## THE SARDINIAN CONDAGHI: NEGLECTED EVIDENCE FOR MEDIAEVAL SEX RATIOS

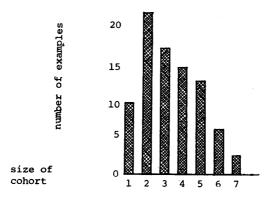
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In recent years, various scholars, working with different techniques and in different disciplines, have grappled with the elusive problem of "missing" females in mediaeval documents of various sorts, particularly documents which purport to be inventories of peasant households. Understandably, western scholars have a certain measure of difficulty in accepting the suggestion that western Christian societies practised female infanticide; even though we know that some mediaeval parents suffocated, exposed, drowned, or otherwise disposed of unwanted children, it seems to be much more comforting to ignore attested incidents of infanticide and to explain abnormal sex ratios in extant documents as being the product of erroneous gathering or recording of data. It is certainly likely that texts, the compilers of which were more concerned with recording land holdings than with demographic data, contain errors; but it does not follow that those errors can be used as an argument against the hypothesis that female infanticide was being practised by the peasants living on those estates. At best, we have been up to now forced to conclude non liquet.

One set of texts which include data pertinent to the discussion has not, it seems, been previously noted. These are the Sardinian *condaghi*, similar in content to the more familiar cartularies, i.e., they are the registers of various monasteries in which are recorded the acquisition or alienation of property through purchase, donation, or exchange. Four *condaghi* are extant,

composed of material dating from the early 1100's to no later than the middle of the thirteenth century. Two of the four, CSPS and CSMB, contain detailed information about the children of slave couples, compiled as a record of their division among two or more owners, one of which was the monastery for which the condaghe was compiled. The offspring cohorts recorded are generally those which arrived safely at adulthood; indeed, many of the offspring have children of their own. Hence, it must be emphasized that what follows deals only with survivors: "natural" infant mortality and infertility, for example, cannot be divined from these texts. Each of the two condaghi will be considered separately.

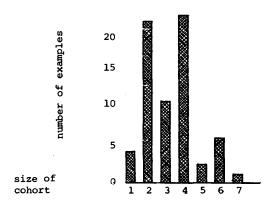
There are eighty-four offspring cohorts in CSPS, ranging in size from one to seven. The graph illustrates the number of examples of each cohort's size:



The total number of offspring is 280 individuals, or 3.3 children for each parental couple; the average familial unit is therefore 5.3, with 63% of the family units composed of from four to six individuals. Most striking is the fact that 140 of the offspring are females, yielding a sex ratio of 100. Twenty families had three or more male offspring; only two of these twenty had no daughters. Collectively, the group averaged 1.3 daughters each. Fifteen families had three or more daughters; only two of these had no sons. Collectively, this group had 1.4 sons each. Families with three or more sons had an average of 3.5 sons (hence, 4.8 offspring), and families with three or more daughters had 3.4 daughters (hence, 4.8 offspring). On the other hand, of the twenty-one couples with two offspring, nine had two daughters and five had two sons. This group had an average of 1.2 daughters, but only 0.8 sons each,

figures which stand in sharp contrast with those of the other condaghe.

There are sixty-nine offspring cohorts in CSMB, also ranging in size from one to seven, though the distribution is somewhat different. The graph illustrates the number of examples of each cohort's size:



Here, 81% of the family units are composed of four to six individuals. There is a total of 226 offspring or 3.3 per parental couple. The average size of the familial unit is therefore the same in both texts. In contrast with CSPS, however, there are only ninety-seven female offspring, yielding a sex ratio of 133. Even when we add several groups of offspring recorded apart from familial units (CSMB 83, 167, 177, 205), there are 184 male and 140 female offspring, for a sex ratio of 131. Five of the nineteen families with three or more sons had no daughters, while the group had an average of 1.3 daughters each. Only two of the eleven families with three or more daughters had no sons; this group averaged 1.8 sons per couple. Families with three or more daughters had 3.4 sons each (hence, 4.7 offspring) and families with three or more daughters had 3.4 daughters each (hence, 5.2 offspring). Of the twenty-two couples with two children, only three had two daughters, while nine had two sons. This group averaged 1.3 sons each, but only 0.7 daughters: a sex ratio of 175.

Curiously, both *condaghi* show a nearly identical sex imbalance in families with four offspring; in *CSPS*, 56.6% are males, in *CSMB* 57.6%. In other words, the sex ratios among offspring cohorts of four are 131 and 135 respectively, in spite of the fact that the overall ratios are so different. Also curiously, *CSPS* has a sex ratio of 113 in families with five or more offspring, while *CSMB* has 100. As a final observation, 12% of the offspring cohorts in *CSPS* 

are all male and 21% are all female. In CSMB, 26% are males only, 7% females only.

It is certainly quite likely that some of the anomalies and curiosities are due to the relative paucity of data. However, there is one important difference between the territories encompassed by these two condaghi: although both churches possessed agricultural lands of every sort, the territory of S. Maria di Bonarcado, including (among others) the territories of modern Austis and Neoneli (situated at 737 and 555 metres above sea level), comprised much more pastoral land where first and second born sons were more likely to be reared than first or second born daughters were. Although the importance of women and women's works (the *Innenwirtschaft*) was recognized, <sup>3</sup> apprentice shepherds were much more in immediate demand than were those who were believed to be less able to stand the rigours and dangers of shepherding. 4 In fact, four texts provide specific data for Austis (CSMB 82, 100, 151, 177), and two others give specific data for the broader (but still largely pastoral) zone of Barbaria (CSMB 83, 155), modern Barbagia. In the texts dealing with Austis there are sixty-nine male offspring and thirty-nine females, a sex ratio of 177; combining Austis and Barbaria, there are ninety-three males and fiftysix females, a sex ratio of 166. It is also striking that two-thirds of the male-only offspring cohorts in the entire condaghe are from these two pastoral zones. Subtracting the pastoral figures from the total, the more purely agricultural zones have a more nearly "normal" sex ratio of 108, Although other possible explanations for these phenomena could be adduced -- including attested variations in life expectancies for men and women and a high level of mortality for young women in their child-bearing years 5 -- the one which springs most readily to mind is that of female infanticide, once again deduced rather than demonstrated.

However, because these condaghi record inventories of property to be divided between or among different owners, we cannot assume or even seriously suggest that the missing females are merely unreported, either qua female or because they have wandered off or been transferred elsewhere, particularly in light of the fact that they are missing in one ecological zone where pastoralism was and is the dominant economic strategy and are not missing in agricultural zones. Although it is possible that parturition mortality is higher in the mountains than in the plains, I can find no nineteenth- or early twentieth-century evidence to sustain that hypothesis. One implication of this note is not so much that female infanticide may have been practised among

mediaeval Sardinian pastoralists, but that it is now necessary to return to previously studied texts (e.g., the Farfa dossier) to see if different ecological zones elsewhere in mediaeval Europe yield different figures, as they do in Sardinia.

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## NOTES

1 For infanticide, see especially Richard C. Trexler, "Infanticide in Florence: New Sources and First Results," History of Childhood Quarterly 1 (1974) 98-116, and "The Foundlings of Florence, 1395-1455," ibid., 259-84; William L. Langer, "Infanticide: a Historical Survey," ibid., 353-66; Barbara A. Kellum, "Infanticide in England in the Later Middle Ages," ibid., 367-88; R.H. Helmholz, "Infanticide in the Province of Canterbury during the Fifteenth Century," ibid. 2 (1975) 379-90; Emily R. Coleman, "L'infanticide dans le haute moyen âge," Annales: ESC 29 (1974) 315-35, reprinted (in English) in Susan Mosher Stuard, ed., Women in Medieval Society (Philadelphia 1976) 47-70. Passing over Eskimos and other well-documented non-western societies, observe the matter of fact observation of John K. Fairbank, Chinabound: A Fifty-Year Memoir (New York 1982) 66: "My chief occupation in Shanghai was to read the North China Herald for 1850-54 but my thesis seemed remarkably superficial to Chinese life. The Shanghai Municipal Council's sanitation trucks still picked up dead baby girls from the streets every morning because female infanticide was a seemingly unavoidable necessity for many of the poor, and in the city they had to rely on the municipal services."

The standard editions of the texts, each with excellent introductions of wide-ranging scope, are: G. Bonazzi, Il condaghe di San Pietro di Silki (Sassari 1900) (CSPS); R. Di Tucci, "Il condaghe di San Michele di Salvennor," Archivio storico Sardo 8 (1912) 247-337 (CSMS); E. Besta and A. Solmi, I condaghi di San Nicola di Trullas e di Santa Maria di Bonarcado (Milan 1937) (CSNT and CSMB). A. Boscolo, La Sardegna bizantina e alto-giudicale (Sassari 1978) 157-88 (with bibliographical notes on 202-4), provides a useful intro-

duction to the background; more recently O. Schena has examined "Le scritture del condaghe di S. Maria di Bonarcado" in Miscellanea di studi medioevali sardo-catalani (Cagliari 1981) 45-73, and Gloria Borghini has produced a valuable tesi di laurea for the Università degli Studi di Pisa, anno accademico 1979/80, I condaghi sardi e la storia agraria della Sardegna giudicale.

- <sup>3</sup> Cf. *CSMB* 131: "Mulieres moiant et cogant et purgent et sabunent et filent et tessant et, in tempus de merare, mersent omnia lunis, sas ki non ant aere genezu donnigu" ("women should grind, gather, clean, wash, spin, weave, and, at harvest time, harvest every Monday, those who are not destined to marry nobles").
- For an evocative, autobiographical account of a shepherd's life, see Gavino Ledda, Padre Padrone: L'educazione di un pastore (Milano 1975).
- <sup>5</sup> See David Herlihy, "Life Expectancies for Women in Medieval Society," in Rosmarie Thee Morewedge, ed., *The Role of Women in the Middle Ages* (Albany 1975) 1-22. Perhaps improvements in diet had not yet reached, or were not possible in, the Sardinian uplands; cf. V. Bullough and C. Campbell, "Female Longevity and Diet in the Middle Ages," *Speculum* 55 (1980) 317-25.
- <sup>6</sup> For the Farfa dossier and references to earlier studies, see Richard R. Ring, "Early Medieval Peasant Households in Central Italy," *Journal of Family History* 4 (1979) 2-25.