1.   Background

For any ordinary proposition about the external world o, if I know that o, then I know that $not\text{-}h_S$, where h_S is a skeptical hypothesis.	*Underdetermination principle*: If q is a competitor to p, then a subject S can know p only if p has more epistemic merit than q.
I don't know that $not\text{-}h_S$.	(SU) *Skeptical underdetermination*[1]*:* For any "mundane" proposition m about the world that we ordinarily believe, there exists some skeptical hypothesis h such that m has no more epistemic merit than h.
$\therefore$ I don't know that o.	SC. $\therefore$ No "mundane" proposition, m, is known.

Vogel objects to SU.

Domestic Skepticism denies that we have knowledge according to "a body of epistemic principles that govern what we count as knowledge, justified belief, and the like."

- Vogel is out to refute domestic skepticism.
- He's not out to refute *exotic skepticism*, which is skeptical not only about the knowledge we claim to have, but *also* the epistemic principles that we use. Exotic skepticism is less interesting than domestic skepticism, since the former claims that if the skeptic has very high standards of what counts as knowledge, then we don't know as much as we thought. Domestic skepticism, by contrast, says that even *by our own standards of knowledge,* we don't know as much as we thought.

2.   Vogel's Explanationist Reply to Skepticism
2.1.   *Inference to the Best Explanation (IBE)*

F is a set of facts in need of explanation.
Among the potential explanations of F, p is the best explanation of F. [probably]
So p is true.

2.2.   *The argument against domestic skepticism: biggest picture*

P1.   If q is a competitor to p, then p has more epistemic merit than q if p provides a better explanation of the relevant body of facts than q does.

P2.   For any "mundane" proposition m and skeptical hypothesis h, m provides a better explanation of the relevant body of facts (which are about our mental lives) than h does.

~SU. $\therefore$ For any "mundane" proposition m about the world that we ordinarily believe, m has more epistemic merit than any skeptical hypothesis h. (From P1, P2)

2.3.   *Argument for P2*
2.3.1.   Big picture

Consider three potential explanations of your experiences:

MSH.   *Minimal skeptical hypothesis*: for every m, if it appears to you that m, then something causes it to appear to you *falsely* that m.

RWH.   *Real world hypothesis*: your experience is caused by the world as it is normally (i.e. non-skeptically) conceived, e.g. your hands cause your visual experiences of your hands.

ISH.   *Isomorphic skeptical hypothesis:* The relationships among causes and effects are the same as RWH but are not at all as described by RWH, e.g. neural manipulations cause your visual experiences of your hands.

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[1] This is premise (2) for Vogel.

P3.   Of these three hypotheses, RWH provides the best explanation of our experiences.
P4.   If RWH provides the best explanation of our experiences, then, for any "mundane"
         proposition m and skeptical hypothesis h, m provides a better explanation of the relevant
         body of facts than h does.
P2.   ∴ For any "mundane" proposition m and skeptical hypothesis h, m provides a better
         explanation of the relevant body of facts than h does. (From P3, P4)
                        2.3.2.   Why is MSH a bad explanation?
M1.   Good explanations are not ad hoc.
M2.   MSH is an ad hoc explanation of our experience.
~MSH.   ∴ MSH is not the best explanation of our experience. (From M1, M2)
                        2.3.3.   *Why is ISH a bad explanation?*
I1.   Our sensory experiences abide by the following principle: If X is located at a location L, and
         Y is distinct from X, then Y isn't located at L.
I2.   If RWH is true, then X and Y are real physical objects and L is a real location, and this
         explains I1.
I3.   For every real shape and location that RWH posits, ISH must posit a pseudo-shape and
         pseudo-location.
I4.   ∴ If ISH is true, then L is a pseudo-location. (From I1-I3)
I5.   It is possible for X to be located at a pseudo-location L, Y to be distinct from X, and Y to be
         located at L.
I6.   ∴ ISH doesn't explain I1 without further assumptions. (From I4, I5)
I7.   *Simplicity*: If q is a competitor to p, then p provides a better explanation of the relevant body
         of facts than q if p provides an explanation of those facts using fewer assumptions than q
         does.
~ISH.   ∴ RWH provides a better explanation of I1 than ISH (I2, I6, I7)

3.   Objections (with some replies)
                        3.1.   *IBE Skepticism*
This anti-skeptical argument presupposes that IBE justifies our beliefs. However, skeptics need not
and would not grant this.
*   If IBE is true, then the simplicity of an explanation increases the probability that this explanation
    is true.
*   But why should we think that simplicity is a guide to truth?
                        3.2.   *Vogel's Reply*
One can be skeptical about (a) IBE (as the objection is); (b) induction; or (c) the external world.
R2.   If external-world skepticism is true, then so is IBE skepticism.
R3.   If IBE skepticism is true, then inductive skepticism is true (compare with "red rose"
         inference)
R4.   If inductive skepticism is true, then only exotic skepticism is true.
R5.   If only exotic skepticism is true, then skepticism is uninteresting.
R6.   So if external-world and IBE skepticism are true, then skepticism is uninteresting.
                        3.3.   *Fumerton's Objections to Vogel*
You can legitimately employ IBEs only insofar as you can discover the probability connection
    between its premises and conclusions *a priori*; not clear that you can discover this (see below).
*   In this regard, Fumerton disagrees with Vogel that IBE is 'basic' and hence fair game in a debate
    with domestic skeptics.
Unclear whether RWH is best explanation.
*   Consider a universe where all that exists are ideas and minds. This will be simpler than the RWH,
    where there are minds, ideas, and material things.
Science provides better explanations than RWH, and science frequently shows that commonsense
    objects are not what they appear to be.

4. Fumerton

4.1. *Choosing from among competitors*

Both Vogel and the skeptic take our appearances (seemings, experiences) to be acceptable evidence. These appearances are foundations (i.e. both the skeptic and Vogel can grant that *S* knows that *it appears to me that m*; the skeptic will deny that *S* knows that *m*.)

How do we get from these foundations to knowledge of the external world? Fumerton suggests two possibilities:

- *Inferential Externalism:* For *S* to have justification for believing *p* on the basis of *e*, *e* must make *p* epistemically probable.
- *Inferential Internalism:* For *S* to have justification for believing *p* on the basis of *e*, *S must be aware* of the fact that (have justification for believing that) *e* makes probable *p*.
  - "the *key* to meeting the skeptical challenge for the inferential internalist centers on the ability to find non-inferential justification [i.e. foundations] for accepting probability connections between our available evidence and the propositions of common sense." (124)

4.2. *The Analysis of Epistemic Probability*

4.2.1. Inferential externalism

Inferential Externalism (reliabilism, frequentism): *e* makes *p* epistemically probable if and only if:

$$\frac{\text{(All instances where } p \text{ is true as a result of } S\text{'s believing that } p \text{ on the basis of } e)}{\text{(All instances of } S\text{'s believing that } p \text{ on the basis of } e)} \cong 1$$

Problems:

Many frequencies are not actual, i.e. we need to imagine what a frequency *would* be had certain things happened.

Not always clear how to define the class of instances where *S* believes that *p* on the basis of *e*

New evil demon problem: suppose that we actually are in an evil demon world. It seems as if we should still be *justified* in believing everything we believe, even if we don't *know* it (because it's false.) Externalism doesn't deliver this verdict, since the probabilities will be very low.

One can be justified in believing that *p* on the basis of *e*, even though one does not justifiably believe that *e* makes *p* (externally) probable.

4.2.2. Inferential internalism

If *e* entails *p,* then we justifiably believe *a priori* that *e entails p.*

- *A priori* justification = justification that can't be overturned by subsequent evidence, and can be gained through reflection alone. (The *a priori* is a good foundation!)
  - *Ex.* If John is a bachelor then John is unmarried.

Similarly, the internalist interpretation of epistemic probability holds that if *e* makes *p* probable, then we can justifiably believe *a priori* that *e makes p probable.*

- This only works if we think of *e* as being a very detailed account of our evidence.
  - Ex. *A priori*, it doesn't follow that *footprints are on the beach* makes it probable that *a human recently walked on the beach,* since it's possible to reflect and imagine a case in which footprints are on the beach and it's very improbable that nobody walks on the beach (imagine a scenario in which humans did not evolve feet, but crabs did)
  - So to make this *a priori*, we need to pack *e* with all of the background information that is normally left implicit, e.g. humans have feet unlike any other species that walks on the beach. Only then will *e* make *p* probable *a priori*.

However, even the internalist interpretation is contentious: *a lot* of detail is required for evidence to make a belief epistemically probable *a priori*.