

## 006 Plenary Lecture

### MOTHERS AND OTHERS: WHAT DOES IT MEAN TO DEVELOP AND EVOLVE AS A COOPERATIVELY BREEDING APE?

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New evidence from human behavioral ecology has focused attention on the role of alloparents in addition to parents in the care and provisioning of immatures in the line leading to the genus *Homo*, contributing to an ongoing paradigm shift in the way that anthropologists conceptualize Pleistocene child-rearing. At the same time evidence from primatology and from the emerging field of comparative infant development are leading to a better understanding of the psychological implications for apes growing up dependent on a flexible array of mothers plus others. In this lecture I explain why I am convinced that the psychological and emotional underpinnings for human perspective-taking and for caring about what others intend and feel first emerged as byproducts of "cooperative breeding", of what for a Great Ape was an entirely novel mode of child-rearing. According to this psychological component to the cooperative breeding hypothesis, large-brained, *anatomically modern humans* evolved in the last 200,000 years, *behaviorally modern humans*, capable of symbolic thought and language only in the last 100,000 or so, but *emotionally modern humans*, interested in the mental and subjective states of others and characterized by stronger prosocial impulses to give and share, emerged far earlier

**Allomother** - Male or female group member other than the mother who helps rear offspring.

**Alloparent** - Group member other than genetic parent who helps rear offspring.

**Cooperative Breeding** -- Sociobiological term referring to any species characterized by alloparental care and provisioning of young. Alloparental care can evolve for a variety of reasons and "cooperative breeding" need not imply individuals always cooperate.