

Accounting Historians Notebook

Volume 26
Number 2 October 2003

Article 5

October 2003

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Recommended Citation

Oldroyd, David (2003) "Feminine context of prehistoric notation systems," *Accounting Historians Notebook*: Vol. 26 : No. 2 , Article 5.

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FEMININE CONTEXT OF PREHISTORIC NOTATION SYSTEMS

by
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A radical school of modern feminism exists which believes in the existence of a time in prehistory, before the “male take-over,” when society was universally matriarchal, and women enjoyed a more central role in society than men. The idea of an ancient matriarchy first gained ground in the 19th century amongst evolutionary theorists, such as Engels. He linked the oppression of women to the rise of the state, which he said had resulted in the separation of private and public domains, the activities of women being relegated to the private service of their husbands (Leacock, 1978, p. 255; Siverblatt, 1991, pp. 141, 144-146). Another theory is that matriarchal society was swept aside during the Neolithic by patriarchal, hierarchical invaders from northern Europe (Stone, 1976, p. 20; Tringham, 1991, pp. 96-97; Grindell, 1993, pp. 124-125). Supporters of the matriarchal thesis maintain that mathematics, counting and calculation were originally female preserves that were linked to fertility through the menstrual cycle and the motions of the moon. They argue that “math” is derived from the Sanskrit “matra” or the Greek “meter,” both of which mean “mother” and “measurement.” Therefore, mathematics literally

means “mother wisdom,” and ancient peoples regarded it as one of the particular gifts of the mother-goddess to her daughters (Walker, 1983, pp. 684-5). The paper seeks to explore this claim, that in the beginning counting and calculation were the preserves of women.

The significance of counting and calculation runs deep. According to Walker (1983, p. ix), the most fundamental right that was denied to women by patriarchy was the right to control their own motherhood. Before the male “take-over” women were in control of reproduction, and tracking the menstrual cycle through the lunar phases played a vital part (*ibid.*, pp. 645, 670). Two explanations have been advanced why these charts were significant in an age before the advent of monogamous marriage when “every child’s maternity was certain, but its paternity debatable and irrelevant” (Graves, 1958, p. 387). First, as is still the case in some cultures today, people in ancient pre-agricultural societies, unable to observe the behaviour of domesticated animals, did not appreciate the link between sex and reproduction, believing instead menstruation to be the one significant factor (Stone, 1976, pp. 11-12; Thompson, 1981, p. 127; Walker 1983, p. 680).

Tracking the menstrual cycle through the lunar calendar was therefore regarded as a magical art that enabled women to give birth. Thus Walker (1983, p. 685) maintained that “women did temporal and spatial calculations for so long” that, according to Hindu mythology, “men once thought that women were able to give birth because they had superior skill in measuring and figuring.” The second possibility is that women did realise the relationship between menstruation, sex and conception, but men did not. Therefore, keeping track of the lunar phases allowed women to decide when to conceive and by whom (*ibid.*, p. 681). In either case, this was a special kind of secret knowledge as control of reproduction helped ensure that early society developed along matriarchal lines, with the matriarchal group in the centre and the men on the periphery.

Most of the evidence that is advanced in support of these claims consists of associations in ancient mythology between writing/counting and female deities. In Hindu mythology, for instance, it was a goddess who gave birth to “the year, the month, the season, the lunar day, the inch, the second, and other measurements” (O’Flaherty, 1975, p. 49). Similarly, the Egyptian goddess, Seshat, invented writing, measurements, calculation and record-keeping (Walker, 1983, p. 909). The fact that throughout most of Egyptian

history her husband, the god Thoth, was believed to have been the true inventor (Wallis Budge, 1914, pp. 1-2) is taken as evidence of a male conspiracy to de-feminise the pantheon following the take-over of society by men (Graves, 1958, p. 387; Walker, 1983, pp. 909-910, 996). However, the trouble with mythology is its unreliability as a source of historical evidence. Aside from the; difficulties in establishing the chronology of stories that have been passed down over thousands of years, there is also the problem of interpreting their true meaning. As Ehrenberg (1989, p. 23) observed, myths serve to explain phenomena in terms that are understandable to a society. Women alone give birth to children. Therefore, it is not surprising that in some myths the creation of writing and counting is seen as a goddess giving birth, but this does not necessarily mean that in reality women fulfilled these roles. Moreover, by the time that writing emerged in the Near East at the end of the 4th millennium BC society was already patriarchal, and organised on strict hierarchical lines (Ehrenberg, 1989, p. 63). The hierarchical structure of society is illustrated by a list of professions dating from about 3100 BC. The titles were ordered in sequence of rank, starting with the king, followed by the leaders of justice, the city, the plough and barley, then the priests, wise-men and other court officials, and finally the

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lower-ranking priests, gardeners, cooks and craftsmen (Nissen et al., 1993, pp. 110-11). Such a “pecking order” is foreign to the notion of a matriarchal society, which is usually portrayed as having been egalitarian (Walker, 1993, p. 687). It follows that if matriarchal society ever existed, this situation must have predated the existence of written records, which makes corroboration problematical.

Although there are no societies currently in existence that could be described as “matriarchal,” primitive cultures do exist where women and men enjoy equal status (Ehrenberg, p. 65). Most authors agree that this is characteristic of pre-farming communities, despite Shennan’s (1996, p. 367) assertion that notions of forager egalitarianism are “much overdone” (Leacock, 1978, p. 248; Dahlberg, 1981, pp. 16-20; Schmandt-Besserat, 1992, p. 170). Is there any evidence of an ancient matriarchy amongst hunter-gatherer communities? One of the central tenets of the matriarchal claims is that women controlled the childbearing, nurturing and productive aspects of society, and that counting the lunar phases played a vital part. It is therefore remarkable that such lunar notations, carved on a variety of artefacts from the Upper Palaeolithic (c.30000-10000 BC), may well have survived.

It was Marshack (1972, pp. 31, 41, 57, 109, 293, 36) who first suggested that lunar notations existed

in the Palaeolithic as a result of a microscopic examination of a wide range of bones and stones from sites as dispersed as the Pyrenees and Russian steppes. He concluded that many of the sequences of scratches and marks were “cognitive, time-factored, and time-factoring notations” based on the lunar count. One of the oldest examples is a small, ovoid shaped piece of bone from the Dordogne region of France, recovered from layers from about 32,000 to 30,000 BC. Both faces of the bone were incised with a series of lines and dots that corresponded to a near-perfect lunar phasing and breakdown (ibid., p. 53). Marshack (1972, p. 54) maintained that this record was compiled over a length of time to give the preparer “a visual record and recall of the seasons and moons of the past year.”

According to Schmandt-Besserat (1992, p. 160), these “tallies” were a cognitive step forward as they enabled “concrete information” to be translated into “abstract markings” and knowledge to be separated from “the knower.” Their interpretation as lunar almanacs was challenged by d’Errico (1989) on the grounds that the incisions were produced in a single operation, and could not therefore represent the observations of an extended period of time. White’s (1982) work on engraving tools came to the same conclusion. Marshack (1991), however, reasserted his earlier claims and presented new evidence that the

lunar notations became more sophisticated as the Upper Palaeolithic progressed. Both Marshack and d'Errico now agree that at least some of the inscriptions were notational and not merely decorative (Marshack, 1995, 1996). D'Errico (1995, pp. 164, 196, 200) described them as "artificial memory systems" that were capable of recording different categories of information "well before the system of tokens evoked by Schmandt-Besserat," and conceded that the notion of lunar calendars is in fact possible, albeit ones that were "planned in advance, not updated by accumulating marks over time."

The uses of such records are uncertain. One possibility would have been to synchronise sexual activity and hunting expeditions with the phases of the moon and menstrual cycle, which has been observed in some modern-day cultures (Power and Watts, 1996, pp. 313, 322). Marshack (1972, p. 91) suggested a number of other possible uses, both practical and ceremonial, such as to plan voyages, visits, marches or initiations and to act as "a menstrual or pregnancy record." The latter is precisely what is claimed by modern writers on behalf of the ancient matriarchy. Furthermore, it is not *just* speculation, as there is a well established association between these Palaeolithic notations and female fertility symbols, as the two were often found together. "In most cases, the images are naked or represent naked portions of the fe-

male anatomy," such as the breasts or vulva (ibid., pp. 281-2). For example, a notational bone from the Dordogne was recovered from a shelter containing engravings of vulvar shapes (ibid., p. 44). Similarly, a carved and engraved baton in the form of a vulva with splayed legs comes from Le Placard, which has also yielded notational bones from the same period. This particular sculpture was itself "marked by an extremely fine series of sequential marks made by different points and rhythms," which Marshack (1972, p. 91) suggested might be related to menstruation, pregnancy or an associated rite. Unfortunately, one cannot know, and far from indicating deference to women, these sculptures may have been salacious images for men. In fact, this is quite a common assumption amongst male anthropologists (Conkey and Williams, 1991, p. 121; Russell, 1993, p. 94).

Despite the female connection, Marshack (1972, p. 338) balked at the idea of an ancient matriarchy, stating that its involvement cannot be inferred from these female images. This statement is true. Much of the fabric surrounding the ancient matriarchy is speculative, and because of the extreme antiquity of the subject, may never be susceptible to proof. Neither, however, has it yet been disproved, and the existence of seemingly lunar notations with a strong feminine association in the pre-agricultural societies of

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the Upper Palaeolithic is the most tangible piece of evidence in its favour, and in support of counting and calculation having originally been a female role.

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