

The Capsian palaeoeconomy in the Maghreb

Abstract

Capsian groups were hunter-gatherers; there is no evidence that they practiced agriculture. Some very late Capsian groups (called Neolithic of Capsian Tradition) appear to have practiced transhumant pastoralism with domestic sheep and goat which were not derived from species native to the Maghreb. In general, the Capsian diet included several species of land snails in addition to *Bos primigenius*, *Equus mauritanicus*, *Alcelaphus buselaphus*, *Gazella* spp., and lagomorphs. Almost nothing is known of the plants which were used and eaten. Capsian settlement patterns have been variously described as sedentary, semi-sedentary and nomadic on largely circumstantial evidence.

Research undertaken in the Bahiret Télijdjène (Wilaya de Tébessa, Algeria) since 1972 has demonstrated the following:

1. At least two major periods of Capsian occupation are present: an earlier one (ca. 10,000 to 8,000 B.P.) and a later one (ca. 8,000 to at least 6,000 B.P.)

2. Environmental conditions during the earlier period were more humid and became increasingly arid at about 8,000 B.P. While there is evidence for subsequent amelioration, it seems the landscape did not recover sufficiently to support large herds of herbivores.

3. At the site of Ain Misteheyia this change at ca. 8,000 B.P. is marked by the following trends:

- reduced frequencies of larger land snails (*Helix melanostoma*) and increased frequencies of smaller, more arid-adapted species (*Helicella sitifensis*, *Leucochroa candidissima*);
- reduced frequencies of larger herbivores (*Bos*, *Equus*) and increased frequencies of smaller, more arid-adapted species (*Gazella*, lagomorphs) although *Alcelaphus* remains the most abundant species;
- reduction in the overall size of retouched tools as well as change in the frequencies of certain tool classes – burins backed blades and endscrapers are

common in the earlier assemblage, while notches, denticulates and geometric microliths are common in the later one;

- changes in the granulometry and geochemistry of the deposits consonant with an hypothesis of (at least local) environmental change.

4. At the site of Kef Zoura D, two assemblages are also present:

- an earlier one (ca. 9,000 B.P. and known so far only from the *in situ* deposits on the slope in front of the shelter) which contains abundant and large burins and backed blades in association with a fauna of large herbivores;
- a later one (ca. 6,000 B.P. known so far only from within the shelter) which contains abundant notches, denticulates and geometric microliths in association with a fauna composed almost exclusively of *Gazella* and lagomorphs.

5. Taphonomical studies of the deposits at both sites leads us to conclude that they were not occupied year-round, but rather for short periods at, perhaps, widely spaced intervals. We conclude that most, if not all, Capsian sites do not represent sedentary occupations, a reconstruction which agrees with modern ethnographic data on hunter-gatherers in semi-arid environments.

6. Based on these two sites we suggest that:

- Capsian assemblages with larger tools and high frequencies of burins (Typical Capsian) should be associated with a fauna composed primarily of larger herbivores;
- Capsian assemblages with smaller tools and high frequencies of notches, denticulates and geometric microliths (Upper Capsian) should be associated with a fauna composed primarily of smaller mammals;
- when both kinds of Capsian occur in the same site, “Typical” should be stratigraphically earlier than “Upper”.

We also suggest that Capsian groups were small, mobile, and that their economy was based on a widely spaced seasonal round (*i.e.* one which included several environmental regions), and that this constituted a very flexible economic pattern which was not strongly affected by localized environmental changes during the Holocene in the Maghreb.

We conclude that, on present evidence, food production was a late (post 5,000 B.P.) development in the Maghreb because: (a) the Capsian palaeoeconomy was flexible and thus permitted long-term stability and continuity; and (b) the apparent absence of a suite of sufficiently nutritious plants (e.g. wheats and barley) did not permit the type of sedentary occupation which is a necessary adjunct to an agricultural mode of production.

Publications resulting from this research

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- Lubell, D., F. A. Hassan, A. Gautier and J. L. Ballais. 1976. The Capsian escargotières. *Science* 191 : 910 - 920.
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- In press. *The prehistoric cultural ecology of Capsian escargotieres, Part II: Report on investigations conducted during 1976 in the Bahiret Télidjène, Tébessa Wilaya, Algeria.* *Libyca.*
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