

## Book Review

**Domestic Animals and Stability in Pre-State Farming Societies,**  
by Carol Raish. B.A.R. Internat. Series no. 579. Hadrian Books, 122 Bamburg  
Road, Oxford, OX 27 BP, England. 89 pp., 3 figures, 7 tables. 1992

L. R. Binford encouraged Carol Raish to do a Ph. D. thesis at the University of New Mexico to study a pattern from a generalist approach. Raish studied 11 archaeological sequences with large domestic animals and five without. For each sequence, she determined the time at which village farming (tribal level) began, and the time at which the state level was attained. She subtracted the two dates to determine the time duration required for this increase in complexity. Her Table 2 has the following durations in years: Central Europe 6200, Southeast Europe 6200, Greece 5000, Anatolia 4600, southern Britain 4000, northern Mesopotamia 3660, Peru 3650, northern China 3150, Pakistan 3030, Upper Egypt 2400, southern Mesopotamia 3660, Tehuacan Valley 1750, Basin of Mexico 1400, Valley of Oaxaca 1400, Cahokia 1073, Chaco Canyon 800. She takes the conservative view that Cahokia did not quite reach the state level before collapsing around A.D. 1350-1400. Chaco Canyon was marginal in terms of growing season and rainfall, and was abandoned about A.D. 1300. Peru is the only New World area with large domestic animals.

The pre-state farming sequence is shorter in the New World than the Old. This pattern has never been examined before.

Her Group N2 (11 areas, including Peru) had large animals, and Group N1 (five New World areas) did not. There is no overlap in durations between the two groups. In the null hypothesis, the group separation is artificial, and domestication of large animals is irrelevant to the time required. Statistical analysis rejects the null hypothesis. She theoretically proves not only that large domestic animals affect the time required to increase complexity to the state level, but that it works in a direction contrary to intuition: animals slow it down! Raish remarks that factors other than large domestic animals likely affect the time span, but proves that animals are a contributing factor to the extent of slowing it down.

She concludes that animals give stability and security. Without them, the food base is unstable, making society as a whole unstable. A society that is dependent on horticulture and has no sheep, cattle, goats, pigs, or camelids apparently compensates by increasing complexity toward the state level rapidly. In contrast to lives of big men and dates of battles, this stuff is the meat of history!

Collapse of Indian sites and cultures reminds me of wasp nests in a forest. When one ends, the forest is unchanged. The difference is that the new sites and cultures start from a higher developmental base. It is difficult to imagine serious discussions of causes of collapse of sites or cultures ignoring this study.

When Binford speaks, I listen. This book pulls together a lot of important data on 16 of the most interesting archaeological areas. It strikes me as a uniquely valuable study of the Neolithic Revolution. Every H.A.S. member would enjoy it and find it provocative. The library was able to borrow a copy for me from Texas A&M; after reading it, I asked the Friends of Fondren to try to get a copy for Rice. It is a shame that such a great book is so hard to find!

Thomas C. Williams