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. 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’.