Origins and Revolutions: Human Identity in Earliest Prehistory

Clive Gamble
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'TIMEWALKING' THROUGH ORIGINSLAND: CHANGE HAPPENS

This book by Clive Gamble is another example of his now quintessentially unique perspective on human evolution. Divided into three major parts, which in turn are divided into chapters, the book is well organized and all chapters are briefly but conveniently summarized. Additionally, each of the three major parts is summarized in their own chapters, although the one for Part III is more an epilogue. As expected, these chapters address the issue at heart (that of human identity, perceptions, and evolution) in a broadly chronological manner, with some exceptions. For example, Part I deals with the Neolithic revolution prior to Gamble's presentation of earlier time periods. This is appropriate because the evolutionary and behavioral significance of the Neolithic were formally recognized long before the idea of Paleolithic 'revolutions.' More than the revolutions themselves, Gamble targets the soul of paleoanthropology—human identity and its many facets. The titles of some of these chapters are provocative (e.g., *Bodies, instruments and containers*; *Did agriculture change the world?*) and sub-titles also are refreshingly innovative and generally appealing (e.g., *Defining the fully modern human: bodies, brains and boats*). The text throughout the book is a combination of eloquence blended into a mosaic of clever analogies and useful historical insights. The style of writing encourages the reader to proceed further for more answers as well as newly-raised questions. Using innovative metaphors, Gamble walks the reader through the concepts of change, development, and variation in human evolution and history, rather than simply resorting to temporally constricted cultural revolutions in the traditional sense.

The first part (*Steps to the Present*) introduces the volume and establishes the main tenets and debates concerning specific stages of human evolution, specifically the Neolithic and Paleolithic as well as the 'Urban Revolution.' Gamble also takes (briefly) readers to the world of 'post-modern' humans in the wider context of globalism and humanity or 'humanness.' Unfortunately, the other informal or 'archaeologically invisible' revolutions are not discussed adequately—for example, other pre-modern revolutions such as the seemingly rapid global expansions of Oldowan and Acheulian technologies, respectively. In the section on the Neolithic Revolution, although Childe is cited extensively, Gamble also discusses 'post-Childe' developments and archaeological accomplishments. The Neolithic Revolution is placed in the wider epistemological context and related anthropological sub-disciplines (e.g., Orientalism): "For Childe these revolutions were primarily functional-economic stages where the Neolithic meant food-producing, an interpretation apparently backed by the first appearance of artefacts such as polished axes, pottery and weaving as well as evidence of domestic animals and crops" (p. 13). Similarly, each period of techno-chronology, when introduced for the first time in the book, is preceded by a useful and valid historical background. Three current interpretative revolutions are given their respective discussions: 1) the secondary products revolution of the 1981; 2) the broad spectrum revolution of 1969; and, 3) the symbolic, sensory, and sedentary revolution of 2001.

The second chapter on the *Human Revolution* is a fresh and welcome perspective, especially the modern human debates. It is dedicated to the evolution of the genus *Homo*, but focuses primarily on the evolution of *Homo sapiens* or 'anatomically modern' humans. The increasing relevance of this topic is illustrated by the special volume currently in press in the *Journal of Human Evolution* (on the Omo modern human fossil specimens and associated paleoanthropological issues). The lack of other contemporaneous examples highlights the glaring paucity in the fossil record of fossils from the late Middle Pleistocene. Despite the discussion and inclusion of some now classic figures such as the bar graph of modern human behaviors (Figure 2.2), Gamble manages to objectively summarize these topics and makes them readable. The brief but important discussion on the *sapient paradox* is particularly compelling and thought-provoking. Rather than being 'pitted' against each other, the various theories regarding the evolution of modern humans are presented in a neutral or unbiased manner. Somewhat surprisingly though, the author does not adequately emphasize the importance of certain fossil specimens from the Levant/Near East—they are still the oldest modern human fossils outside of Africa.

Perceiving human evolution from a humanistic perspective is a novel approach not explicitly taken before by others. For example, the chapter on the Human Revolution delves into the three Articles that represent the human genome, human dignity and rights, and genetic mutations. In other words, one key feature of this book is that Gamble has availed himself of a large and diverse array of information, some conventional (e.g., UNESCO's 1997 *declaration of the human genome*) and some unconventional (e.g., *Alice's Adventures in Wonderland*). At times, Gamble turns almost philosophical, especially when discussing the definition

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and boundaries of Originsland which is:

> "…a time and space that is defined by many different interests across the arts as well as the sciences and by beliefs that are variously rational and relational, commonsense and based on faith. The main identities of Originsland differ in the weighting they give to the authority bestowed by either emotion or reason." (p. 61); and,

> "Originsland is therefore my novel metaphor for a complex concept of human beginnings that has become wrapped in many interpretations. Time and geography are combined in Originsland to take us somewhere that otherwise we could neither represent nor discuss, but which we nonetheless desire" (p.70).

In Chapter Three (*Metaphors for Origins*), Gamble (p. 59) demonstrates that "Origins research is much older than an academic subject recognizable as archaeology." Using analogy and homology, he goes on to elaborate on this topic and through the guise of *Originsland*, he shows how earlier scientists and philosophers started questioning the birth of human evolution and behavior. In a sub-section entitled, *Our experience of the past as a container*, the author highlights our concepts and importance for space and time, both of which restrict us, using numerous metaphors (p. 71). Part II (*The material basis for identity*) is the main portion of the book, the 'cover story' so to speak. The section, 'Material proxies of the body,' is reminiscent of White's (1959) classic definition of culture as an *extra-somatic means of adaptation*. Chapters Four and Five in this part (*Bodies, instruments and containers* and *The accumulation and enchainment of identity*, respectively) address the very soul of human identity—how humans perceive themselves and explore relationships between people and their possessions. For example, different cultures have different ways of envisioning the way they think they are projected to other societies. An excellent example of this is provided by a table which contrasts Western and Melanesian personhoods (p. 125). This discussion is the essential background provided to usher in the section on the historical development and applications of the New and Processual Archaeologies. While some tables are useful and necessary aids to the discussions or represent important sources of reference, such as the list of 53 innovations as material proxies (p. 172), a few appear to be extraneous, such as the table showing a pure relationship between people and objects and things (p. 95), because the relevant points could have been made simply in the text. For example, Tables 4.1 and 4.2 probably could have been combined together.

Chapter Six (*Consuming and fragmenting people and things*) is dedicated to organizing the material culture and the various metaphors illustrated in the previous chapters. The role of space and various forms of its exploitation are discussed. Here, the actual behaviors are "fragmented" based on social actions and associated technological objects. A prime example is offered through the site of Saint-Germain-la-Rivière in western France. Using gross organizational categories such as 'sets' and 'nets,' Gamble categorizes the various elements from this site to highlight the intricate behavioral associations between them. Behavior and objects are projected parts of a continuum rather than representing specific temporally and culturally restricted brackets, forming a vast inter-connected and ever-expanding network of planned actions.

In Chapter Seven (*A prehistory of human technology: 3 million to 5000 years ago*), Gamble shows us a brief but tantalizing vignette of where our technological history appears to be heading. This is the *meat* of Part III, where change from instruments to containers including their hybrids, is illuminated through three distinct progressive phases or technological 'movements'—the long introduction (2.7 myr to 101 kyr), the common ground (100 to 21 kyr) and the short answer (20 to 6 kyr)—all comprising at least 53 innovations as material proxies (Table 7.4) based on J. Troeng's list. Gamble later rightly points out that the wheel and plough did not make it to this otherwise comprehensive list. The human body itself is viewed as one such container. Although the presence of stone tools is acknowledged to be at east 2.7 myr old, it is unclear why Gamble limits hominin identity through breaking stones to only 500 ka (p. 159). Surely the seeds of hominin identity were planted well before the Middle Pleistocene. Nonetheless, it is a demonstration of how comprehensive the book is that, for example, Gamble probes the various dimensions of primate technology through evolutionary and anthropological perspectives. A rich and expanding repertoire of chimpanzee behaviors (with and without tool-use), are again classified as *instruments* or *containers*. Unlike early and especially later human technology, the hallmarks of chimpanzee culture are presented as 'technological solution to environmental problems.' Gamble also explores which technologies during the various courses of human evolution were reductive (mostly in earlier prehistory), additive (mostly in later prehistory) or composite. A prominent importance is given to linking lithics to subsistence (as stressed earlier by S. Kuhn). Some key sites cited as preserving examples of hominin identity and behavior include Gona, Gesher Benot Ya'aqov, Castel Guido, Katanda, Salzgitter-Lebenstedt, Blombos, Schöningen, Königsaue, Umm et Tiel, Klasies River Mouth, and Boker Tachtit (among others).

Chapter Eight (*Did agriculture change the world?*) is the longest chapter in the book, probably rightly so. However, some sections and information (including parts of some tables and figures) do not appear to mesh well with the overall topic of this chapter. For example, in a discussion largely devoted to agriculture and its evolutionary roots, brief input also is included on early hominins (i.e., Australopithecines, early *Homo*, Neanderthals) and their group size and language, as well as related but indirect topics of children and homes. The Acheulian site of Boxgrove also receives a considerable amount of attention as well as Middle and Upper Paleolithic sites in Russia, Europe, and South Africa. In fact, the topic of agriculture and related evidence and its adaptive and evolutionary implications are not discussed outright (contrary to the title of the chapter), but within a subtle framework of homes, hearths, domestication, ecological adaptations, and general settlement

patterns. Nonetheless, the short answer to the chapter title is given as "…agriculture did not change the world…" (p. 272). Gamble ends his book with the notion of mobility and its many implications for human cultural identity.

Throughout the book, Gamble has utilized a diverse range of publications and literature; the cited sources in his opening quotes for each chapter attest to how holistic and novel is his approach. The brief but diverse viewpoints of different advocates have been presented from a neutral perspective, some through historical anecdotes, and are also a useful asset of this book. In short, Gamble has managed to combine brevity (where required) with near-comprehensiveness when it comes to the backgrounds of the most salient issues discussed. One distinct example of Gamble's bird's-eye view of cultural revolutions in prehistory, is the inclusion of chimpanzee culture, an increasingly published field of study. Just as Gamble has utilized select figures from key publications, future literature on this broad topic will no doubt include his soon-to-be-classic figures presented in this book, such as Figures 7.1 showing his three technological movements and Figure 9.1 depicting the changing landscapes of Originsland as a line graph. Many of the figures are not what one would expect in a book on human prehistory, such as William Blake's painting, *God as an architect* (p. 63), but have been included for good reason, given the associated discussions in the text. Although some figures appear to be oversimplified, such as analogy and homology applied to three different arrowhead types (p. 105), they deliver a strong and direct example of the discussion in the text. Salient information also is included in the form of tables, some of which are very suitable as quick reference guides, such as the anatomical traits of modern humans on page 37.

Gamble demonstrates that while agriculture and sedentism have played a major role in defining revolutions, Paleolithic behavioral changes were/have been rarely taken into serious account. In some sections, sociology and psychology are harmoniously intertwined within an archaeological fabric and the very social contexts of human actions and behaviors are teased out. Prehistoric symbolism is also a significant focus in some parts of this volume. The author attempts to model identity structured around material metaphors because his intention is to go beyond the traditional material fixation when making archaeological inferences. Using the fundamentals originally used by the 'movers and shakers' of the 1960's (e.g., L. Binford), Gamble takes it *several* steps further. Some sub-topics such as *The importance of children: sets and nets* and *Childscapes* are becoming increasingly important when interpreting the prehistoric record. Other sub-topics, though frequently discussed by others at varying length today, also have a place in this book. For example, Gamble holds forth on such issues as the importance of blades, pottery, and fire in human prehistory. While such aspects are elaborated upon considerably, other sections appear to have suffered from a lack of adequate attention (possibly unavoidable in some cases). For example, five sub-sections are devoted to blades and thus perhaps comparatively over-emphasized, while pottery only gets two sections. Additionally, Gamble does not explicitly highlight the importance of the *geographic* differences in chimpanzee culture (West and Central African groups vs. East African groups) and bonobos are not discussed as a distinct group, nor are Kanzi and his flintknapping abilities mentioned.

While this book will be, of course, read by most interested professionals, graduate students interested in the development of our discipline and its various theories are also encouraged to take advantage of this most timely volume. The medium size of this paperback is perfect for the topics discussed, which are showcased by an attractive cover image. The volume will, no doubt, raise awareness of the way we identify, define, and interpret the concept of change in human evolutionary studies. Different revolutions in the history of humans are not only defined by the types of change but by the actual *increments* of change. Some of the conclusions and models outlined are expected to herald a new perspective and approach to the increasing resolution of our understanding of what *really* happened in prehistory and most importantly, *why and how* it happened. In a recent review of this book, however, Dennell (2008) properly points out that only time and further research will prove if Gamble's views and conclusions regarding human prehistoric identity are accurate. For example, the human cultural and evolutionary continuum is often likened to J. Gowlett's (in press) 'gradient' perspective, rather than identifying with or defining 'unjustified or invisible' revolutions *sensu stricto*. In my humble opinion, there were neither exclusively gradual gradients nor punctuated revolutions, but probably an irregular combination of the two patterns (the "bumps" in Gamble's Figure 9.1). As human evolution accelerated and our cultures attained a growing complexity over time, so did our psyches and material identities. As an oversimplification for convenience's sake, our material proxies have always and will continue to reflect our cognitive realms.

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