

extent of these regions, is explicable on the basis of functional requirements, since the position of the vent always corresponds to the place behind the sacrum where the muscular movements connected with the pelvic musculature on one hand, and the caudal on the other, bound an area of little myogenic disturbance. This is essential, as otherwise the violent movements of the adjacent muscles might disturb proper defaecation.

In snakes the sacrum has been secondarily lost and thus the coccygeal region is not distinguished from the preceding part, although the tail is well defined.

In the Testudinata, the preano-coccyx contains an extension of the coelom around the terminal part of the gut, a feature which is always absent in the tail, strictly defined.

Extant birds have a small coccygeal prolongation but no true tail, although some extinct forms (*Archæopteryx*, for example) had a fairly long tail. Mammals have both.

Developmentally, the vent, as is well known, marks the position of the blastopore, so that a true tail is strictly post-blastoporal in origin.

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Arapesh Maternity

THE Arapesh are a people of an area of north-western New Guinea lying at and about 143° 30' E., and 3° 30' S. They have a custom of segregating women in outshelters at all times of the catamenia. Like most other women in this respect, Arapesh women do not ovulate or menstruate for an interval after parturition and during nursing. This organic quiescent period is usually known as the lactogenic interval. The Arapesh have the unusual custom that a woman and her husband must notice the advent of the first post-partum onset of menstruation in her body by giving a feast to the neighbours. The first post-partum onset of menstruation in a woman's body during lactation is termed in the Arapesh tongue *helib*. The feast given by a woman and her husband to the neighbours a few days after *helib* is termed in Arapesh *Kwa di batauin*. It takes place, on Arapesh evidence, between six to twenty-five months after child-births, as noted by the nursling having first cut its first two incisors (6-9 months) in some cases, and having first cut all its milk teeth (24 months) in other cases, with a modal time about the intermediate age of the nursling walking and talking.

There are said to be no Arapesh women who resume menstruation during nursing before the infant has cut its first incisors, although the clinical evidence indicates that some Caucasian women resume menstruation during nursing as early as one month after the birth of the child¹. The Arapesh are an inbred group not more than eight thousand in number, and they may all be representative of a constitutional type with a comparatively long lactogenic interval. However, there is no known explanation of this point of difference. There are said to be some Arapesh women who do not resume menstruation during nursing until the infant has first cut all its milk teeth. The clinical evidence does not indicate that

any Caucasian women have as long a lactogenic interval as this. However, the maximal time of the interval, stated to be not long over twenty-four months in the Arapesh population, is possibly not matched in the data available on the Caucasian population, because Caucasian populations usually wean infants before that time, and because early weaning may bring a lactogenic interval not already closed to a close. It may be noted that nursing for three years, which is common Arapesh practice, does not prolong a lactogenic interval for three years.

An assumption in respect to the conditions of a particular type of co-ordination of vital processes is not in the same field as a proof of the action of isolates or of near isolates in vital activities. The assumption that instances of a twenty-four months long lactogenic interval depend upon nursing being continued at least as long, and upon an individual constitutional factor, is not, for example, in the same field as a proof that a certain fraction, not isolated, obtained from the pituitary gland can initiate mammary secretion, and, in some species, stop ovulation². Nevertheless, the assumption is reasonable.

The observation that nursing for three years will not prolong a lactogenic interval for three years is good against the chance, however remote or however proximate it may be, that prior resumption of sex relations after parturition may be an interfering factor provocative of renewed ovulation. The Arapesh do not resume familial sex relations after parturition until after *helib*.

The idea behind the Arapesh practices discussed here is evidently an idea of controlling population growth by abstinence during the lactogenic interval, adjusted to the exact length of time of the interval in individual cases. In previous accounts of Arapesh sociology³ the idea in point has been distorted and the associated practices incorrectly described. The social 'culture' has been described as "working, selecting a maternal type as desirable, and embodying this choice in every thread of the social fabric"⁴. The Arapesh have, in fact, a predilection for maternal types. They believe, not without prejudice to some, that the constitutional types with the longest lactogenic interval make the best mothers. Nevertheless in matters of history and of social 'culture' the Arapesh still embody ideas in their social fabric. They do not attempt the impossible task, attributed to them, of embodying one constitutional type rather than another, instead of ideas there.

In an account of the associated practices the ceremonial feast at *helib*, namely, *Kwa di batauin*, has been omitted, and the resumption of familial sex relations after parturition has been dated about the time of the nursling walking and talking, without reference to the point that it occurs, in fact, at various times, but always a few days after *helib*.

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¹ Hoskins, R. G., "Endocrinology", p. 294 (W. W. Norton and Co., 1941).

² Riddle, Oscar, "Prolactin, a Product of the Anterior Pituitary and the Part it Plays in Vital Processes", Carnegie Institution of Washington, Supplementary Publications, No. 40 (1938). Cameron, A. T., "Recent Advances in Endocrinology" (London: J. and A. Churchill, Ltd., 1940), pp. 388-91.

³ Mead, Margaret, "Sex and Temperament in Three Primitive Societies" (London: Routledge, 1935). "The Mountain Arapesh", Anthropological Papers of the American Museum of Natural History, 37, Pt. 3 (1940).

⁴ Fortes, M., "Review of Sex and Temperament in Three Primitive Societies in Man", pp. 125-26 (July 1936).