

Birth in prehistory

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In this article I investigate the process of birth from a woman-centred, rather than child oriented, perspective. I demonstrate that irrespective of culture or belief there exist basic prerequisites (environmental, physical and psychological) which maximise the potential for a successful outcome in the negotiation of birth. In the application of these to the physical environment, specifically Palaeolithic France, it becomes evident that it may be possible not only to identify areas used for this specific purpose, but that material evidence within these areas may demonstrate the negotiation and expression of this potentially lethal aspect of female corporeality.

Attempting to define a singular and ostensibly biological process such as birth is highly contentious. Historically, discourse on female reproductive physiology particularly in the context of the prehistoric past, tended to define women as reproducers, whose primary role was to gestate future generations, or passive creatures dependent on man the hunter for protection and sustenance. Feminist and gender oriented research has demonstrated conclusively that women are far more than the embodiment of their reproductive potential (for example, Conkey and Gero 1981; Nelson 1997; Sorensen 2000). It is, or should be clearly evident that all genders embody the potential to undertake and negotiate activities that are not directly attributable to mere classification by sex.

A fundamental difference does exist between the predominant genders which has an impact on the manner in which some performances are enacted. Most women are physiologically capable of giving birth. Men do not possess this attribute. This distinction, though consistently noted in archaeological discourse, is for the most part skimmed over, marginalised, or ignored, in favour of demonstrating alternative roles which demonstrate human action and interaction in a social context. However, if the process of birth is considered from a singularly woman-centred perspective, it becomes evident that this event, occurring only a finite number of times in a woman's life, has the potential to leave a considerable impression on the material evidence of our prehistoric past.

The process of birth within modern Old and New World systems is consistently viewed from a child-centred perspective. The very term 'childbirth' focuses on the desired outcome, not the lengthy process negotiated by the woman at the centre of the event. In contemporary technologically enhanced systems, it is only in exceptional circumstances that the health of the woman and child is jeopardised in the negotiation of birth. If analgesics fail, or complications arise, a caesarean section may be done, expediting the birth and ensuring the safety of woman and infant. A 'safety net' therefore exists within contemporary western society which offers an alternative not possible within prehistoric systems.

In a prehistoric context the process of birth was, by necessity, a more woman-centred than child-oriented event. The birthing woman is already a known and contributive member of a group, she embodies knowledge relevant to its survival, she is also self-sufficient. The infant, on the other hand, is a non-contributive member of the group requiring a considerable investment of time and assistance. Without the birthing woman, the viability of the newborn is seriously jeopardised. It is logical, therefore, that the birthing woman is the prime focus of the event and that her physiological and environmental needs are addressed with some

foresight. The most fundamental of these needs is a safe environment in which a woman can give birth.

Environment

Through observation and testing of animals during the birthing process, Naaktgeboreen (1990) noted that the environment is of crucial importance to many species. In fact, in all mammalian species a stressful environment can adversely affect delivery. For example, anxiety, fear, removal to an unfamiliar environment, noise, excessive light, overcrowding or the presence of a stranger can prolong or halt labour. This instinctive reaction is part of the primal 'fight or flight' mechanism, common to all mammalian species. It is necessary and extremely effective as the temporary cessation of labour allows the vulnerable mother some chance of relocating to avoid the stressor. In the short term this response saves the birthing mammal and her unborn infant. If, however, the source of stress is continuous, the constant conflict between hormones of parturition and hormones initiating the 'fight or flight' response react adversely and can cause pathological problems for the birthing mammal and the infant.

In assuming control over environmental stressors during birth women, like the majority of other birthing mammals, generally utilise a place apart from the main group. This might take the form of a screen in her immediate residence (Laderman, 1982), or relocation to an area peripheral to the main habitation area (Moser, 1982). In virtually all cases women are assisted by others who themselves have given birth (Moser, 1982). According to ethnographic evidence the Kalahari Ju/'hoansi women are a notable exception (in that they give birth alone). However, this rarely occurs with a first birth, it is rather the ideal to which the birthing women aspire and often achieve in subsequent pregnancies (Biesle, 1997). The dynamics of the birth process, however, still necessitate that environmental disturbance be kept to a minimum. In addition to this, evolutionary changes to the pelvic structure, as a result of bipedalism, suggests that support and companionship also prove beneficial.

Support

Trevathan (1997) outlines the process which, as a result of evolution, may have led to the human assistance during parturition. As our ancestors assumed an upright position a corresponding modification occurred in the pelvis to compensate for this change in posture. With bipedalism there also came a change in the orientation of the birth canal. In order for a human infant to be born, it must, therefore, undergo a series of manoeuvres in order to navigate the birth canal. As a result, in contrast to non-human primates, human infants are born facing away from their mother. Trevathan suggests that the orientation of the birthing baby and difficulties inherent in self-delivery as a result may have initiated a need for companionship and support during parturition. The psychological benefits and didactic element of such support (particularly in the case of a woman negotiating birth for the first time) may also have proved greatly beneficial in successful conclusion of birth.

This evolved pelvic structure also necessitates the adoption of distinctive positions during birth. Certain positions in particular maximise pelvic expansion. From an anatomical perspective, an upright position with arms raised above the level of the waist, maximises efficient delivery. The internal dimensions of the pelvis can alter considerably due to this upright and forward leaning posture. This, in turn facilitates the passage of the baby through the birth canal, expediting the birth process.

Safety, support and an element of mobility are, therefore, important pre-requisites in the successful negotiation of birth by parturient women. To relate these needs to the Upper Palaeolithic period in France an additional factor must be considered, that is, climate.

The Upper Palaeolithic Period in Europe spanned the second half of the last glaciation, the south west of France and Spain offering a more temperate, though fluctuating climate than the rest of Europe. The harsh climatic conditions of the period necessitated that habitation sites were carefully chosen to offer protection from the elements and from carnivores which inhabited this region. As the process of birth does not allow for extended or continuous interruption without serious consequences to mother and child, it was even more essential to choose a location which allowed adequate time for birth to be negotiated. Rockshelters in particular, and a proportion of caves may have proven ideal for this purpose.

The advantages of using caves and rockshelters for habitation during this period are considerable. Collins (1976) observes that they protected the inhabitants from cold and precipitation and from the anti-cyclonic winds, which emanated from the northern ice-sheets. They maximised the efficient use of fire through the provision of natural windbreaks or by facilitating their construction. The stone of these shelters absorbed solar energy and raised temperatures within their immediate environment. Within the caves, particularly those he terms as 'true' caves, temperatures remained fairly constant throughout the year. Collins also noted that the use of fire would have served as a means of protection against dangerous animals encroaching on cave dwelling humans.

It is therefore not surprising that prehistoric people quickly identified the benefits of this form of dwelling. For pregnant women and those in labour, a proportion of such sites also provided the essential criteria to maximise their chances for successful childbirth. Their structure facilitated partitioning of sections through the use of hangings, natural rock formations or alcoves. This provided a means for seclusion from the main group without foregoing their protection. The safety of previous offspring of the birthing woman and her companion(s) is also maximised through the utilisation of such sites. Additionally, the presence of one or more companions within such a defined area would assist in elevating the temperature, minimising discomfort. As the birth process itself is an organic one, scent arising from blood and afterbirth has the potential to draw carnivorous animals. Proximal location to the main group area, therefore, would ensure a high measure of protection.

Though surviving material evidence does not categorically demonstrate that certain caves and rockshelters were used as birthing areas, spatial analysis of these sites from the perspective of the parturient needs of women has the potential to define specific areas within these sites which may have suited this purpose. The following factors may further indicate the presence of areas used for birthing at a number of sites:

These areas would not contain evidence for continuous habitation. They will be located adjacent to areas with evidence for habitation (that is, main group areas). They will be large enough to admit a few members of the group but not large enough to suggest utilisation by a large percentage. If located within a larger area (a rock shelter for instance) they may indicate their separation through the use of natural rock formations or may be located in areas which contain material evidence implying the use of a constructed partition.

There may be ritualistic or symbolic material evidence, which suggests their use by women. Such symbolism may have been instigated by assistants to the parturient women, perhaps as a

point of focus, a didactic element, or a transposition of the desired outcome of a particular stage of labour. A number of symbols may have been constructed by the parturient woman as she negotiated the birth process.

The process of birth in a cultural context

Mithen (1991) notes that the short term behaviour of individuals may be the basis of culture change. In his view the action of individuals, operating within a larger group structure may have provided the impetus for the development and proliferation of Palaeolithic Art. One of these actions may have been the negotiation of childbirth within a broader cultural context, initiating safety, seclusion and support for parturient women. The sequence of events, which inspired one gender to initiate culture change, could then be read as follows:

Given that the physiology of upper Palaeolithic women is identical to that of present day humans, it can be assumed that similar physiological changes occur during childbirth. The most protracted stage of labour and the most vital, even within modern medical systems, is the dilation of the cervix in order to open the birth canal. Barring no pathological characteristics, the baby can then descend. These initial contractions are involuntary and their efficiency rests greatly on maintaining a secure environment for the parturient woman. The successful dilation of the cervix is an essential aspect of the process of birth in women's bodies as lived, both past and present.

Within a prehistoric context, without the last resort of surgical intervention, this stage of labour embodies enormous symbolic and ritualistic potential. A proportion of vulva images specific positions and in specific contexts in the Upper Palaeolithic rockshelters and caves of France may have been structured to this end. That vulva signs are not structured to indicate the capping of a baby's head should not be surprising. The dilation of the cervix cannot be seen externally though it is a critical stage in the labour process. Additionally the lack of facial and physiological detail could suggest that the negotiation of the process was of prime importance, rather than the specific embodiment of it within a particular sex. In short, an aspect of women's bodies as lived was negotiated symbolically (as well as physically and psychologically), but this aspect did not define them, due to the fact that they were *significant* part of a larger group structure for a considerable time *prior* to this event.

Representations of some of the female figures in parietal and cave art may also have embodied ritualistic and didactic elements relating in relation to the optimum position during the second stage of labour. This is the stage where the woman must push the infant through the birth canal. As previously mentioned, the optimum position in order to maximise the dimensions of the pelvic outlet involve some form of upright and forward leaning stance, with arms raised above the level of the waist. A large number of female representations in rock art during the Palaeolithic period assume variations of this position. A number of these, if interpreted in context may be indicative of a woman in the second stage of labour assuming a position which maximises pelvic expansion.

At Pech Merle, for example, three complete figures of women are evident on a ceiling scratched into the clay surface. They are represented in profile and half bent forward. The location of these figures is deliberate, in order to ensure their visibility from a distance. They are contained within an area 3.6m by 3m. Their location, within a cave system, confined to a specific area, are suggestive of a place apart, that is a specific location, deliberately chosen to ensure safety, seclusion and support in the negotiation of parturition. The angle of the torso in

relation to the legs implies a forward leaning pose, (irrespective of the angle of view), that strongly suggests deliberate choice in execution. This position mirrors the one previously outlined as the optimum position used in negotiating the second stage of labour.

The most evident and unique representation of a parturient woman comes from the site of Les Trois Freres. The famous image of 'The Sorcerer' at Les Trois Freres is consistently referred to as embodying ritualistic or magical characteristics.

This image is located high on the wall of what is known as the Sanctuary of this cave system. It is 75cm tall, engraved and painted in black. The outline of the back, shoulders, chest, abdomen legs and tail are delineated in black (Graziosi 1960). Breuil's tracing of this image is consistently the one most represented in books relating to cave art. Graziosi on the other hand has placed Breuil's tracing of this image next to a photograph of same. From comparative analysis it is not clearly evident that the genitals as outlined by Breuil exist in such detail and proportion. The curve ascribed to the penis, for instance, taken in conjunction with the line he interprets as a tail, could be indicative of the head of a baby in the process of birth. Irrespective of the placing of this image, the angle of the legs in relation to the torso, and the uplifted arms are again indicative of the optimum position during the second stage of labour. Furthermore the figure bears evidence of the existence of breasts, a point also noted by Conkey (1997), and by the artist employed to copy this image for a National Geographic article.

In conclusion, given the fundamental requisites of birthing women in contemporary, historic and prehistoric systems, all habitation sites utilised by reproductive groups potentially contain an area demarked for birthing, even if material evidence for this has not survived the passage of time. From contemporary, historic, ethnographic and anthropological examples, birthing is also culturally encoded with meaning which may have originated from these environmental needs. However, the necessity to structure a suitable birth environment in order to minimise stress is not a socio/cultural phenomenon, peculiar to a definitive group. It appears as timeless and global, though mediated in innumerable ways.

More research is required into this specific aspect of women's corporeality in a prehistoric context. However, when viewed in context and from the perspective of birthing requirements, representations of a proportion of the female form from the prehistoric past, as outlined above, can continue to suggest alternative meanings. By recognising the importance of this aspect of women's corporeality, it should be clearly evident that women had considerable impetus to deliberately structure an environment which optimised their chances of survival during birth. Didactic, ritualistic, symbolic and cultural manifestations which recognise its embodiment may also have been initiated simultaneously. Such symbols may have embodied meaning relevant to the negotiation of this potentially lethal aspect of women's lives, while at the same time celebrating its successful negotiation. From this perspective, prehistoric women are far more than shadows of the past – they are active, intelligent people who assumed considerable control over essential aspects of their corporeal lives.

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