Intentionality and Representation

Lecture 2: Indication and causal covariance

1. Resemblance, Natural Meaning, and Externalism

There are three factors that have convinced naturalistically minded philosophers that there might be mileage in a causal theory of intentionality:

1. The failure of resemblance to explain representation
2. The observation that there are forms of natural meaning that depend on causal connections
3. A number of successful defences of externalism in semantics, showing causal determination of content at least locally

2. The challenge

> An embarrassment: It seems that, according to [the causal theory], there can be no such thing as *misrepresentation*. Suppose, for example, that tokenings of the symbol 'A' are nomologically dependent upon instantiations of the property A; viz., upon A's [sic]. Then, according to the theory, the tokens of the symbol denote A's (since tokens denote their causes) and they represent them *as* A's (since symbols express the property whose instantiations cause them to be tokened). But symbol tokenings that represent A's as A's are ipso facto veridical. (Fodor 1987:101)

On the one hand, the causal theory requires that 'tokenings' of symbols are causally dependent on the objects it represents. On the other hand, to capture *intentionality*, the causal theory needs to allow tokenings of a symbol for As to be caused by Bs (misrepresentation). This is the Disjunction Problem: if symbols that represent As can be caused by Bs, those symbols represents As *or* Bs.

(Fred Dretske tried to solve this problem by isolating a 'learning period' where content is fixed, and the period thereafter, in which misrepresentation can occur. How good is this solution?)

3. Fodor's solution

A symbol 'A' represents As just in case As cause 'A', and for any Bs that cause 'A', the B-to-'A' connection is *asymmetrically dependent* on the A-to-'A' connection.

We can understand this counterfactually: a causal connection x depends on another causal connection y just in case if y were to break, x would also break. For example, the symbol 'dog' represents dogs and not foxes because if the dog-to-'dog' connection were to break, then the fox-to-'dog' connection would also break, but if the fox-to-'dog' connection were to break, the dog-to-'dog' connection would remain intact.

As we could put it, 'dog' represents dogs because dogs are the most robust causes of 'dog'.

4. Main problems

- Brain Tampering: It seems all brain events are artificially inducible in systematic ways. Such dependencies do not depend on causal connections between symbol (i.e. brain event) and object.
- Indistinguishable Items: For all cases where As and Bs are indistinguishable, the disjunction problem seems to recur.
- Causal intermediaries: Imagine the 'dog' concept always has the sound of a dog as an intermediary cause. Then doesn't our concept dog represent a sound?
- Property Mismatches: Especially for sensory representations, the qualities we represent are not themselves the causes of these representations.

5. Recent work

There remains a widespread intuition that a naturalistic theory of content should appeal to some kind of causal relation. (But theories are often restricted to a much narrower subset of intentional phenomena.)

Recent example: Jesse Prinz (e.g. *Furnishing the Mind*, ch. 9) thinks that for a representation 'A' to have A as its content: (1) A must be 'A''s *incipient cause* and (2) there has to be a nomological covariance between A and 'A'.

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