
(a) In what way is Silverman et al a better test of the hypothesis than New et al, and in what way is New et al (‘Farmers Market’ study) a better test than Silverman et al?

The strength of Silverman et al is their cross-cultural testing (vs. testing in a single setting like New et al), thus showing that their results had universality or generality, whereas the strength of New et al was its relatively realistic ‘field’ test, kind of a modern simulation of the EEA gathering situation (vs. the simple paper-&-pencil test of Silverman et al).

(b) Evolutionary psychologist and human behavioral ecologists take different approaches to measuring adaptation. Which approach is taken by these two studies? Explain.

EPs measure adaptation in terms of ‘design’ whereas BEs measure adaptation in terms of fitness. Both of the present studies take the EP approach, hypothesizing that male and female spatial abilities evolved in the EEA, where there was a division of labor between the two sexes, women gathering, males hunting. Thus females and males should show different spatial adaptations, and (the two studies differ a little bit on this) females should be better at location memory and males better at dead reckoning.
2. Holden & Mace 2003 examined the occurrence of matriliney and patriliney in Bantu-speaking societies.

(a) The table shows the occurrence of matriliney and patriliney in 61 societies (it also ignores 7 cases of mixed systems) and also the presence or absence of cattle in these societies. With that information you might conclude that matriliney tends to be associated with the absence of cattle. **Question:** Why do the authors use the phylogenetic tree of Bantu languages in their analysis? – what further conclusion are they able to draw by using this method?

*They are able to say that the most common historical (evolutionary) transition was when a matrilineal society gained cattle it would then usually become a patrilineal society.*

*Have to say more than you can see in the table, that matriliney and cattle are seldom found together.*

(b) Their evolutionary explanation (which they give afterwards rather than up front as hypotheses) is in terms of two characteristics of a particular society: **potential for polygyny** and **uncertainty of paternity**. For which of these two do they provide a stronger measure, and what is that measure?

*They actually measure PFP – it is when one of these societies has cattle vs. when it doesn’t – cattle can be given as brideweight to get a second wife. They do not measure UOP at all – they talk about it, have some interesting theory, but they do not measure it, and it does not appear as a variable in their analyses (whereas cattle and matriliney/patriliney of course do).*

*Many of you confused the issue of which variable is more important with the issue of which variable do they do a better job of measuring; this question is about the second issue, not the first. If Holden & Mace could actually measure UOP, they might be able to explain why some societies without cattle are matrilineal (high UOP?) and some are patrilineal (low UOP?).*