

# *Philosophy of Psychology*

## *Week 8*

- ⇒ Last week's team exercise
- ⇒ The topic so far
- ⇒ Dennett on the folk psychology of propositional attitudes
- ⇒ Team exercise

# *Last week's team exercise*

- Summarize the challenges faced by folk psychology. If possible, add some challenges of your own (not mentioned by Nagel, Wilkes, or Churchland).

# *Science and folk psychology*

## *Recap*

- ⇒ Folk psychology is the set of common sense assumptions we make about people's minds in everyday life
  - Common sense assumptions only, not *everything* we think about minds
  - Folk psychology may be thought of as a theory, at least on a loose sense of “theory” (it's obviously not a theory in exactly the same sense as General Relativity)

# Recap

- ⇒ Some claims which seem to be part of FP
  - People act to maximize the satisfaction of their *desires* (short-term and long-term). They determine how to satisfy their desires using their *beliefs* about what actions will achieve what.
  - Satisfaction or dissatisfaction of desires is directly reflected in *how one feels* (satisfaction of one's desires makes one happy, dissatisfaction unhappy)
  - We know our own mental states by *introspection*, a kind of “inner perception”. All mental states can easily be introspected whenever desired.

# *Recap*

- ⇒ Two kinds of challenge from science:
  - Science can uncover conflicting empirical data, or data which bring out inconsistencies in FP
    - Nagel on split brains
    - Wilkes on brain lesions, as far as “can read” and “can see” go
  - Science can provide explanations which might be judged better than FP in that they explain more facts and do it better. This could lead us to conclude that the entities posited by FP (e.g. beliefs and desires) do not exist.
    - Wilkes on dissociations and associations FP cannot explain
    - Churchland on the many things FP cannot explain

# Recap

- ⇒ Is FP like phlogiston or caloric?
  - Caloric was posited to be a “subtle fluid” which flows from hot to cold bodies, found in constant amount in the universe
  - The caloric theory of heat was never decisively refuted, because its predictions were similar to those of the modern kinetic theory of heat
  - Yet the caloric theory was rejected because the kinetic theory has more *explanatory power*
  - Could the same happen to FP and the entities it posits?

# *Recap of Churchland*

- ⇒ Churchland insists that FP is a theory.
- ⇒ His point is that, if FP is largely false, then there are no beliefs and desires (propositional attitudes).
- ⇒ This is because beliefs and desires are defined by the role FP says they play, somewhat like electrons.

# *Recap of Churchland*

- ⇒ Churchland thinks FP has a good chance to be false because:
  - It explains relatively little of what is going on with people's minds (compared to what a completed neuroscience will be able to explain)
  - Yet it has not evolved significantly for 2500 years
  - Furthermore, FP does not fit well with scientific theories of human behaviour

# ***Daniel Dennett***



## ***Three Kinds of Intentional Psychology***

# *Terminology*

## ⇒ Abstracta

- Abstract, “calculation-bound” entities.

Examples:

- The centre of gravity of your chair
- The average score on the exam
- The NASDAQ index
- The consumer confidence index
- etc

## ⇒ Illata

- Concrete entities posited by a theory.

Examples:

- Electrons, quarks, neutrinos, atoms, etc

# ***“Three Kinds of Intentional Psychology” at a glance***

**Folk Psychology**

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graph TD; FP[Folk Psychology] --> IST[Intentional System Theory (IST)]; FP --> SCP[Sub-Personal Cognitive Psychology (SCP)];
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**Intentional System Theory (IST)**

**Treats beliefs and desires as abstracta**

**Describes ideally rational behaviour**

**Sub-Personal Cognitive Psychology (SCP)**

**Posits concrete entities (illata) playing roughly the role of beliefs and desires in folk psychology and IST**

**Explains how we approximate ideal rational behaviour**

# *Folk Psychology according to Dennett*

- ⇒ The core of folk psychology is constituted by the following assumptions:
  - Our beliefs and desires are those we *ought* to have given our circumstances (our perceptual abilities, our needs, our experience, our biological needs, etc).
  - We generally behave like *rational* agents would do given our beliefs, desires, perceptual abilities, and general abilities.

# *Folk Psychology according to Dennett*

- ⇒ In addition to this “idealized core”, folk psychology incorporates all kinds of assumptions about:
  - What people actually tend to believe and desire (independently of rationality)
    - Ex: smokers want cigarettes even though cigarettes are not good for their health.
  - How people actually reason
    - Ex: people tend to make errors in complicated calculations
  - How beliefs and desires get to do their jobs (beliefs and desires as illata)
    - Ex: they are information-bearing structures in the brain.

# *Internal tensions in folk psychology*

- ⇒ Rational vs irrational
- ⇒ Illata vs abstracta

# ***Rational agents? Yes and no***

- ⇒ On the one hand, FP treats people as ideally rational agents
- ⇒ On the other hand, it incorporates all kinds of observation about people's irrational behaviour and the limits of rational explanation.
- ⇒ Tension between the “core” and the “periphery” of folk psychology?

# ***Beliefs: abstract or concrete?***

- ⇒ Beliefs are sometimes treated as abstracta, sometimes as illata
  - Abstracta: we ascribe infinitely many beliefs to people, e.g. you believe that  $1+1=2$ ,  $1+2=3$ ,  $1+3=4$ , etc.
  - Illata: we think of beliefs as capable of having side-effects, e.g., “her belief that John knew her secret caused her to blush”.

# *Two projects in folk psychology*

- ⇒ The project of intentional system theory
- ⇒ The project of sub-personal cognitive psychology

# *Intentional system theory (IST)*

- ⇒ A theory of rational behaviour: how one ought to act and update one's beliefs and desires given one's circumstances
- ⇒ Beliefs and desires are defined by the *role* they play in the theory
  - A belief that P is a state such that:
    - If one sees that P is the case, one will believe that P
    - If one desires that Q, and believes “If I do X, Q will happen”, then one will do X.
    - If one believes that P and believes that if P then Q, then one will believe that Q.
    - ...
- ⇒ As such, beliefs and desires are abstracta

# *IST*

- ➔ IST does not include any of the elements of FP which have to do with *how* we get to behave rationally (or why we sometimes fail to).

# ***Sub-personal cognitive psychology (SCP)***

- ➔ The goal of SCP is to uncover the mechanisms which underlie human behaviour and enable us to approximate rational behaviour (or cause us to be irrational)
- ➔ SCP posits illata which may or may not correspond to the entities found in IST or FP.

# *The gap between IST and SCP*

- ⇒ Dennett discusses two main ways in which IST and SCP pull apart:
  - IST makes us perfectly rational, SCP does not.
  - IST treats us as being capable of understanding and grasping meanings, while SCP can only explain how we approximate (“fake”) this capacity
    - The reason Dennett gives is that the brain can only deal with “syntax”, and syntax does not determine semantics
- ⇒ The implication Dennett hints at is that IST and FP are at best useful fictions.

# *Useful fictions?*

- ⇒ FP and IST may be useful fictions in the sense that they are false but nevertheless useful for certain purposes, e.g. predicting how most people would normally act
- ⇒ Some possible useful fictions:
  - Newtonian physics, including absolute space
  - Folk physics
  - Mathematical abstractions:
    - Averages (the average salary, the average weight, the average grade, etc)
    - Centres of gravity
    - Perfect figures (straight lines, circles, squares)

# *Relations between FP, IST and SCP*

- ⇒ IST is an improved part of FP, perhaps the core of it.
- ⇒ FP treats beliefs and desires as abstracta defined by the core principles of FP (most of the time at least).
- ⇒ So the coherent notion of a belief or desire closest to FP might be that provided by IST.
  - It might be appropriate to “reduce” the beliefs and desires of FP to those of IST.

# *Relations between FP, IST and SCP*

- ⇒ SCP might also be drawn in part from FP, but it is largely independent both in the claims it makes and the entities it posits.
- ⇒ SCP is related to FP and IST in that it explains how we come to behave in the sort of way FP and IST say we do.
  - SCP describes the (imperfect) *implementation* of the rules of rational behaviour described by IST, as well as other elements of behaviour described by FP.

# *Criticism*

- ⇒ Dennett's claim that real physical systems (e.g. brains) can at best “fake” the capability to grasp meanings is highly controversial.
- It's OK to say that we only approximate ideal rationality, but we really seem to think the things we think.

# Criticism

- ⇒ Dennett's “neobehaviourism”
  - Dennett's account of the FP notions of beliefs and desires is essentially behaviourist
  - Some disagree with him: the ordinary notions of beliefs and desires are tied to conscious feelings, not behaviour
    - What makes it so that you desire something, on the ordinary conception, is that you *feel* you want it.
    - See Galen Strawson on the Weather Watchers (in *Mental Reality*)
- ⇒ If Dennett is wrong in this regard, IST might be much farther from FP than he claims. Maybe FP's beliefs don't reduce to IST's.

# ***Dennett vs Churchland***

- ⇒ They seem to agree about the multiple shortcomings of FP.
- ⇒ They seem to agree that beliefs and desires are defined by the role FP says they play.
  - That is the point of beliefs and desires being abstracta
- ⇒ But they don't seem to agree on the relation between scientific psychology and folk psychology. How do they disagree?

# ***Dennett vs Churchland***

## ⇒ Churchland

- Scientific psychology (SCP) should seek to explain behaviour without consideration for FP, and should even replace FP

## ⇒ Dennett

- The job of SCP is not just to explain behaviour, but to explain what is true in FP, namely, that we behave in good part like rational agents.
- We should at least retain the part of FP that corresponds to IST (after improvements).

# *Dennett vs Churchland*

- ⇒ Different conceptions of what SCP can do:
  - Churchland
    - SCP, particularly neuroscience, can provide high-level models of cognitive function which could be applied across species, even perhaps to all kinds of intelligence
  - Dennett
    - The possible implementations of intentional systems are too diverse for any theory to replace IST in all its applications

# *Team exercise*

- ➔ Find more disagreements between Dennett and Churchland