

1. Background

Reminder: S knows that p iff (1) S believes that p , (2) p is true, (3) S is justified in believing that p , and (4) S 's belief that p isn't Gettiered. We're still focusing on justification (3).

Unlike foundations theories, *coherence theories of justification* hold that **no** beliefs are basic; a belief is justified for S iff it fits ("coheres") with the set of S 's beliefs.

1.1. Why be a coherentist?

The modest answer. We've seen that foundations theories face many problems. Many take coherentism to be the most conservative adjustment to foundationalism that avoids its pitfalls.

Neurath's answer: In principle, (a) we can revise any of our beliefs, (b) just not all at once. For instance, when our beliefs conflict, we can revise one of our beliefs, or we can revise our "meta-belief" about what it means for beliefs to "conflict." Coherence provides a plausible story about how this is done: we revise any belief depending on how well it fits with our other beliefs.

1.2. Problems with Neurath's answer

Wrongly presupposes that all belief change is guided by "meta-beliefs," i.e. beliefs about how we can infer one belief from another (item a, above). Here's an example:

- Suppose that I believe that *if Frida is a dog, then Frida is a mammal*, and I also believe that *Frida is a dog*. Then I should believe that *Frida is a mammal*.
- There is a rule (called *modus ponens*) that underwrites this inference. Its general form is: For all p and q , if I believe that *if p then q* , and I also believe that p , then I should believe that q .
- *First problem:* Most people reason *in accordance with* this rule but don't have a *meta-belief* about it.
- *Second problem:* if we were required to have a meta-belief about modus ponens every time that we used it, we would be required to have a meta-meta-belief (**If *modus ponens* is valid and *Frida is a dog* and *if Frida is a dog, then Frida is a mammal*, then *Frida is a mammal***) and so on¹.

The remaining core of the Neurathian motivation is the idea that ideas are innocent until proven guilty (item b, above). We have to stand on some planks of the raft in order to criticize and revise the others, so the planks that we stand on are assumed to be correct.

- *Third problem:* However, this is entirely compatible with foundationalism.

1.3. Positive & Negative Coherence Theories

Negative coherence theories hold that *all* beliefs are *prima facie* justified ("innocent until proven guilty"), hence we are justified in believing p unless we have some evidence to the contrary, i.e. a "negative reason".

Positive coherence theories hold that *no* beliefs are *prima facie* justified ("guilty until proven innocent"), hence we are justified in believing p only if we have some evidence supporting p , i.e. a "positive reason."

1.4. Linear & Holistic Coherence Theories

Linear coherence theories: A reason for a belief is either another individual belief, or a small set of beliefs, and is not automatically the set of all of one's beliefs.

Holistic coherence theories: If S has a reason to believe that p , then p stands in some relationship to the set of *all* of S 's beliefs.

2. Positive, Linear Coherentism

2.1. Regress Argument

- R1. For all S , p , and q , if q is S 's justification for believing that p , then S must be justified in believing that q .
- R2. If R1 is true, then all justification results in an infinite regress, a vicious circle, or stopping at an arbitrary assumption.
- R3. We cannot possess an infinite chain of justification.
- R4. Viciously circular reasoning does not provide justification.
- R5. Stopping at an arbitrary assumption does not provide justification.
- R6. ∴ No belief is justified. (R1-R5)

¹ For a very fun, clear, and brief discussion of this, read Lewis Carroll's "What the Tortoise Said to Achilles."

2.1.1. *Coherentist responses to the Regress Argument*

- C1. Negative coherence theories reject R1. (Or perhaps they only reject the stronger claim that we must *provide* justification for q , in which case they're still on the hook for the Regress Argument.)
 C2. Holistic coherence theories reject R2 on the grounds that are closely related to R4: all of our beliefs are justified by how they relate to each other. This is a "virtuous" circle, not a vicious one.
 C3. \therefore Only positive, linear coherence theories are subject to the regress argument. (C1, C2)

2.2. *Creeping foundationalism objection*

- CF1. If positive, linear coherentism is true, then S 's reasons for a physical-object belief p are either: (a) appearance beliefs, or (b) some subset of all of my beliefs from which I infer p .
 CF2. There is no subset of S 's beliefs from which S infers a physical-object belief, i.e. (b) is false.
 CF3. \therefore If positive, linear coherentism is true, then my reasons for physical-object beliefs are (a) appearance beliefs. (CF1, CF2)
 CF4. If S 's reasons for physical-object beliefs are appearance beliefs, then positive, linear coherentism is indistinguishable from foundationalism.
 CF5. \therefore If positive, linear coherentism is true, then it is indistinguishable from foundationalism. (CF3, CF4)

3. Positive, Holistic Coherentism

3.1. *Lehrer's Theory*

A belief p is justified for a person S if and only if for each belief with which p 'competes,' S believes that p is more probable than that competitor.
 p competes with q iff the probability of p on the assumption of q is less than the probability of p without any assumption, i.e. $\Pr(p|q) < \Pr(p)^2$.

3.2. *Occurrent belief objection*

- O1. If positive, holistic coherentism is true, then both occurrent and non-occurrent beliefs can justify our beliefs.
 O2. Only occurrent (conscious, explicit) beliefs can justify our beliefs.
 O3. \therefore Positive, holistic coherentism is false. (O1, O2)

3.2.1. *Two Arguments for O2*

Thought-experiment (p.77): Suppose that you once knew of evidence e that justifies your belief that p , but you cannot recall e . Then you are not justified in believing that p .

- *Quick reply*: Not all non-occurrent beliefs are ones that you cannot recall. Hence, it might suffice that evidence is *accessible*, even if it is *non-occurrent*.

Epistemic norms (p.77-8): Justification is supposed to guide us in what we believe. However, if evidence exists non-occurrently, then we are unaware of it. If we are unaware of our evidence, then it cannot guide us. So, non-occurrent beliefs cannot justify.

² "Pr(...)" is the "the probability of..." It is sometimes represented as "prob(...)" or "P(...)." $\Pr(p|q)$ is called the *conditional probability* of p on q . It is sometimes represented with "/" rather than "|".

3.3. *The Basing Objection*

Recall: there's a difference between *having* a reason for your belief and *basing* your belief on that reason.

- B1. If holistic, positive coherentism is true, then a belief that p can be based on a reason only if (a) the believer bases his belief that p on her meta-belief that p *coheres with my other beliefs* (doxastic option³), or (b) the believer bases his belief that p in virtue of p 's relation with her other beliefs, and that relation is not a meta-belief (non-doxastic option).
- B2. People do not (generally) base their beliefs on meta-beliefs that p *coheres with my other beliefs*.
- B3. If the doxastic option is true, then justified believers would have an infinite regress: we would need to base our meta-belief that p *coheres with my other beliefs* on the meta-meta-belief that (p *coheres with my other beliefs*) *coheres with my other beliefs*, and so on...
- B4. ∴ If holistic, positive coherentism is true, then a belief that p can be based on a reason only if (b) the believer bases his belief that p in virtue of p 's relation with her other beliefs, and that relation is not a meta-belief (non-doxastic option). (From B1-B3)
- B5. If believer bases his belief that p in virtue of p 's relation with her other beliefs, and that relation is not a meta-belief, then the coherence relation is obscure.
- B6. ∴ If holistic, positive coherentism is true, then the coherence relation is obscure. (From B4, B5)

4. Negative Coherence Theories

All beliefs are *prima facie* justified, i.e. “we are automatically justified in holding any belief we do hold unless we have some positive reason for thinking we should not hold it.” (80)

4.1. *Harman's Theory*⁴

Reasoning is striking the right balance between two (oft-competing) factors:

- Conservatism: making the modest revisions to your overall set of beliefs (view).
 - Note that this contributes very much to its status as a negative coherence theory.
- (Explanatory) Coherence: making revisions that allow your overall set of beliefs to explain more and leave less unexplained. More precisely: a belief is unjustified if: (1) we cannot (in the context of our overall belief system) explain how it could be true, or (2) the best explanation of other features of our beliefs is incompatible with this particular belief.

4.2. *Negative Basing Objection*

- NB1. If negative coherentism is true, then no belief needs to be based on a reason.
- NB2. If no beliefs need to be based on reasons, then how one comes to hold a belief is *irrelevant* to whether one is justified or not.
- NB3. How one comes to hold a belief is *relevant* to whether one is justified or not.
- NB4. ∴ Negative coherentism is false. (From NB1-NB3)

4.3. *Automatic Defeater Objection*

- AD1. If negative coherentism is true, then S believes p unjustifiably only if S has a belief that is a defeater for believing p .
- AD2. There are some S and p such that S believes p unjustifiably and S has no belief that is a defeater for believing p .
- AD3. ∴ Negative coherentism is not true (AD1, AD2)

³ Note that the “doxastic option” is related but distinct from the “doxastic assumption.”

⁴ NB: Pollock and Cruz spend most of this section trying to force Harman into a negative coherentist framework. Arguably, Harman is better read as having a hybrid position that includes both negative and positive coherentist elements.

5. Isolation and the Doxastic Assumption

5.1. Isolation Objection

- I1. The doxastic assumption is true iff only a belief can justify a belief.
- I2. Perceptual beliefs are typically based on how physical objects causally interact with our senses.
- I3. How physical objects causally interact with our senses is not a belief.
- I4. ∴ If the doxastic assumption is true, then perceptual beliefs are typically not justified. (I1-I3)
- I5. Perceptual beliefs are justified.
- I6. ∴ The doxastic assumption is false: in addition to beliefs, other things can also justify a belief. (I4, I5)

5.2. Nondoxastic theories

5.2.1. Externalism

The most direct response to the Isolation Objection is that, in addition to beliefs, we also add physical objects' causal interactions with our senses to the set of things that can justify our beliefs.

Note that causal interactions happen *outside* of our minds. As such, if they justify, they can do so without our being *aware* of it. *Externalists* are unbothered by these facts.

But keep in mind what P&C say about occurrent beliefs above. Non-occurrent beliefs are *internal* to our minds, yet if we aren't even *attending* to them, then P&C argue that they can't justify our beliefs. So, quite clearly, P&C reject externalism: justifiers are not only *inside* our minds; they must be inside our working memories/attention.

So, is there a way to reject the doxastic assumption without becoming an externalist?

5.2.2. Pollock and Cruz's Alternative: Direct Realism

The ingredients:

- Perceptual beliefs are physical-object beliefs, not appearance beliefs (this seems more psychologically plausible)
- Perceptual beliefs are justified by perceptual states. Perceptual states are in the mind but are not beliefs. Perceptual states include how one is appeared to (appearance states, but not appearance beliefs.) Ditto for memory beliefs and memory states. Hence, this is a kind of *nondoxastic internalism*.
- So, nothing about this story needs to involve causal interactions between physical objects and our senses.