

UNST 124g fall 2011

the long road from foraging to farming

1 introduction

In our conversations about *spirit of place* (Flores, 1998) last term, we considered the profound impact that human activities have had upon the landscape, and feedbacks between human cultures and landscape change. While we discussed the rise of agrarianism in the context of landscape change, we did not spend much time considering why the transition from foraging to farming took place, or the changes in human culture that accompanied that transition. The first four readings this term were selected to lend some insight into these issues. Balter (2011), a science journalist, gives an overview of recent archaeological and anthropological research on the migration of physiologically modern humans out of Africa while Rowley-Conwy and Layton (2011) synthesize decades of scientific research into one theoretical framework regarding the transition from the relatively mobile life of gathering and hunting to the fixed life of the agriculturalist. The history of human migration that began when hominids first walked out of Africa continues to this day, but under very different circumstances and with different effects on the landscape and on ourselves.

Our reading list this term includes several academic research papers. These papers are more challenging to read than popular articles and books. They tend to be information-dense and to contain specialized language with which you may not be familiar. The authors make frequent use of citations to support arguments and to fill in details that have been discussed elsewhere in the literature. You should be prepared to read an academic paper at least twice, first for an overview of the author's goals, reasoning, and main conclusions, and second to fill in the details that help you more fully understand (and sometimes question) the author's arguments and conclusions. You may find the "SQ3R" method helpful for effective reading.

Most scientific articles follow a standard format that is only slightly different from the academic essay format we followed last term. A paper begins with an **abstract** that provides an overview of the relevance and main points of the paper. Reading the abstract is a good way to evaluate whether or not a reference is relevant to your interests or needs in a research project. The first section of the main body of the paper is the **introduction**. As you expect, this section provides an overview of the information the reader needs to understand the rest of the paper, both in terms of its relevance and the overall plan of work that led to the results reported later. If a hypothesis is being tested, it is stated in the introduction. The materials and procedures followed in the work are described next, in a **methods** section. This section should provide enough detail that the investigation made by the authors can be repeated by others. The methods section may be missing in a *review* or *synthesis* paper, in which the work of many different authors, using different methodologies, are brought together under one theoretical framework. The **results** of the original research are presented next. This section includes some rationale for the various experiments conducted by the author, together with their outcomes. Finally, the paper concludes with a summary of the findings and discussion of their broader implications, in **conclusions** and **discussion** sections. There may be slight disciplinary variations but in general, all scientific papers follow this scheme.

Scientific papers often include **figures** and **tables**. These are used to illustrate points made in the paper and often represent original research (data). Figures and tables are always accompanied by captions that describe their content. Figures also often contain legends that provide detail about figure elements (such as the meanings of different symbol colors or line weights). Tables must have appropriate headings that contain all the detail necessary for the reader to understand their content (for example, data units). Figures and tables are numbered for reference in the text and all figures and tables should be referenced in the text of the paper.

2 assignment

Please read Balter (2011), *Was North Africa The Launch Pad For Modern Human Migrations?* and Rowley-Conwy and Layton (2011), *Foraging and farming as niche construction: stable and unstable adaptations* and answer the following questions. The second article is a scientific research paper. Please be sure that you give yourself enough time to read the articles more than once.

1. Create a formal outline of Rowley-Conwy and Layton (2011) including the authors' main points and supporting details.
2. Why do foragers live below the *carrying capacity* of their environments?
3. What does *domestication* of a wild plant or animal mean? How do Rowley-Conwy and Layton suggest this happens?
4. Why are only some animals selected for domestication?

3 references

Balter, M. (2011). Was North Africa The Launch Pad For Modern Human Migrations? *Science*, 331, 20-23.

Flores, D. (1998). *A sense of the American west*. Spirit of place and the value of nature in the American west (pp. 31-40) J.S. Sherow (Ed.). University of New Mexico Press.

Rowley-Conwy, P. and Layton, R. (2011). Foraging and farming as niche construction: stable and unstable adaptations. *Phil. Trans. R. Soc. B*, 366, 849-862.