

# Pelvic Typology: A Racist Model

BIOL1010-100

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October 7, 2021

# Development of Typology

- ▶ Anatomical pelvic typology first appeared in midwifery texts in 18<sup>th</sup> century
- ▶ Since mid-1800s pelvic shape variation has been based on ideas that people can be classified by racial association
- ▶ 1830s - Pelvic shapes first categorized by Professor MJ Weber
- ▶ 1860s - Professor Zaaier created the brim index standard formula to classify pelvis into one of two shapes
- ▶ 1885 - Turner's index recognized three categories based on brim index
- ▶ 1933 – Caldwell & Moloy defined four basic pelvic types based on inlet shape

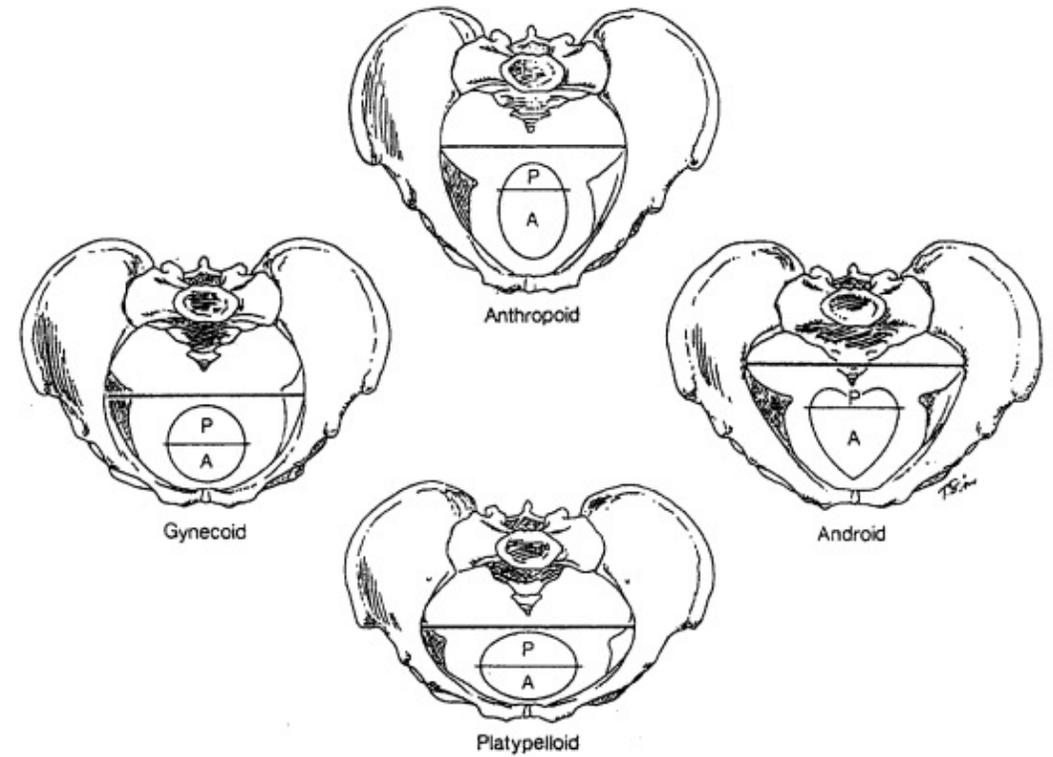


FIG. 3. Caldwell and Moloy's pelvic types (Pritchard, MacDonald, and Gant 1985:fig. 11-9).

# Race and Social Constructs

- ▶ Epidemic of obstructed labors & maternal morbidity in mid-late 1800s led to desire to fully understand anatomical structure
  - ▶ Non-white births were having less difficulties
- ▶ Turner's analyses were fueled by need to explain human differences in biblical context
  - ▶ "Great chain of being" was popular belief during 19<sup>th</sup> century
  - ▶ His assessment of white women having flatter pelvises were correct but because of social practices not biological
  - ▶ Typology categories demonstrate belief about racial positions in society
- ▶ Certain pelvic types were considered animal-like & so associated with specific races
  - ▶ Turner described anthropoid as representing the "degraded or animalized arrangement seen in the lower species"
  - ▶ Pelvic types used to describe indigenous bodies as "downward", "backward" or "primitive" compared to European ideals
  - ▶ In early 1900s Mexican doctors insisted on cesareans for indigenous women for having "faulty" anatomies
    - ▶ Used to justify eugenics on indigenous women

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*Among primitive people, still natural in their habits and living under conditions which favor the healthy development of their physical organization, labor may be characterized as short and easy, accompanied by few accidents and followed by little or no prostration; the squaw of the Modoc Indians—a tribe which has been but little affected by the advance of civilization—suffers but an hour or even less in the agony of childbirth; the Sioux, the Kootenais, and the Santees are some-what longer in labor, not, however, over two or three hours; two hours being about the average time among the North American Indians. The period of suffering is very much the same among the natives of Africa and of Southern India, the inhabitants of the Antilles and the Caribbees, of the Andaman and the Australian islands, and other savage people. What little fear exists as to the occurrence of this event, which is so much dreaded by many of our delicately constituted ladies, may be judged from the instances of speedy and unexpected delivery so often related by those in contact with the Indians.*

”

*-Labor Among Primitive Peoples, 1882  
by George J Engelmann*



# Modern Typology



- ▶ Pelvic morphology changes over time on an individual & population level
  - ▶ Pelvic shape changes in pregnancy due to hormones
- ▶ Anthropologists have moved away from typology due to variability
- ▶ 1980s a new anthropological line of thought analyzing typology based on growth & development grew momentum
  - ▶ Based on these studies other factors like climate, nutrition, activity levels & body size affect pelvic form
  - ▶ Allows for human diversity
- ▶ A 2006 study examined racial disparities in VBAC success citing racial factors as non-white women have more “non-gynecoid” anatomy
  - ▶ Including race in VBAC calculator reinforces misconceptions
  - ▶ Race is not a predicting factor in Canada/Sweden but remains so in USA
- ▶ Gray's Anatomy introduces pelvic types based on race
- ▶ Current midwifery, obstetric & anthropologic textbooks still use these typologies today

# Typology & non-Western Perspective



**Fig. 4.** Labor scene among the Wakambas. (Western portion of central Africa.) (Englemann, 1882; p 63).

- ▶ Four recognized “pure” types though many people have a mixture of types
- ▶ Gynecoid & anthropoid types are more common in black women than white women
- ▶ Pelvic typology in tropics vary drastically than in western areas
- ▶ Anthropoid types are rare (.8% based on sample study)
- ▶ < 3% of women have pure pelvic types

\*studies based upon people identifying as women

**Watch this video if you  
want to learn**

**Clinical  
pelvimetry**





# Resources



- ▶ Bukar, M., Mustspha Z., Ahidjo A., & G.Bako, B.G. (2010). Pelvic Types as Seen in a Tropical Setting. *Nigerian Journal of Medicine*, 19(1), 42-45. [10.4314/njm.v19i1.52476](https://doi.org/10.4314/njm.v19i1.52476).
- ▶ Delprete, H. (2017). Pelvic Inlet Shape is Not as Dimorphic as Previously Suggested. *The Anatomical Record*, 300(4), 706-715. <https://doi.org/10.1002/ar.23544>.
- ▶ Diouf, K., Jones, D., Meadows, A., Nour, N., Schantz-Dunn, J., & Vyas, D. (2019). Challenging the Use of Race in the Vaginal Birth after Cesarean Section Calculator. *Women's Health Issues*, 29(3), 201-204. <https://doi.org/10.1016/j.whi.2019.04.007>.
- ▶ Stone, P. (2016). Biocultural Perspectives on Maternal Mortality and Obstetrical Death from the Past to the Present. *American Journal of Physical Anthropology*, 159, 150-171. <https://doi.org/10.1002/ajpa.22906>.
- ▶ Walrath, D. (2003). Rethinking Pelvic Typologies and the Human Birth Mechanism. *Current Anthropology*, 44(1), 5-31. Retrieved September 27, 2021, from <https://www.journals.uchicago.edu/doi/full/10.1086/344489>.