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[7] Intelligent Design (ctd.) + Evolution and Philosophy of Mind

0. Outline

1. **Intelligent design: Pr($O \mid ID$)**
2. **Evolution & Philosophy of Mind: Introduction**

1. Intelligent design: Pr(*O* | *ID*)

- As I said last week, the claim that *ID* has a relatively high likelihood is surprisingly rarely explicitly made - let alone defended - in recent creationist literature.
- This isn't of course to say that proponents of *ID* aren't committed to this view: surely they *must* be – after all, they typically hold that the properties of the living world favour the design hypothesis over the Darwinian one.
- Neither is it to say that this commitment isn't based on some kind of supporting consideration(s): surely it is, to the extent that they see their position as epistemically rational.
- So what kind of supporting consideration(s) could there be?
- One potential source of justification could perhaps be found in Paley's famous watch-on-the-heath case.

1. Intelligent design: Pr(*O* | *ID*)

- Paley invites us to consider someone stumbling across a watch on a heath.
- He points to several properties of the watch:

> '…when we come to inspect the watch, we perceive that its several parts are framed and put together for a purpose, e.g. that they are so formed and adjusted as to produce motion, and that motion so regulated, as to point out the hour of the day; that if the different parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner, or in any other order, than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it' (Paley *Natural Theology*)

1. Intelligent design: Pr(*O* | *ID*)

- Paley (quite rightly) points out that the watch's characteristics strongly favour the hypothesis that it was the product of the activity of an intelligent designer.
- Although the obtaining of a favouring relation doesn't require any particular *absolute* value for the likelihood of the favoured proposition– just a *comparatively* higher one – we can safely assume that Paley takes the absolute value to be respectably high in this case.
- Paley then moves on to consider the case of biological adaptations, with respect to which he finds it natural to draw similar etiological conclusions.

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- Implicit in his discussion seems to be the suggestion that that, to the extent that we are entitled to take Pr(*W*|*ID*) to be relatively high, we should thereby be inclined to take Pr(*O*|*ID*) to be relatively high as well.
- Why so? It isn't quite clear.
- In fact, there is a significant *disanalogy* between the two cases.
- *In the case of the watch*: we have an entity whose existence with the properties that it in fact has isn't too improbable given the kinds of goals and further attributes that, as far as we know, its putative intelligent designer would be likely to possess (*ignoring religious testimony*, as far as we know, designers are likely to be *human* and human designers need to keep the time, have a decent grasp of the relevant technology, etc.)

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- *In the case of living organisms*: this simply doesn't hold true.
- In fact, we have entities whose existence with the properties that they in fact have is *vanishingly unlikely* given the kinds of goals and further attributes that, as far as we know, their putative intelligent designers would be likely to have.
- Of course, *were one to admit as evidence various items of scriptural/oral religious testimony*, matters might arguably be somewhat different: our assumptions concerning the range of attributes of unspecified intelligent designers would no doubt change significantly.
- However…

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- (a) This introduces a further debate over the contentious epistemic relevance of various religious testimonies, a debate that that neo-creationists have agreed to leave aside.
- (b) Many have argued that, even if one does take some of these testimonies into account, the biological data may still be difficult to account for on the *ID* hypothesis (i.e. the likelihood of *ID* may remain extremely low).
- For instance, say we allow biblical or Q'ranic evidence into the equation, postulating the existence of the kind of benevolent, omniscient and omnipotent being that followers of the Abrahamic tradition believe in. It is commonly argued that, even then, a number of features of the living world *still* remain unlikely conditional on the truth of the *ID* hypothesis.

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- Typical examples cited:

  (i) Existence of traits (aka 'vestigial' traits) performing no useful function:

  - the human appendix (does nothing at best, leaves one vulnerable to appendicitis at worst),
  - the whale's pelvis (the whale has no hind limbs),
  - etc.

  (ii) Existence of traits performing a function but doing so sub-optimally:

  - the mammalian eye (yielding a blindspot due to the presence of a hole in the retina which the retinal nerves are fed through on their way to the brain)

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  - the mammalian respiratory system (crosses the gastrointestinal tract, bringing about risks of choking),
  - somewhat ironically, various ICAs (see last lecture for examples) in which the performance of the system's 'basic function' is extremely sensitive to damage to its component parts,
  - etc.

  (iii) Cross-species similarities in properties for which a large number of functionally equivalent alternatives exist. We mentioned some of these cases in lecture 1:

  - similarities in nucleic-acid-to-amino-acid mapping,
  - tetrapod pentadactyly.

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- These kinds of features can, incidentally, be easily accommodated within the Darwinian framework:

  (i) Non-functional traits: often legacies of traits that were fitness-enhancing in ancestral organisms (e.g. the whale's pelvis, functional in the whale's supposed tetrapodal ancestors).

  (ii) Suboptimal functional traits: attributable to a large number of factors, including the existence of various trait correlations (e.g. due to pleiotropy – see lecture 5) and the fact that mutations must build on and modify preexisting structures: evolutionary 'design' doesn't proceed from scratch and is constrained by the legacies of history.

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(iii) Similarities in properties for which functionally equivalent alternatives exist: attributable to common ancestry and lack of subsequent modification (possibly due to subsequent modification becoming increasingly deleterious as the trait becomes embedded in a larger system).

2. Evolution & Philosophy of Mind: Introduction

- In the following few lectures: overview of a popular version of '*teleosemantics*'.
- Teleosemantics: a view according to which the contents of the beliefs and desires of a subject (what the subject's beliefs are 'about' and what his or her desires are 'for') hinge on facts pertaining to the *biological function* of various traits that he or she possesses.
- In other words: on this view, what determines whether or not a particular state of believing is a state of believing *that P* (rather than, say, believing *that Q*) or whether or not a particular state of desiring is a state of desiring *that R* (rather than, say, desiring *that S*) involves facts about the biological functions of various traits of the believer.

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- The concept of 'biological function', in turn, is then given a Darwinian analysis in terms of concepts drawn from evol. theory (there are a number of options here – more on this later).
- Note: the use of the term 'semantics' suggests a concern with *meaning*. Common assumption in philosophy of mind: to believe or desire that *P* is to bear a certain relationship to some inner mental symbol – a 'mental representation' - that has the proposition *P* as its meaning. This assumption isn't central here.
- In spite of the fact that teleosemantics is a relative philosophical newcomer (born in the mid-80s), the literature on this topic is now *vast* (see consc.net/biblio/2.html#2.3d for a small sample).
- We will accordingly have to restrict ourselves to: (i) one of many versions of teleosemantics, (ii) the more central issues at stake.

Next lecture: 'Evolution & Philosophy of Mind' (ctd.)

- Reading:
  - Whyte, J.T. [1990]: 'Success Semantics', *Analysis* 50: 149-157.
- Supplementary reading:
  - Brandom, R. [1994]: 'Unsuccessful Semantics', *Analysis* 54(3): 175-178.
  - Godfrey-Smith, P. [1994]: 'A Continuum of Semantic Optimism', in S. Stich and T. Warfield (eds.) *Mental Representation*, 259-77. Oxford: Blackwell. (available in library on short loan)
  - Whyte, J.T. [1997]: 'Success Again: Replies to Brandom and Godfrey-Smith' *Analysis* 57(1): 85-88.