

HANDOUT ON FUNCTIONALISM

1. Overview

1.1. View on concepts.

- Concepts like SQUARE, TRIANGLE, and maybe BACHELOR are *not* functional concepts. They can be defined in terms of *individually necessary* and *jointly sufficient* conditions
- Functional concepts can only be defined in terms of function
 - x is a MOUSETRAP if and only if x functions in the right way
 - Mousetraps can be made out of plastic, metal, etc.
- Functional concepts do *not* have individually necessary conditions for their application; they only have jointly sufficient conditions for their application
- Many functional concepts can be defined in terms of the satisfaction of enough features on a big list (or “cluster”)
 - x is a GAME if and only if x has enough of the features that are typical of games
- Functionalism in the philosophy of mind says that concepts like PAIN, BELIEF, DESIRE, etc. are functional/cluster concepts

1.2. View of the mind.

- In a slogan, functionalism is the view that the mind is what the brain does
- The primary motivation is to account for the multiple realizability of mental states
- What it *is* for some brain state to be a pain, a belief, or a desire *just is* for it to function in a certain way: to *tend* to take certain physical inputs and produce certain behavioral outputs
- *Commonsense functionalism* says the relevant inputs/outputs are the ones specified by commonsense
 - *Pain* is normally caused by bodily damage and causes groaning, withdrawal of the body from the damaging stimulus, etc.
 - *Thirst* is normally caused by a lack of fluids
 - *Fear* often causes its subjects to flee
- Functionalism says we can define what each mental state is by reference to its mediating role
 - A creature is in pain at a particular time if and only if that creature has something going on in its brain that has enough of the causal features (causing groaning, etc.) that are typical of pain
- All it is to have a mind is to have a system of internal states that causally interact with one another in the right ways and are caused by the right physical inputs and cause the right physical outputs
- Differences with behaviorism
 - Mental states are tokened in the brain
 - Mental states lie behind and cause behavior
 - Mental states are not to be identified with behavior or with dispositions to produce behavior

- Acting *as if* in pain is caused by different inputs, involves different internal interactions, etc. than *pain* itself

2. Analogies

Mental states are internally related to other mental states. For example, pain typically causes a desire for the pain to stop. This raises a worry. We want to define mental states in terms of their causal roles, without mentioning mentality at all. But how can we do that? The coke machine analogy is supposed to reveal how.

MONEY	ANN	TOM
0.50¢ →	No output Go to TOM	Emit coke Go to ANN
\$1.00 →	Emit coke Stay in ANN	Emit coke & 0.50¢ Go to ANN

2.1. Coke machine.

ANN: x is a coke machine in state ANN if and only if x has two internal states such that:

- (a) If 0.50¢ is inputted and x is in the first state, then x is caused to go into the second state;
- (b) If 0.50¢ is inputted and x is in the second state, then x is caused to emit a coke can and to go back into the first state;
- (c) If \$1.00 is inputted and x is in the first state, then x is caused to emit a coke can and stay in the first state;
- (d) If \$1.00 is inputted and x is in the second state, then x is caused to emit a coke can plus 0.50¢ and go back into the first state;
- (e) x is currently in the first state.

We can build this machine out of anything we want. So long as it meets the above conditions, it'll be a coke machine in state ANN.

CHECK	TELLER	MANAGER
$\leq \$10,000 \rightarrow$	Give out cash	
$> \$10,000 \rightarrow$	Give out no cash initially Request manager	Ask for supporting information

2.2. Bank teller/manager.

MANAGER: x is a bank manager if and only if there are two individuals, A and B , such that:

- (a) If A is presented with a check $\leq \$10,000$, then A gives out a corresponding amount of money;
- (b) If A is presented with a check $> \$10,000$, then A gives out no cash initially and contacts B ;
- (c) B (when called on) asks for supporting information;
- (d) $x = B$.

2.3. **Pain.**
$$\frac{\text{Pinpricks} \rightarrow \text{S}_1 \rightarrow \text{S}_2}{\text{Emit a loud noise} \quad \text{Emit brow wrinkle}}$$

$$\text{Go to S}_2$$

PAIN: x is in pain at time t if and only if x there are two internal states, S_1 and S_2 , which x is capable of being in, such that:

- (a) S_1 (when the creature is in it) is typically caused by pinpricks;
- (b) S_1 typically causes the emission of a loud noise and S_2 ;
- (c) S_2 (when the creature is in it) typically causes brow wrinkling;
- (b) x is in S_1 at t .

We just defined PAIN without using any mental terminology. The idea is that *any* creature (even an alien) will be in pain if it meets the above conditions. Of course, this is a vast oversimplification. The point is that, according to behaviorism, mental states can be defined *along these lines*; the actual definition will be extraordinarily complex.

3. Are these problems for functionalism?

- Terri is permanently paralyzed due to an unusual illness
- Super Stoics have conditioned themselves to never show signs of pain
- Isabelle is a masochist and doesn't pull away when you prick her with pins

Hints:

- Cluster concepts
- States that *typically* cause such-and-such