

“Ants and Uncles”

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Posted to [The Daily Ant](#) (02/24/2017)

As a philosopher who knows little about the details of evolutionary theory, I find it hard to understand questions about the evolution of ants. It seems often to be assumed that there are specific features that ants possess because of the “survival value” of such features. This makes very little sense to me. I find it very hard to believe that there are any features at all that can be viewed as having survival value for ants.

I might express my basic puzzlement as follows: Why should we suppose that ants have evolved in any fundamentally different way than uncles? For an uncle to exist is simply for there to exist an x such that x is a male human, and such that for some y and z , y is a sibling of x and z is a child of y . (I leave it open whether y and z must themselves be human in order for x to qualify as an uncle.) If we ask a question about the evolution of uncles, we seem to be seeking an evolutionary explanation for male humans having siblings who have children. But it seems virtually tautologous that, if there are to be male humans, and if humans are to reproduce, then there will be male humans who have siblings who have children. There seems no room for an additional question as to why there are uncles in the world!

What I have said about uncles applies mutatis mutandis to ants. “What features have survival value for ants?” This question is ambiguous, but as far as I can tell it makes little sense on either of its possible interpretations. It might mean, “If x is an ant, what features have survival value for x ?” The trivial answer is: “Good hygiene, a healthy diet, ample exercise, and at least seven hours of sleep a night.” Why should x ’s being an ant require for her survival any features that apply less to uncles, cousins, and others? The second possible interpretation of the question is: “What features can help x to survive as an ant?” But that question seems absurd. Should we say that a feature she needs to survive as an ant is: “not having an impulse to murder her nephews and nieces”?

I think that biologists ask such questions as, “Why has there evolved more ants than beetles?” Suppose there are n humans. Then there are roughly $n/2$ female humans. Perhaps at any given time about $1/3$ of female humans are ants. The question, “Why has there evolved more ants than beetles?” is then equivalent to the question, “Why has there evolved six times as many humans as beetles?” But that is surely not a question about ants as such!