Understanding Interpretations of Landscape Research

Marina Gkiasta

Universiteit Leiden, Faculteit der Archeologie
Postbus 9515, 2300 RA
Leiden, The Netherlands
M.Gkiasta@arch.leidenuniv.nl

Abstract. This paper deals with the problem of comparing and integrating results of archaeological landscape research and suggests a critical approach that necessitates the study of the theoretical and methodological frameworks within which these results arose over time. Focusing on the island of Crete the aim is to explore interrelationships between questions asked, methods chosen, data obtained and interpretations suggested and also acquire a collection of interpretative information which pays respect to the variability offered by the researchers. It is also proposed that in order to follow the interpretative process we should separate raw data from interpretations. The end result of this study will be a historiography of landscape exploration, the illumination of the problems regarding data integration and the contribution towards an integrative approach that is archaeologically meaningful.

1. Introduction

Landscape has always been an integral part of archaeological research from the very start of the discipline. As landscape research acquires further experience and becomes more labour and time intensive asking new and complex questions, new classes of data are under investigation in a structured and organised way, including environmental, landuse and ethnographic. The usual landscape research themes concern:

- Subsistence and human/environment interaction: settlements are analysed in terms of their locale's potential for trade, agriculture or pastoralism and landscape observations include raw sources, coppicing and use of woodland, terracing.
- Socio-economic systems and socio-political organisation believed to be manifested through different types of settlements, hierarchy – usually in terms of site size – and site inter-relationships.
- Cognitive use of landscape e.g. ritual landscapes.

The fact that intensive survey has been practiced for about 3 decades has led to the acquisition of a very large amount of data, which encourage the construction of inter-regional settlement histories by comparison and integration of surface survey data, an attempt particularly enhanced by new tools such as GIS. However, the effects that different problem orientations and methods used might have on data acquired and interpretations suggested do not receive the necessary attention. Besides the difficulties concerning the integration of intensive survey data, issues regarding intensive – extensive as well as old and new landscape research data should also be explicitly considered.

In the course of archaeology, we attest many changes in academic thought and field practice, which are not necessarily steps in a linear development. Therefore, we have to develop reliable methods of integrating a variety of data obtained over time, a goal that presupposes the study and understanding of what people have been doing and why.

2. Studying Landscape Research on Crete

The project presented in this paper concentrates on the study of the history of landscape research in Crete, on the kind of data and interpretations we have at present and why, but also on what we could possibly do with it. The island of Crete is an extraordinary example of landscape research intensity since the end of the 19th century, and this trend has been increasing the last years when about 20 projects of intensive survey have actually taken place. It follows as a natural consequence that there is quite a large body of data or 'sites', the sought-after of the archaeologist, which have enhanced our understanding of past human activity, but also created a lot of new questions. Such a rich dataset has understandably promoted the desire for data integration under current theoretical and interpretative trends such as models based on 'hierarchy', 'nucleation' or 'dispersal' believed to express prevailing economic, political or religious/cultural circumstances. The concept of 'site', however, has not always been the same and results naturally have depended upon questions asked and methods chosen each time. Meaningful ways of comparing and combining data require our serious efforts on understanding and assessing data and interpretations.

The approach followed consists of two components: The first is a serious study of theory and methodology that has guided landscape research, which seeks to explore relationships between theoretical background, aims, methods and results in terms of interpretations. The second is a study of the interpretative process that observes the relationship between data observed and interpretations suggested for each of the different landscape traditions. The structure of the databases designed for such an analysis and the Classes of information believed crucial for intra-project understanding and inter-project comparisons are discussed below. Problems encountered and which relate in particular to insufficient publication and the lack of standards (in publication) unfortunately can not be discussed in the present paper.

2.1 'Surveys' Database for intra-project study and inter-project comparisons

Classes of information and Classificatory decisions. The main tables of this database gather general information about the projects, the kinds of data they collected, their questions, methods and interpretative framework, as well as their results concerning sites and interpretations. Here follows some basic description of the most important tables and fields:

Table 'Surveys' contains general information about the projects. The most important fields are:

Aims (Fig. 1), which consists of a basic classification of aims so as to clarify the context within which research was undertaken and allow us to study relationships with methods and results and

Tradition (Fig. 2), which consists of the main traditions in landscape archaeology, each tradition corresponding to landscape research approaches that share common features. Worth noting that although there is some general sequence in time they may also co-exist and do not necessarily relate to a linear development.

Table 'Sampling and Field Methods' (Fig. 3) contains fields, which collect necessary qualitative and quantitative information about fieldwork. For e.g. if we want to compare intensive survey results, we need to know exact area that was walked (this allows to compare densities of sites quantitatively between different areas).

Table 'Environmental data' has additional qualitative information; if landuse or environment was not studied in a project, inter-project comparison can not be achieved at this level.

Table 'Multi-disciplinarity' has information about the operational framework of landscape research in terms of influences and cooperation with other disciplines.

Table 'Interpretative Framework' includes the basic interpretative models and theoretical trends that researchers use in order to explain material culture observed and its spatial characteristics, e.g. Site Catchment Analysis, ecological explanations, core-periphery models, hierarchy etc.

Table Presentation aims to give us a first idea about the level and kind of communication of the information acquired by each project, e.g. locational information (from compass directions to GPS), map scales, pottery drawings, plans etc.

Table 'Interpretations' summarises the main interpretations usually in the form of settlement patterns per period.

Table Chronology / Functions (Fig. 4) relates to the necessity of knowing what we compare so as to refrain from a vague
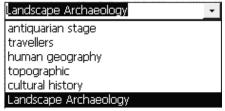
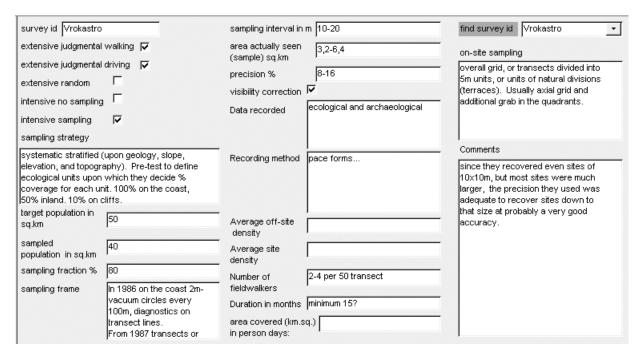

Fig. 1. Aims.

Fig. 2. Tradition.

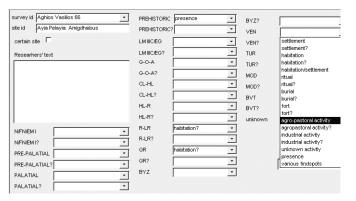**Fig. 3.** Sampling and Field Methods.

Fig. 4. Chronology/Functions.

notion of 'site'; this table contains the researchers' interpretations in terms of chronology and functions assigned to each site. In this respect integration of site information between different projects should make clear if we compare areas of occupational character, religious, unknown, findspots, etc. paying respect to the differentiations used by each researcher, including differentiation between certain and non-certain sites.

Fields of Chronology. Researchers have used and are using many chronological divisions and characterisations. Given the fact that it would be almost impossible to work with a classificatory system containing all categorizations used, this table's fields describe a broader chronological system[1], based on periods of relative cultural homogeneity and times of transition. Additionally, chronological interpretations are distinguished in those between those considered certain and those that are not.

Classes of Function

Every chronological field contains a choice of certain or possible functions including a class for unknown activity and one for just presence of material. Thus, sites do not have a vague meaning, but a specific interpretation (or not) of chronology and function which should be taken into account. Again, classification had to be decided upon broad categories that incorporate more accurate characterisations.

The above classifications fit an investigation of a very large body of information both time and space wise. It is assumed and suggested that in projects where data integration is required, classes should be more refined according to questions asked, however it is proposed that a similar approach is adopted, which acknowledges the importance of differences in classes of data and interpretations and studies this differentiation in a structured manner.

2.2 'Interpretations' Database

Additional to the above survey work on theory, methods and results of landscape research projects, it is of great importance to try and understand what various site terms meant for different people. The problem of what we should call a site has been addressed from the beginning of intensive surveys, and an answer does not yet exist, quite understandably. The major predicament, however, is not that we may not agree on what a

site is, but that we do not know what people mean when they use specific terms, and whether their definitions are in accordance with those of other researchers, so that we can treat landscape interpretations as unified information. For this reason the 'Interpretations' database tries to follow the interpretative process by separating raw data observed and interpretations used to explain them, the term interpretation referring to the function and chronology assigned (or not) to a material entity at a specific location. The database consists of the following tables:

Table 'Data Observed' (Fig. 5) includes archaeological material, topographic/environmental and landuse observations, which are the classes of information that archaeologists have used through time in order to arrive at some specific interpretations.

Table 'sherd quantities' deals with pottery descriptions as used by the observers, since pottery has been the most important criterion used in interpreting whether a find-spot is a site or not, and of which date and function. The chronology fields used are the same as in the table 'Chronology / Functions' (Fig. 4) and the 'sherd quantities' categories included in each one are: "1–2 sherds", "a few sherds", "some sherds", "many sherds", "the majority of sherds", and "unknown quantity".

Table 'interpretations suggested' consists of the actual chronological and function interpretations for these sites and are the same as the ones included in the 'Chronology / Functions' table of the 'Surveys' database. Thus, we can follow the interpretative process and observe what qualitative and quantitative data were used for each site interpretation. This allows us to understand what interpretations mean for different people and see whether e.g. everybody's 'settlements' could indeed be used as such in a settlement pattern model or not. It will also be interesting to observe whether there are any patterns of observation and interpretation through traditions.

Analysis and Perspectives for Comparison and Integration

The classification of 'survey' work information allows us a variety of analyses for intra-project understanding and inter-project comparison. We can explore interrelationships between aims, methods, theoretical background, interpretative framework and results. Questions will seek similarities and differences between projects and will include:
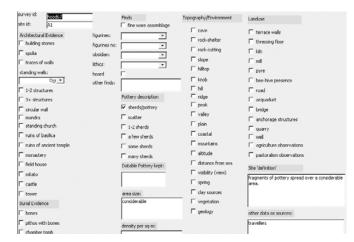

Fig. 5. Data Observed.

- What questions are asked in different projects and what methods are followed to answer them?
- How do methods relate with quantity and quality of results?
- What types of 'sites' or interpretations occur for different traditions?
- What are the chronological periods used?
- What are the favoured interpretative trends and how do they relate with quality and quantity of data?
- What is the spatial and temporal spread of traditions, theories and methods on the island?
- What are the Real Densities of sites or interpretations per survey project taking into account the different classifications of site-types and chronological periods, and paying respect to researchers' distinction between certain and non-certain values?

3. Conclusion

Most current Landscape researchers move towards an integration of processual and post-processual approaches, the first relating more to the methodology applied in landscape exploration, the latter to the interpretation of patterns observed. In our effort to understand past human societies, whichever theoretical viewpoint we adopt, landscape studies are a prerequisite and so is the integration of knowledge acquired by archaeologists through time. In turn, however, we need to acknowledge the importance of assessing interpretations and results, which means we have to consciously study landscape research over time and understand methods and theoretical framework that has influenced questions, methods and results. Unless we accept the significance of understanding even our own archaeological practice, we put into jeopardy the meaning of our very own research.

The last comment is therefore, that landscape reconstructions should filter data used and be aware of their potential and limitations so that models produced can really enhance our understanding of landscape ecology and cultural change. Methods, including technology, can not exist without a body of theory, which guiding archaeological work has to be understood and assessed. It is time we adopt not only a critical, but also a shelf critical approach and consciously reflect on why we do what we do.

Note

1 Chronological periods included have been widely used by archaeologists working on Crete.

Acknowledgements