## Alvin I. Goldman's "What is justified belief?"

- I. Criteria for an adequate theory of justification
  - A. The theory must provide a set of substantive conditions, expressed in non-epistemic terms, that specify when a belief is justified.
  - B. The theory must explain why beliefs that meet those conditions count as justified.
- II. Goldman does not assume INTERNALISM, according to which "when a belief is justified there is something 'possessed' by the believer which can be called a justification" (p. 106).
- III. Initial attempts to provide a theory
  - (1) If S believes that p at t, and p is INDUBITABLE for S (at t), then S's belief in p at t is justified.
    - 'p is indubitable for S' = 'S has no grounds for doubting p'
      - This doesn't meet Criterion A, for 'ground' is an epistemic term.
    - 'p is indubitable for S' = 'S is psychologically incapable of doubting p'
      - Counterexamples galore: "A religious fanatic may be psychologically incapable of doubting the tenets of his faith, but that doesn't make his belief in them justified" (p. 107); "[D]uring the Watergate affair, someone may have been so blinded by the aura of the presidency that even after the most damaging evidence against Nixon had emerged he was still incapable of doubting Nixon's veracity. It doesn't follow that his belief in Nixon's veracity was justified" (p. 107).
  - (2) If S believes p at t, and p is SELF-EVIDENT, then S's belief in p at t is justified.
    - 'p is self-evident' = 'p is directly justified' or 'p is intuitively justified' or 'p is nonderivatively justified'
      - o This doesn't meet Criterion A, for 'justified' is an epistemic term.
    - 'p is self-evident' = 'It is impossible to understand p without believing it'
      - Any belief in a trivial analytic truth or in a necessary truth will count as justified.
      - Its being *humanly* impossible to refrain from believing certain propositions that we understand is not enough to make those beliefs count as justified.
      - There are no propositions such that (a) we understand them and (b) it is *logically* impossible to refrain from believing them.
      - According to (2), there will be no justified *contingent* beliefs.

- (3) If p is a SELF-PRESENTING proposition, and p is true for S at t, and S believes p at t, then S's belief that p is justified.
  - 'self-presenting' = 'h is self-presenting for S at  $t = _{df.}$  h is true at t; and necessarily, if h is true at t, then h is evident for S at t'
    - This doesn't meet Criterion A, for 'evident' is an epistemic term.
  - (SP) Proposition P is self-presenting if and only if: necessarily, for any S and any t, if p is true for S at t, then S believes p at t.
    - (3<sub>N</sub>), according to which self-presentingness has to do with *nomological* necessity.
      - It is nomologically necessary, let's say, that anyone in brain-state B will ipso facto believe that he's in B. But we can imagine cases in which that belief is not justified, e.g., a case in which we have reliable evidence (from the Super EEG) to the contrary.
    - (3<sub>L</sub>), according to which self-presentingness has to do with *logical* necessity.
      - 'I am awake' is such that logically necessarily, for any S and any t, if
        'I am awake' is true for S at t, then S believes that she is awake at t.
        But since we (perhaps often) believe that we are awake even when we're asleep and dreaming, my belief that I'm awake need not be justified simply because its truth logically guarantees that it's held.
- (4) If p is an INCORRIGIBLE proposition, and S believes p at t, then S's belief in p at t is justified.
  - (INC) Proposition p is incorrigible if and only if: necessarily, for any S and any t, if S believes p at t, then p is true for S at t.
    - (4<sub>N</sub>), according to which incorrigibility has to do with *nomological* necessity.
      - It is nomologically necessary, let's say, that if anyone believes that he's in brain-state B then he will be in B. Thus, 'I am in brain-state B' is nomologically incorrigible. But we can imagine cases in which that belief is not justified, e.g., a case in which we have reliable evidence (from the Super EEG) to the contrary.
    - (4<sub>L</sub>), according to which incorrigibility has to do with *logical* necessity.
      - Any true proposition of logic or mathematics is logically incorrigible. But not all such beliefs are justified. Imagine, for example, that Nelson comes to believe some complex logical truth on the basis of wishful thinking.
      - Restrict (4L) to *contingent* incorrigible propositions: Humperdink and Fraud.

IV. Diagnosing the problems with the initial attempts

Notice that counterexamples arise, in each case above, because we can find a belief that meets the conditions (set out by the theory of justification) but that is also *aberrantly caused*.

- Belief is causally sustained by an inability to doubt the tenets of one's faith
- Belief is causally sustained by being blinded by the aura of the presidency
- Belief is causally initiated by its being humanly impossible to refrain from believing a certain proposition
- Belief is causally initiated by the mere fact that you're in some brain-state
- Belief is causally initiated by wishful thinking
- Belief is causally initiated by reliance on a pseudo-logical principle

Such beliefs are fair game as counterexamples because none of the above theories places restricts *how beliefs can be caused*.

Each theory in III either fails to meet Criterion A or fails to meet Criterion B. Those that fail to meet Criterion B do so because *some causal requirement is needed in order to explain why beliefs count as justified.* 

V. The initial statement of reliabilism

The justificational status of a belief is a function of the reliability of the process or processes that cause it, where (as a first approximation) reliability consists in the tendency of a process to produce beliefs that are true rather than false.

- VI. Clarifying and explaining some things in the initial statement
  - A. How reliable must a process be in order to have justified beliefs as outputs?

"A precise answer to this question should not be expected. Our conception of justification is *vague* in this respect."

- B. 'Tendency'
  - 1. Frequency (or actual long-run frequency). For example, the process *actually* yields a true belief in eight out of ten cases.
  - 2. Propensity, or regularity throughout both actual and possible situations. For example, the process does *and would in non-actual but possible cases* yield a true belief eight out of ten times.

Which of these is intended? Goldman thinks that our ordinary conception of justifiedness is vague on this dimension too.

- C. 'Process'
  - a. A process is "a *functional operation* or procedure, i.e., something that generates a *mapping* from certain states—'inputs'—into other states—'outputs'. The outputs in the present case are states of believing this or that proposition at a given moment" (p. 115).

- b. *Generality*: Should belief-forming processes be construed *broadly* or *narrowly*? Which of the following should we count as a belief-forming process: seeing, or seeing in OSH 336 on Tuesday, February 7<sup>th</sup> at about 11:45 a.m.? Goldman suggests that we should count the former but not the latter as a belief-forming process.
- c. *Extent*: Should we restrict the extent of belief-forming processes to 'cognitive' events, or should events external to us also be included as parts of those processes? Goldman suggests that we should restrict belief-forming processes to cognitive events (although this is not to deny that external events play an important role in helping us to form beliefs).
- VII. The second statement of reliabilism

If S's believing p at t results from a reliable cognitive belief-forming process (or set of processes), then S's belief in p at t is justified.

- This theory is too strong, however: it suggests, inappropriately, according to Goldman, that a process's reliability depends (at least to some extent) on the nature of its inputs. Consider some process that we take to be reliable, for example, deductive inference. Imagine, however, that, for one reason or another, we tend to infer from beliefs that are false. Given this, deductive inference would tend to generate *false* beliefs *even though we're performing inferences just as we should*. Thus, deductive inference would *not* count as reliable (since it would tend to produce false beliefs). This result strikes Goldman as inappropriate, for it seems that a process's reliability is a function of something about *the process itself*, rather than a function of something about the process is inputs (for example). This leads Goldman to revise the notion of reliability in the following way:
- VIII. The third statement of reliabilism
  - *Conditional reliability*: "A process is conditionally reliable when a sufficient proportion of its output-beliefs are true *given that its input-beliefs are true*" (p. 117).
  - *Belief-dependent cognitive processes* are processes some of whose inputs are beliefs states.
  - Belief-independent processes are processes none of whose inputs are belief-states.
  - (6A) If S's belief in p at t results ('immediately') from a belief-independent process that is (unconditionally) reliable, then S's belief in p at t is justified.
    - o Example: Perception
  - (6B) If S's belief in p at t results ("immediately") from a belief-dependent process that is (at least) conditionally reliable, and if the beliefs (if any) on which this process operates in producing S's belief in p at t are themselves justified, then S's belief in p at t is justified.

- o Example: Deductive inference
- IX. Other neat things about Goldman's theory
  - It is not a *current time-slice theory*, i.e., a theory that makes the justificational status of a belief wholly a function of what is true of the cognizer *at the time* of belief. (CTSTs include forms of coherentism and of so-called Cartesian foundationalism.) Rather, Goldman's theory makes the justificational status of a belief depend on its prior history (and, in Goldman's case, on the reliability of belief-generating processes).
  - 2. Goldman does not assume that "the justificational status of a belief is something which the cognizer is able to know or determine at the time of belief" (p. 118). (This means that his theory is an *externalist* one.)
  - 3. Objections and replies
    - Objection: Not all justified beliefs—for example, beliefs about one's current phenomenal states or intuitive beliefs about elementary logical principles—derive their justificational status from their causal ancestry.
      - Reply: Even these beliefs have a causal history (in that they are generated by some belief-generating process). And, like other beliefs, their being justified depends on the reliability of those processes.
    - Objection: Imagine a possible world, *w*, in which wishful thinking (for example) is reliable. According to Goldman's theory, beliefs formed on the basis of wishful thinking would be justified in *w*. But *no* beliefs formed on the basis of wishful thinking are justified.
      - Reply 1: Beliefs formed on the basis of wishful thinking *would* be justified in *w*.
      - Reply 2: The reliability of a belief-forming process is a function only of its performance in natural, non-manipulated environments.
      - Reply 3: We don't count wishful-thinking beliefs *in w* as justified because we don't count wishful-thinking beliefs *here* as justified. We form our opinions about the reliability of process, and of their ability to confer justification, *in the actual world*; and those opinions carry over into other worlds in spite of the nature of the processes in those worlds.
- X. A final objection, and a final revision to the theory
  - Can Goldman's theory account for the following case? My believing p at t results from a reliable cognitive belief-forming process, but I believe, perhaps even *justifiably*, that the process is *not* reliable. Here, reliabilism suggests that my belief that p is justified even though we tend to think that it is *not*. How can reliabilism account for this case?

- Goldman claims in reply that "[t]he justificational status of a belief is not only a function of the cognitive processes *actually* employed in producing it; it is also a function of processes that could and should be employed" (p. 123). Here's the revision that springs from this thought:
  - (10) If S's belief in p at t results from a reliable cognitive process, and there is no reliable or conditionally reliable process available to S which, had it been used by S in addition to the process actually used, would have resulted in S's not believing p at t, then S's belief in p at t is justified.
- How does (10) handle the proposed counterexample to the theory? Jones' beliefs result from a reliable cognitive process, namely, memory. Yet, in spite of what his parents tell him, namely, that he suffered from amnesia when he was seven but later developed pseudo-memories of that period, he continues to hold his memory beliefs. However, those beliefs are *not* justified, according to (10). For, in addition to memory, Jones has available to him *the testimony of his parents*, which, although misleading in this case, is generally reliable. His using this process the one constituted by forming or adjusting beliefs on the basis of his parents' testimony would have resulted in his *not* holding his memory beliefs. Thus, Jones' memory beliefs are not justified.
- XI. Does the theory meet Goldman's criteria?
  - A. "Since 'reliable belief-forming process' has been defined in terms of such notions as belief, truth, statistical frequency, and the like, it is not an epistemic term." Hence, Goldman has provided a set of substantive conditions, *expressed in non-epistemic terms*, that specify when a belief is justified.
  - B. Reliabilism claims that there is a *causal connection* between a belief and the process that one employs in forming that belief. (This connection can be cashed out in at least two ways either the process *causally initiates* the belief, or it *causally sustains* the belief.) According to Goldman, beliefs are justified in the way that they are because of their causal connection to belief-forming processes. So this explains *why* beliefs are justified in the way that they are.

## Moreover,

- C. like justification, reliability comes in degrees. Just as one belief can be more or less justified than another, one process can be more or less reliable than another. Thus, reliabilism can account for the fact that justification comes in *degrees*. For example, "[v]isual beliefs formed from brief and hasty scanning, or where the perceptual object is a long distance off, tend to be wrong more often than visual beliefs formed from detailed and leisurely scanning, or where the object is in reasonable proximity. In short, the visual processes in the former category are less reliable than those in the latter category" (p. 114). This accounts for the fact that we judge visual beliefs of the former sort to be less justified than visual beliefs of the latter sort.
- D. To be reliable, a belief-forming process needs only a *tendency* to produce beliefs that are true rather than false. This suggests that beliefs formed on the basis of reliable belief-forming processes can be false. Nevertheless, even these beliefs can

be justified, for they too are formed on the basis of reliable belief-forming processes. Thus, reliabilism allows for *fallibilism*.