PHL232 Handout 6: Varieties of Knowledge

So far our focus has been empirical knowledge acquired through perception. But not all knowledge is perceptual, and not all of it concerns empirical matters of fact. Today we'll discuss two other varieties of knowledge: knowledge acquired through testimony, and knowledge of mathematical truths.

§1 Testimony and Transmission

Here are three questions to which testimony gives rise:

1. *Knowledge Question*: What conditions must be met for hearers to know that p on the basis of a speaker's testifying that p?
2. *Testifying Question*: What conditions must be met for a speaker to count as testifying (as opposed, perhaps, to merely stating or asserting that p)?
3. *Justification Question*: What conditions must be met for a hearer to form a justified belief that p on the basis of a speaker's testifying that p?

Lackey focuses on the *Knowledge Question*. Most theorists have followed Dummett (1994) and held that testimonial knowledge, like knowledge derived from memory, is the product of knowledge *transmission*: a hearer knows that p on the basis of testimony only if her knowledge is inherited from some speaker earlier in the communicative chain. Lackey contrasts two views about testimonial knowledge transmission (pp. 472-473):

> *Strong Transmission (ST)*: S_1 comes to know that p via S_2's testifying that p only if S_2 knows that p
>
> *Weak Transmission (WT)*: For every testimonial chain of knowledge C, S_1 comes to know that p via the testimony of a speaker S_2 in C only if at least the first speaker in C knows that p (in a non-testimonial way)

ST entails that for every testimonial knowledge chain C, someone at the end of the chain knows that p on the basis of C only if every prior member in the chain also knows that p.

As we'll see, Lackey argues against both *ST* and *WT*. She thus holds that a right answer to the *Knowledge Question* will not entail that testimonial knowledge must be the product of transmission. Instead, testimonial knowledge can be *generated* by an act of testimony (i.e. a hearer can acquire testimonial knowledge even if no speaker earlier in the testimonial chain knows that p).

§2 Reductionism vs. Non-Reductionism

Lackey also discusses two competing approaches to the *Justification Question*:

> *Reductionism*: S has (defeasible) justification to accept another's report only if she has positive reasons to trust the speaker – reasons that do not ultimately rest on the testimony of others.
>
> *Non-Reductionism*: S can have (defeasible) justification to accept another's report merely on the basis of a speaker's testimony

A speaker possesses defeasible justification only if she lacks a *defeater* for that justification.

> For example, while I'm usually justified in taking my visual experience at face value, this justification might be undermined if I believe that my visual system is defective. Such a belief would count as a *doxastic defeater* (cf. pp. 474-476 for Lackey's discussion of types of defeaters).

From a distance, reductionists about testimonial justification wish to reduce our justification to believe the testimony of others to our justification to believe the deliverances of sense perception, memory, and the like. In contrast, non-reductionists take testimony to provide the same kind of 'basic' justification as these others sources of knowledge.

> Consider how this debate over testimonial justification fits into the debate over foundationalism about justification. Recall that foundationalists are committed to a range of basic beliefs whose justification does not depend upon justification for any other of a subject's beliefs. Reductionism must deny that beliefs formed on the basis of testimony are candidate basic beliefs, whereas anti-reductionists can hold that beliefs formed on the basis of testimony are candidate basic beliefs if those formed on the basis of perception (and memory, etc.) are candidates.

Reductionism vs. Non-Reductionism: A False Dichotomy?

Perhaps we should be suspicious of the distinction between reductionism and anti-reductionism. Insofar as we take the notion of transmission seriously, we might wish to pull apart the conditions under which we are entitled to accept the testimony from the conditions under which a belief formed on the basis of testimony counts as justified.

Given this separation, one could hold instead that we inherit justification for our testimonial beliefs from the speaker whose testimony we accept. In slogan form: whether a speaker makes available her knowledge to a hearer does not depend upon any reasons the hearer might have to accept the speaker's testimony. Dummett's view could be read this way, and Ed Nettel's recent dissertation defends this sort of pure transmission view.

§3 Lackey's Argument

We are not going to walk through all of Lackey's putative counterexamples to *ST* and *WT*. But these cases have a general structure:

1. A speaker testifies that p, and on the basis of her testimony a hearer forms the belief that p
2. The speaker does not know that p, either because she does not believe that p or she possesses a doxastic defeater that undermines her justification for p
3. The speaker's doxastic defeater does not transmit to the hearer, and the hearer has no other defeater that would undermine her justification for believing p

These ingredients have the potential to undermine both ST and WT:

> If the speaker does not believe that p, yet the hearer successfully knows that p on the basis of the speaker's testimony, we have a counterexample to *ST:* knowledge transmission occurs despite a speaker who fails to know that p.
>
> If every speaker earlier in the testimonial chain has a non-transmitted defeater, and 1 and 3 obtain for the final speaker, we have a counterexample to *WT*: the hearer acquires testimonial knowledge that p despite the fact that no prior speaker in the communicative chain knows that p.

Lackey takes these counterexamples to suggest a necessary condition for a hearer to acquire knowledge on the basis of testimony: the *statements* of a speaker (rather than her beliefs) must bear an appropriate connection to the truth (cf. 2** on p. 489).

> She leaves the precise nature of this connection open. But since she takes the Gettier cases to show that knowledge requires reliability or non-luckiness, she has in mind a reliabilist account of this connection (recall Nozick and Goldman).

§4 The Testimony Question

Lackey's counterexamples assume that a speaker testifies that p just in case she utters a statement that expresses p. But this is a potentially contentious answer to the *Testifying Question*. Some have held that further conditions must be met for a speaker to count as testifying that p. For example, perhaps a speaker testifies that p only if she asserts that p with an intention to bring about a belief that p in her audience.

> If we increase the number of conditions a speaker must satisfy to count as testifying, what we are left with is a disjunctive account of testimonial knowledge: some testimonial knowledge will derive from genuine testimony, the rest will exploit mere statements.

Question: on pp. 482-483 Lackey offers reasons to prefer a non-disjunctive account of testimonial knowledge. Are any of these persuasive?

> *Note*: this desire for a uniform account of knowledge also crops up in Benacerraf's paper. More generally, there are good questions about the force of such appeals to uniformity. Sometimes appeals to uniformity run roughshod over distinctions that serve important explanatory aims (Dummett says something similar on pp. 425-426 of his 1994 paper).

§5 Benacerraf's Dilemma

Recall that *Benacerraf's Dilemma* concerns a tension between our metaphysics of mathematics and our best epistemology. Here is a more careful statement of the dilemma:

1. *Referentialism*: Numerals and other mathematical 'names' are singular terms that serve to refer to extra-linguistic entities [*Note*: the *reference* of an expression is the expression's contribution to the truth or falsity of sentences in which it occurs.]
2. *Mind-Independence*: If referentialism is true, the required extra-linguistic entities do not depend for their existence on our capacity to think about them, know about them, etc.

3. *Abstracta*: If referentialism is true, the required extra-linguistic entities are abstract entities that can neither cause nor be caused by other entities
4. *Anti-Scepticism*: We know many mathematical truths [cf. p. 667]
5. Hence mathematical truths concern mind-independent causally-isolated extra-linguistic entities [from 1-3]
6. A right account of knowledge must accommodate knowledge of truths about mind-independent causally-isolated extra-linguistic entities [from 4 & 5]
7. But: no current account of knowledge (1) accommodates knowledge of such truths and (2) is both plausible and general [cf. the argument in Handout 2 against the correspondence theory of truth]

Benacerraf's Dilemma arises because of the tension between 6 and 7. Responses to Benacerraf have fallen into several broad categories:

A. *Reject 1*: those that reject *Referentialism* must offer an alternative semantics for mathematical discourse (i.e. one that does not explain mathematical truth in terms of reference) [Cf. p. 669 of Benacerraf; Hofweber]
B. *Reject 2*: those that reject *Mind-Independence* – but accept the other problematic claims – must offer an account of the relevant extra-linguistic entities on which they are mind-dependent [Cf. Brouwer]
C. *Reject 3*: to reject *Abstracta* requires that we identify numbers (for example) with a category of concrete entities in the world [Cf. Mill]
D. *Reject 4*: to reject *Anti-Scepticism* requires either that we deny that there are any mathematical truths [this is *mathematical fictionalism* – cf. Field 1980] or that we accept mathematical truths but deny that we can form justified beliefs about them.
E. *Reject 7*: those who reject 7 must furnish an account of knowledge that accommodates mathematical knowledge yet is both plausible and general (unless of course they reject the generality requirement).

All of these responses come with costs.

Benacerraf motivates *Referentialism* by appeal to a methodological preference for semantic uniformity: a semantic theory should treat like expressions alike. In Benacerraf's lingo, we ought to prefer a *homogeneous semantic theory*. (cf. pp. 661 & 666-667)

> Benacerraf's inspiration here is Gottlob Frege, the father of contemporary semantics and philosophy of mathematics. Frege (1884) argued that numerals act just like names, and hence because we treat names as referential in ordinary language, we should also treat numerals as referential.

Many motivate 2 and 3 by appeal to the putative necessity of mathematical truths (i.e. if 2+2=4 is true, it is *necessarily* true). It is hard to see how necessary truths could concern extra-linguistic entities that are either mind-dependent or concrete (i.e. non-abstract).

While Hartry Field (1980) famously rejects 4, he and his allies face a problem: mathematics appears indispensible to natural science. Were mathematical statements all false or without content, how could we explain the applicability of mathematics? Field attempts to show that science can get along without mathematics, but his project has found few followers.