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Dowry and Female Competition: A Reply to Dickemann

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We thank Mildred Dickemann for her attention to our recent article (Gaulin and Boster 1990) on dowry. Following a brief reitera-

tion of our explanatory model, we will try to highlight both the similarities and the differences between our viewpoint and hers.

Where marriage transactions involve wealth transfers by only one sex, they signal a sex bias in the intensity of competition for marriage partners: competition is stronger among (or on behalf of) members of the sex that pays (Gaulin and Boster 1990). Thus the common occurrence of bridewealth in polygynous societies indicates disproportionate competition for wives, an unsurprising result, given the linkage of male-male competition with polygyny in mammals generally (Daly and Wilson 1983). Similarly, where dowry occurs, it indicates disproportionate competition for husbands. But why do any societies deviate from the mammalian pattern of disproportionate male-male competition? We argue that women should compete for husbands if two conditions coincide: (1) the resources relevant to reproduction are unevenly distributed among adult males, and (2) the polygyny expected in such cases (Verner and Willson 1966; Orians 1969) is prevented by social prescription. Under this combination of conditions, the reproductive advantage of being mated to a man with a large resource pool would not be diluted by his acquisition of additional wives. This advantage is worth competing for. These two conditions hold only in nonpolygynous, stratified societies, and dowry is essentially limited to such societies, supporting our model (Gaulin and Boster 1990).

Dickemann apparently agrees with us that dowry is a manifestation of competition, as indicated by her own discussions of “hypergynous dowry societies” (Dickemann 1979a) and “dowry competition” (Dickemann 1981). A critical difference in our perspectives is that she claims a positive association between dowry and polygyny (e.g., Dickemann 1979b). As reviewed above, our model predicts and our statistical analyses show that dowry and polygyny are negatively associated.

Nevertheless, we agree with Dickemann that, in any such reproductive competition, the parents (and to a lesser extent more distant kin) are expected to take an active role in amassing the required dowry and in negotiating the marriage contract. Dickemann claims that our title and argumentation are inappropriate because they overemphasize the woman’s role in actively choosing and competing for a partner. In fact, we go to some length to acknowledge that these matters may be largely in the hands of parents. We phrase our introduction in terms of whether *parental* resources should flow to bridewealth or

dowry. The explicit point of the second paragraph under our heading "The Model: Dowry as Female Competition" (1990:995) is to indicate the often dominant role of parents in negotiating marriages and associated payments. Moreover, we note (1990:1002–1003) that dowry may be the particular manifestation of "female competition" most likely to appear where female autonomy is low. Thus, the question of whether dowry represents competition *by* females or *on behalf of* females may be central to issues such as female autonomy, but it is irrelevant to the argument presented in our article.

One point, clear in our article, must be reiterated because it is made somewhat ambiguous by Dickemann's remarks: we did *no* coding. Every one of our analyses draws on a well-known cross-cultural data base previously coded by others (Murdock 1986; Murdock and White 1969). We agree with Dickemann that there are errors in these cross-cultural data sets, but would such data errors produce spurious support for our hypothesis? Our model predicts that across societies certain traits should co-occur, in particular that dowry should be absent except in nonpolygynous, stratified societies. If there are random errors in the data, they would tend to obscure this pattern and thus make the hypothesis more difficult to demonstrate (Kobben 1967). Only if a society that is miscoded as having dowry is also likely to be miscoded as being stratified *and* miscoded as being nonpolygynous could errors in the data base artificially aid the hypothesis. Because all the data were coded by scholars unfamiliar with our hypothesis, such a (complex) bias seems unlikely.

Logical argument aside, we directly demonstrate how actual coding errors affect our model's performance (1990:table 5). Schlegel and Eloul (1987; Schlegel 1988) recently corrected errors in marriage transaction codes for the 186-society Standard Cross-Cultural Sample (SCCS; Murdock and White 1969). This allowed a comparison of our model's performance on the uncorrected and on the corrected versions of the sample. The model's predictions are inaccurate for 13 (7.0%) of the 186 SCCS societies in the uncorrected sample, but the inaccuracy rate is nearly halved to 7 (3.8%) in the corrected sample. As expected, errors hurt rather than help the model.

Dickemann suggests that not only are there errors but there are also systematic biases in the data sets. In particular, she argues that many of the ethnographies on which they draw are classist, concentrating their descriptions and analyses on the upper social strata. In this regard, she notes that some societies

practicing dowry in the upper classes may practice bride-price in the lower, a conclusion also reached by other authorities (e.g., Tambiah 1989). The relevant question is, would such an ethnographic bias affect the testing of our model? The answer is no, as long as each ethnographer's bias was consistent. Only if ethnographers *regularly* erred by associating the marital form of one class with the marriage transactions of another would the data be problematic. Moreover, assuming that Dickemann and Tambiah are correct, the occurrence of dowry in the upper classes and bride-wealth in the lower represents the sort of detailed within-society data we call for (1990:1002–1003), and it supports our hypothesis. Only high-status (resource-rich) men should warrant female-female competition such as dowry.

In sum, we have offered an a priori causal model of dowry derived from well-known behavioral ecological principles. Tests of the model using two independently coded data sets have provided overwhelming support: dowry is tightly linked to the conjunction of stratification and nonpolygynous marriage. The model may require further refinement, but a model that yields correct predictions for over 96% of the 186 SCCS societies is unlikely to be wholly wrong. Beyond providing a coherent functional explanation for dowry, our analysis offers a framework for understanding the unique dynamics of sexual strategies, especially the expanded scope of female-female competition in stratified, nonpolygynous societies such as our own.

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Polygyny: Further Factors from Mamprusi

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White and Burton have given us an interesting and useful picture of the statistical correlation of some social and ecological contexts with the institution of polygyny ("Causes of Polygyny: Ecology, Economy, Kinship, and Warfare," *AA* 90:871–887, 1988). In checking our fieldwork data on the Mamprusi of northern Ghana against this model we find some supportive relations, but also some factors in Mamprusi polygyny that are hardly acknowledged by White and Burton.¹

With regard to the proposed variables (see White and Burton, pp. 876–878), Mamprusi marriage aligns as follows:

Cultural role of polygyny, 5. Most men at some time (see below) have more than one wife simultaneously.

Fraternal Interest Groups

Male-centered residence, 3 or 2. Wife moves to husband's residence, which is usually in the household headed by husband's Fa, FaBro, or EBro if the husband is not a householder.

Bridewealth, 2.5. Although the Mamprusi pride themselves on not exacting heavy, fixed bridewealth payments in cattle like their northern neighbors (Drucker Brown 1975), the open-ended nature of the brideservice requirements² means that a son-in-law ends up having made a substantial economic contribution to the wife's family, particularly in raising work parties for housebuilding and farming.

Warfare, 1. Warfare has not been present for three generations, and accounts of former warfare (Drucker Brown 1975, 1981; T. Naden 1988) do not suggest that it was either frequent or likely to have affected sex ratios (population approximately 60,000 in 1960).

Environmental Characteristics

Climate zone, 3. However, lateritic soils and erratic distribution of rainfall and drainage detract from environmental quality. Homogeneous on the macro-scale of White and Burton, though farmers often find difficulties in moving to land that has only fairly small differences from that with which they are familiar. There is still unfarmed bush land to move into, which is very important in this region (Hilton 1965; cf. Fortes 1945, 1949).

Subsistence Variables

Plow. The plow was not in use at White and Burton's 1967 deadline; we have observed its introduction and adoption into general use since 1973. In this modern period the plow does not appear to be an impediment to expansion, as tackle can be fairly simply moved by motor vehicles or oxcarts.

Female contributions to subsistence and agriculture. These seem to be the least satisfactory of the measures proposed. In spite of the (weakish) correlations between raters cited, it is not clear how readily these factors can be quantified (how much is "much"?), at least in the absence of studies specifically focusing on this question (Fogelberg 1981). In any case, we propose below that indispensability is more significant than quantity in these areas.

It will be seen that Mamprusi society matches fairly well with the statistical picture of other cultures with a polygynous norm as presented by White and Burton. There are, however, at least two factors that bulk large in