

# Announcements and Such

- One Song — *Allman Brothers Band*
  - “Jessica,” from *Brothers and Sisters*
- Second essay will be assigned on Tuesday (the essay will actually be due on 4/5, rather than 4/3).
- Today: Part I of four parts on the Analysis of Knowledge (finally, we ask “what is knowledge?”)
  - Mainly, today we’ll cover the relationship between Justified True Belief and Knowledge.
  - Note: I’m adding a fair amount of stuff (again) beyond the Audi reading today...

## The Analysis of Knowledge I

### Some Background Assumptions About Knowledge I

- We have been assuming various things about knowledge so far, including the following:
  - $S$  knows that  $p \Rightarrow S$  believes that  $p$
  - $S$  knows that  $p \Rightarrow p$  is true
- I take it the first assumption is uncontroversial. The second assumption may be more so.
- We sometimes talk about “knowing” things that turn out to be false, but this is (for us) loose talk.
- This (loose) way of speaking may involve a conception of “knowing” as *being certain*.
- Knowledge is *not* being (subjectively) certain. In fact, a subjective attitude of certainty toward  $p$  is *neither necessary nor sufficient* for knowing  $p$ .

## The Analysis of Knowledge I

### Some Background Assumptions About Knowledge II

- [What is truth? We will discuss various theories of truth later in this chapter. For now, we’ll just presuppose a naive, realist conception of truth.]
- Of course, we’ve been (tacitly) assuming *more* about knowledge than just these two principles.
- That is, we’ve been assuming something like:
  - Knowledge = true belief +  $X$  [or,  $XTB$ , for short]
- *The* question is: What is this “ $X$ -factor” which, when super-added to true belief, yields knowledge?
- This is one of the most central (and oldest) questions in the history of philosophy.
- In this chapter, Audi considers various proposed answers to this question, about the “ $X$ -factor”.

## The Analysis of Knowledge I

### Knowledge and Justified True Belief I

- One idea that was quite popular for over two millennia (from Plato’s time until the 1960’s) is:
  - (JTB)  $S$  knows that  $p$  if and only if  $S$  believes  $p$ ,  $p$  is true, and  $S$  is *justified in believing*  $p$ .
- In other words: knowledge is *justified* true belief.
- A version of the JTB theory is discussed and rejected in Plato’s *Theaetetus* (201). It is also discussed (more favorably) in Plato’s *Meno* (98).
- The Platonic version of JTB theory is actually somewhat different than modern JTB theory.
- Recall our distinction last time between  $S$  being *justified in believing*  $p$  vs  $S$  being *able to articulate* an “account” or an “explanation” for their belief.
- Plato really seems to be talking about the *latter*.

### The Analysis of Knowledge I Knowledge and Justified True Belief II

- Plato also tends not to distinguish *propositional* knowledge (in our sense) from *other* sorts of knowledge (knowing *how*, *conceptual* knowledge, knowledge *of* persons/objects, *etc.*), and this too causes difficulties.
- In *Theaetetus*, the “true belief + account” proposal is rejected (basically) on the grounds that the “account” or “explanation” would *itself* have to be known, which would lead to a *circular* proposal.
- This is interesting (though not exactly concerned with *propositional* knowledge in our sense). Some moderns have rejected JTB’s for similar reasons.
- It was Edmund Gettier’s (very short) 1963 *Analysis* paper “Is Justified True Belief Knowledge?” that caused so many moderns to reject the JTB theory.
- Gettier offered two counterexamples to JTB.

### The Analysis of Knowledge I Knowledge and Justified True Belief III

- Gettier’s JTB Counterexample #1:
  - Smith has applied for a job, but has a justified belief that:
    - (A) Jones will get the job.
  - Smith also has a justified belief that
    - (B) Jones has 10 coins in his pocket.
  - Smith (competently) *deductively infers* from these two justified beliefs (*via* the *transitivity of identity*) that
    - (C) The man who’ll get the job has 10 coins in his pocket.
- In fact, Jones does *not* get the job. Instead, Smith does. However, as it happens, Smith also had (unbeknownst to him) 10 coins in *his* pocket. So Smith’s belief that (C) was *justified* and *true*. But it does not seem to be *knowledge*.

### The Analysis of Knowledge I Knowledge and Justified True Belief IV

- Remarks on Gettier’s example #1. First, the set-up here seems to presuppose the following principle:
  - If *S* is justified in believing *p*, *S* is justified in believing *q*, and *S* (competently) *deductively infers* *r* from *p* and *q*, then *S* is justified in believing *r*.
- That is, Gettier’s example seems to assume that (good) *deductive inference transmits justification*.
- We have seen *counterexamples* to this sort of principle (the preface paradox is a good example).
- So, you might worry that Gettier’s example rests on a *false principle*. But, it does seem that — *in this particular case* — Smith *is* justified in believing (C).
- So, it seems that Gettier’s first example doesn’t fail for *this* reason. There are some other issues here...

### The Analysis of Knowledge I Knowledge and Justified True Belief V

- Note that Gettier’s 1st example is framed in terms of beliefs about *sentences*, not (merely) *propositions*.
- A more careful rendition of Gettier’s first case says:
  - Smith is justified in believing (but *doesn’t know*) (*p*) the *sentence* (C) “*The man who will get the job has 10 coins in his pocket*” expresses a true proposition.
- Smith *doesn’t know* **which** proposition (C) expresses.
- He *falsely believes* that (C) expresses a proposition *entailed* by the propositions expressed by (A) & (B).
- But, *in fact* (unbeknownst to Smith), the proposition expressed by (C) is true *in virtue of* the truth of the propositions expressed by (A\*) and (B\*), where (A\*) = (A)<sub>Smith/Jones</sub> and (B\*) = (B)<sub>Smith/Jones</sub>.
- This is *why* Smith *doesn’t know* (*p*). [Note: the fact that *p* involves a *future event* is *irrelevant* here].

### The Analysis of Knowledge I Knowledge and Justified True Belief VI

- Gettier's Example #2:
    - Smith has a justified belief that
      - (A) Jones owns a Ford.
- Smith (competently) *deductively infers* from (A), by the rule of disjunction introduction, that
- (B) *Either* Jones owns a Ford *or* Brown is in Barcelona.
- Now, Smith has no knowledge whatsoever about the location of Brown. And, in fact, Jones does *not* own a Ford. However, *by sheer coincidence*, Brown *does* happen to be located in Barcelona.
- So, Smith's belief that (B) is (intuitively) both true and justified, but it does *not* seem to constitute *knowledge*.
- [Note: This involves *neither* descriptions *nor* future events.]

### The Analysis of Knowledge I Knowledge and Justified True Belief VII

- Gettier's two examples both involve an agent who (competently) *infers* a true proposition  $p$  from a set of propositions  $P$  that contains *at least one falsehood*.
- Some have responded to Gettier's examples by requiring that "no false premises" be used in knowledge-inferences.
- This leads to a revision of JTB that we might call JTBN:
  - $S$  knows  $p$  iff  $S$  is *justified* in believing  $p$ ,  $p$  is true, and  $S$  did not infer  $p$  from a set  $P$  containing a falsehood.
- JTBN avoids Gettier's *original* problems, but there seem to be *generalized* Gettier problems that plague JTBN too:
  - Smith walks into a room and seems to see Jones in it. Smith *immediately* forms the justified belief that ( $p$ ) Jones is in the room. But, in fact, it is *not* Jones that Smith saw; it is a life-size replica propped in Jones's chair. Nevertheless, Jones *is* in the room; she is just hiding under the desk reading comic books while her replica makes it seem as though she is in. So, Smith's belief that  $p$  satisfies JTBN, but *isn't knowledge*.

### The Analysis of Knowledge I Knowledge and Justified True Belief VIII

- Even in this case in which there is *no inference* to  $p$  (so there are *no false premises* in any inference to  $p$ ), there does still seem to be a false *presupposition* involved.
- There is a presupposition here (of Smith) that Smith is *seeing* Jones, and this presupposition is *false*. The fact that Smith is *not* seeing Jones is an **epistemic defeater** — it eliminates the power of the justification to turn a true belief that acquires that justification into knowledge.
- With this in mind, we could try to revise JTB into JTBD:
  - (JTBD)  $S$  knows that  $p$  iff  $S$  believes that  $p$ ,  $p$  is true,  $S$  is *justified* in believing  $p$ , and *there is no epistemic defeater* for the justification of  $S$ 's belief that  $p$ .
- As it stands, this is not a very useful account. Without a *contentful, independent characterization* of possible epistemic defeaters, the account is utterly useless.
- Will false premises and presuppositions suffice here? No.

### The Analysis of Knowledge I Knowledge and Justified True Belief IX

- Remember the lottery paradox? In that case, we concluded that there *could* be *justified true belief* (that you will lose:  $p$ ), but there could *not* be *knowledge* that  $p$ .
- But, in that case, there needn't be any false premise or presupposition underlying your belief that  $p$ .
- This shows that there is more to being an "epistemic defeater" than being either a false premise or a false presupposition underlying a (justified, true) belief.
- It might *seem* that your belief that you will lose the lottery depends on the false proposition that the outcome of a chance process can be known beforehand.
- But, you might *reject* this claim and *still* believe — even *justifiedly* — that you will lose, whereas Smith could *not* reject the false presupposition that *he sees Jones* and *still* believe (*justifiedly*, at least) that Jones is in the room.
- Maybe there's a "defeater" in here *somewhere* though...

### The Analysis of Knowledge I Knowledge and Justified True Belief X

- The lottery example suggests that there is another way for “defeat” to creep in — *inconclusive* justification.
- One might therefore propose that the “X-factor” is that the justification of  $p$  be *conclusive*. In other words:
  - (JTBC)  $S$  knows that  $p$  iff  $S$  believes that  $p$ ,  $p$  is true,  $S$  is justified in believing that  $p$ , and  $S$ 's justificatory grounds  $G$  (for  $p$ ) are *conclusive* (guarantee  $p$ 's truth).
- There are various ways of making precise the vague idea of  $G$ 's providing *conclusive reason* for the belief that  $p$ .
- The lottery example suggests that *no degree of high probability* (short of *probability 1*) will suffice.
- Some (e.g., Dretske) have proposed that  $G$  constitutes *conclusive grounds* for  $p$  just in case  $\text{Pr}(p | G) = 1$ .
- By itself, this won't suffice, since  $G$  could be *false*. So, we'd have to *also* require (at least) that  $G$  be *true*.

### The Analysis of Knowledge I Knowledge and Justified True Belief XI

- No matter how we unpack “conclusive reasons”, there is going to have to be *some* sense in which such accounts imply that  $S$  “couldn't have been wrong” about  $p$ .
- In some sense,  $p$  has to be an *epistemic certainty* (for  $S$ ).
- This requires more, of course, than *mere psychological certainty*. One can be *psychologically* certain (that is to say, *dogmatic*) even about things that are *false*.
- Audi introduces a second, *objective* kind of certainty, which he calls *propositional* certainty. It's not entirely clear what this amounts to, but it's supposed to be some *objective* relation between  $S$ 's grounds and the truth of  $p$ .
- Audi offers the following two-pronged characterization of the “conclusive grounds” clause of JTBC:
  - (1)  $S$  may *justifiedly* be *psychologically certain* of  $p$ , and
  - (2)  $p$  is *so well-grounded* (for  $S$ ) as to be itself *propositionally* certain (given  $S$ 's grounds for  $p$ ).

### The Analysis of Knowledge I Knowledge and Justified True Belief XII

- The JTBC account (no matter how it is made precise) will end-up being very *narrow* and *restrictive*.
- That is to say, it will *rule-out* lots of cases that we have (intuitively) said *should* constitute knowledge, e.g., most (if not all) knowledge based on *testimony*.
  - If Jane tells me that she wants to meet to discuss something, and I know her well and have no reason to doubt her word, may I not *know* that she wants to meet with me? Yet I do not have *conclusive justification* nor does her testimony *render it (objectively) certain* that she wants to meet with me. Error is (barely) possible for me; she could act out of character and deceive me.
- Theories like JTBC that require *objective certainty* (given the grounds) are *infallibilist* conceptions.
- Notice that such accounts have another peculiar feature: they seem to be  $XB$  theories, *not*  $XTB$  theories, since the “X-factor” *seems to imply that  $p$  is true*.

### The Analysis of Knowledge I Knowledge and Justified True Belief XIII

- Linda Zagzebski wrote a great (and short!) paper called “The Inescapability of Gettier Problems” (1994, *Phil. Quarterly*), which argues very compellingly that:
  - *Any*  $XTB$  theory of knowledge will have Gettier-style counterexamples, so long as  $XB$  *does not imply* T.
  - Start with a case of  $XFB$ . Make the element of  $X$  “strong enough for knowledge”, but make the belief *false*. The falsity of the belief will not be due to any systematic feature  $Z$  of the situation (if it were, then  $Z$  could be packed into  $X$  and then T *would be* implied by  $XB$ ). The falsity of the belief is therefore due to some element of *luck*. Now emend the case by adding *another* element of luck, only this time one which makes the belief *true*. The second element must be *independent* of the element of  $X$  so that the degree of  $X$  is unchanged (the two elements of luck “cancel each other out”). We now have a case in which the belief is  $X$  (in a sense strong enough for knowledge), the belief is true, but it is *not* knowledge. The conclusion is that as long as the concept of knowledge permits *some* degree of *independence* between the  $X$  and T components,  $XTB$  will *never* be sufficient for knowledge.

### The Analysis of Knowledge I Knowledge and Justified True Belief XIV

- Zagzebski gives a nice, novel application of her recipe:
- **Part I:** Suppose Dr. Jones, a physician, has very good inductive evidence that ( $p$ ) her patient, Smith, is suffering from virus  $V$ . Smith exhibits all of the symptoms of this virus, and a blood test has shown that his antibody levels against virus  $V$  are extremely high. In addition, let us suppose that the symptoms are not compatible with any other known virus, all of the evidence upon which Jones bases her diagnosis is true, and there is no evidence accessible to her which counts significantly against the conclusion. Nonetheless, let us suppose that  $p$  is false. Smith's symptoms are due to a distinct and unknown virus  $W$  and the fact that he exhibits high antibody levels to virus  $V$  is due to idiosyncratic features of his biochemistry which cause him to maintain unusually high antibody levels long after a past infection. In this case, Dr. Jones' belief is false, but, intuitively, it is as justified and undefeated as one could possibly want.

### The Analysis of Knowledge I Knowledge and Justified True Belief XV

- **Part II:** Now, to get a Gettier-style example we simply add the feature that Smith has very recently contracted virus  $V$ , but so recently that he does not yet exhibit symptoms caused by  $V$ , nor has there been time for a change in the antibody levels due to this recent infection. So while the evidence upon which Dr. Jones bases her diagnosis does make it highly probable that Smith has  $V$ , the fact that Smith has  $V$  *has nothing to do with that evidence*. In this case, then, Dr. Jones' belief that Smith has virus  $V$  is true, justified (and undefeated, *etc.*), but it is *not* knowledge.
- As LZ explains, this leaves us with three options:
  - Go *infallibilist*, and make the “X-factor” *imply* T.
  - Go to the *other* extreme and say there is *almost no connection* between  $X$  and T, and then just insist that Gettier cases *are* cases of *knowledge* after all!
  - *Give up on the XTB approach*, and concede/lament that knowledge involves *a heavy dose of luck*. On such a view, knowledge would be “XTB + luck”.