BOOK REVIEW

Ancient Ocean Crossings by Stephen C. Jett. Tuscaloosa, AL: University of Alabama Press, 2017. 508 pp. \$49.94 (hardcover). ISBN 978-0-8173-1939-7.

This review should properly be prefaced with two caveats. First, I am not a specialist in the field of human origins. I am not an archaeologist or anthropologist, but a geologist who is generally unfamiliar with the literature covered and reviewed in this book as well as the issues and controversies. Second, I did not read the entire book. This review is based on a reading of the introduction and conclusion while skimming the rest of the text. For those who find it unsettling that a reviewer has not read a book in its entirety, I can only tell you that it is very difficult to find people who are willing to donate the time necessary to read and review long technical books. (I'm still waiting on *JSE* to find reviewers for books I published in 2010). Anyone who is offended by my failure to peruse this volume from front to back covers may satisfy themselves with one-hundred percent of nothing by stopping their reading at this point.

Ancient Ocean Crossings examines the evidence and arguments that human cultures in the Western Hemisphere were influenced by occasional contacts with ocean voyagers before Christopher Columbus arrived in the Americas in 1492. As the author notes, it's now conceded that Vikings established a few settlements in North America hundreds of years before Columbus, yet these colonies were short-lived and apparently had little to no influence on American Indians. The ocean crossings referred to in the text are hypothetical voyages that may have occurred in the ten thousand years before Europeans first set foot in the Americas.

There are some striking and unexplained cultural similarities between native peoples of the Old World and the Americas. These include "technical complexities of weaving and dyeing that are shared between southern Asia and the Central Andean region of South America," "stepped temple pyramids that are oriented to the cardinal directions in both Mesoamerica and Cambodia," and the belief "in both China and Mesoamerica, that raw jade can be discovered in nature owing to 'exhalations' coming from the stone" (p. 5).

The two schools of thought regarding the origin of these similarities

are diffusionism and independent inventionism. Ancient Ocean Crossings is largely devoted to making the argument for the minority viewpoint of diffusionism. Diffusionists argue that it was possible for ideas and technology to diffuse between the hemi-spheres by pre-Columbian con-tact through ocean crossings. The text is divided into five parts. The first reviews "intellectual obstacles to the notion of early transoceanic contacts" (pp. 13–142). The second. third. and fourth sections treat means, motives, and opportunities for ocean crossings (pp. 143-356). The fifth section is a brief conclusion (pp. 357-361).

Having presented the arguments and evidence, both



pro and con, the author is entitled to draw a conclusion. He concludes that "crossings occurred," and that "the sum of the evidence" is definitive (p. 359). The idea that the pre-Columbian peoples of the Eastern and Western Hemispheres "were hermetically sealed off" from each other rests "upon overly simple, insufficiently tested suppositions and incompletely thought-through conclusions concerning both physical geography and human capabilities" (p. 357).

The question of whether or not ancient ocean crossings occurred is a reminder that evidence regarding human origins is scant. Important questions remain poorly resolved. The author of *Ancient Ocean Crossings* appears to implicitly accept the old idea that the Americas were first settled only in late Pleistocene time by migration across the Bering Strait (pp. 2–3). Yet as I have pointed out, there is a plethora of evidence suggesting a human presence in the Western Hemisphere as early as 200,000 years before present (Deming 2013). This was corroborated a few months ago when human artifacts 130,000 years old were found at the Cerutti Mastodon site in California (Holen et al. 2017).

Another example is provided by recent finds from North Africa. Fossils from a single site in Morocco this year obliterated the idea that Homo

sapiens evolved in East Africa about 200,000 years ago. Excavations at the Jebel Irhoud site indicate that modern humans were in North Africa as early as 315,000 years before present (Stringer & Galway-Witham 2017). If fossils and artifacts from lone sites can completely rewrite our knowledge of human history and evolution, surely our theoretical framework rests upon shaky foundations.

The entire issue of ancient ocean crossings is also a case study in how science works. Rather than adopt Chamberlin's idealized model of multiple working hypotheses (1890), most scientists are narrowly focused specialists who operate within the realm of what Thomas Kuhn called "normal science" (Kuhn 1996:10). By the term "normal science," Kuhn meant research based upon an existing intellectual framework. Most researchers see their work as the "further articulation and specification" of the prevailing paradigm (Kuhn 1996:23). Thus an archaeologist wedded to the idea that cultural novelties arise from independent inventionism will tend to automatically filter out and reject all evidence of cultural diffusionism. This mindset quickly evolves into a self-fulfilling prophecy whereby the diffusionist theory is rejected for lack of evidence.

In summary, *Ancient Ocean Crossings* is a well-written and comprehensive review of an important issue in human origins. The author appears to have an in-depth and comprehensive knowledge of the pertinent scholarly literature. The text contains 35 pages of endnotes and the bibliography occupies 61 pages. This book is highly recommended to anyone interested in the history of the human race.

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