. Landscape is a lived experience organised in relation to the actions that are conducted within it. Therefore understanding landscape and studying the organisation of a culture's social space is integral to understanding the perceptions and cultural behaviour of past peoples. It is essential that Byzantine studies begin to consider new approaches to the organisation of landscape and how it is experienced, in order to move beyond a »dehumanised history« and develop an up-to-date Byzantine Archaeology of the 21<sup>st</sup> century. This paper addresses these issues, by exploring a new methodological approach to landscape investigation. To achieve this, Retrogressive Landscape Analysis and Historic Landscape Characterisation has been implemented to map the historic processes that shape the landscape of a case-study area in Pisidia, southern Turkey. These methods are combined in an innovative way with the results of a ceramic survey to provide further chronological definition to the historic landscape study.