

## **The fetus/infant and the origins of music, religion, art, language, and consciousness**

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Human behavioral modernity emerged roughly 100,000 years ago. How that happened is one of the most interesting and important questions ever asked. Despite recent progress, theories of the origin of music, religion, art, language, and consciousness are still diverse. Might several theories be simultaneously correct? Or has an important idea not yet been formulated?

A possible trigger was the human infant's unique fragility. Upright gait and larger brains had caused an obstetric dilemma and earlier births. To survive, fragile human infants increasingly manipulated caregivers with attachment behaviors. That meant continuously monitoring caregivers' physical and emotional states. In preparation, the fetus monitored maternal vocalizations, heartbeats, footsteps, and body movements including walking.

Music started when humans accidentally reproduced the sounds and movements of the prenatal world (melody/song, rhythm/dance), e.g. when sitting around evening fires in dark, resonant caves. Working with tools, preparing food, and vocalizing, they collectively activated the prenatal schema, evoking mysterious positive emotions that reinforced musical activities.

Religion emerged similarly. The prenatal schema includes the (ungendered) mother from the fetal perspective, upon which survival depends. Schema activation triggered magical emotions including admiration/fear (awe) of a large, moving protector.

The geometric patterns of early art resemble prenatally perceived entoptic phenomena. They evoked the prenatal schema, motivating an aesthetic focus on proximal stimuli (everyday perception is distal). Having learned to sketch, early humans then painted the large, moving supernatural agents they imagined during rituals – high on cave walls, like the prenatally perceived mother.

Language depends on the prenatally implicated ability to assign complex meanings to temporally/spectrally complex sound/movement patterns. Language developed in both ontogeny and phylogeny by honest communication between infants and caregivers.

Consciousness emerged as symbolic behaviors helped early humans adopt the perspective of another person (empathy, theory of mind) or time/place (mental travel). The increasing fragility of human infants forced caregivers to actively predict and prevent accidents, developing mental time travel. Infants and caregivers played with toys as if they had agency.

The theory is no less speculative than competing theories. It generates fundamental questions about the human condition, with political implications for sexism and ageism. Evaluation might involve listing phenomena that are (in)consistent with the theory, or observing prenatal behavior using emerging non-invasive technologies.

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