

## 24.500 Topics in Philosophy of Mind

### Other Minds

Spring 2003/handout 3

#### Sober's "Evolution and the problem of other minds"

#### **Behavior-to-mind & Self-to-Other inferences**

##### *Behavior-to-mind:*

Other's behavior is thus-and-so

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Other's mind is thus-and-so

##### *Self-to-Other:*

My mind is thus-and-so

My behavior is thus-and-so

Other's behavior is thus-and-so

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Other's mind is thus-and-so

The paper is concerned with the "incremental version" of the Self-to-Other problem: what difference does the extra information about me make?

#### **The lesson of the Ravens**

"...it seems sensible to attribute belly buttons to others, based on my own navel gazing [not such a good example; cf. Putnam on moles], yet it seems silly to universalize the fact that I happen to own a bow tie. What gives?"

1. Any statement of the form "All Fs are G" is confirmed by "There is an F that is G". (follows from "Nicod's criterion")
2. If P is logically equivalent to Q, then whatever confirms P, confirms Q.

Therefore (since “All ravens are black” is logically equivalent to “All non-black things are non-ravens”):

3. “There is a white shoe” confirms “All ravens are black”.

The Bayesian can reject (1). E confirms H relative to background knowledge K iff:

$$P_k(H|E) > P_k(H) \text{ [or: } P(H|E\&K) > P(H|K); P_k(A)=P(A|K)]$$

iff:

$$[P_k(E|H)P_k(H)]/P_k(E) > P_k(H)$$

iff

$$P_k(E|H) > P_k(E)$$

iff:

$$P_k(E|H) > P_k(E|\neg H) \text{ (because } P(A|B) > P(A) \text{ iff } P(A|B) > P(A|\neg B))$$

iff:

$$P(E|H\&K) > P(E|\neg H\&K).$$

This inequality does not always hold:

I.J. Good: K: either ( $w_1$ ) 100 black ravens, no nonblack ravens, 1 million other birds;

or: ( $w_2$ ) 1000 black ravens, 1 white raven, and 1 million other birds.

Then (making some reasonable assumptions about P):

$$P(E|H\&K, [\text{i.e. } w_1]) < P(E|\neg H \& K, [\text{i.e. } w_2])$$

since the randomly selected bird is less likely to be a black raven in world 1

(100/1,000,100) than in world 2 (1000/1,001,001).

Other examples: an albino crow disconfirms the hypothesis (relative to actual background knowledge); Swinburne’s example: all grasshoppers are located outside Yorkshire.

The moral: “if no background assumptions can be brought to bear, the only thing one can say is: *out of nothing, nothing comes*” (369).

### **Cladistic parsimony applied to the problem of other minds**

“...when Self and Other are genealogically related”.

Self: B, M                      Other B [M?, A?]

It’s not very clear what “B” and “M” are supposed to be. Presumably M is some “mental trait” like (frequently) wanting food, or the capacity to feel pain, or the capacity to have beliefs about other’s mental states (rather than, say, believing that there is food nearby, or being in pain). What are examples of the behavioral trait B? At any rate: not using sticks to dig out termites, or attracting a mate by building a fancy nest, or swimming upstream to spawn (we don’t do these things).

Sober has three main points:

1. “parsimony favors anthropomorphism about mentalistic properties only when the behaviors in question are thought to be homologous (374). [A “homology” is a trait/organ shared by species that was also present in their common ancestor.]
2. “relevant neurophysiological difference can provide a context in which anthropocentrism is not sanctioned by parsimony considerations” (376).
3. parsimony considerations can (given various assumptions about behavior) favor the “theory of mind” hypothesis for chimps.

### **Common causes**

“Genealogical relatedness is only an example; the fundamental question is whether there are common causes impinging on Self and Other that induce the correlation described in (P). If there are, there will be a likelihood justification for extrapolating from Self to Other” (383)