

### **Strawson's Deflationary Response and Goodman's New Riddle of Induction**

#### **1. Strawson's deflationary response to the problem of induction**

- The following inference is not deductively valid:

(1) All observed As have been Bs (for a large sample observed across variegated conditions).

---

(2) The next A will be a B.

There are claims of form (1) and (2) respectively, where the former claim is true and the latter claim is false.

Thus, (1) does not entail (2).

- The key to Strawson's response is the following: Though (1) does not entail (2), it does entail a claim closely related to (2). Specifically, (1) entails (2'):

(1) All observed As have been Bs (for a large sample observed across variegated conditions).

---

(2') We have reason to believe that the next A will be a B.

- Given that (1) entails (2'), if we have reason to believe a claim of form (1), where thereby have reason to believe the corresponding claim of form (2) proper. Thus, if Strawson is correct that (1) entails (2'), inductive inferences are reasonable inferences.

- Why does Strawson maintain that (1) entails (2')? His answer is rather flat-footed:

So to ask whether it is reasonable to place reliance on inductive procedures is like asking whether it is reasonable to proportion the degree of one's convictions to the strength of the evidence. Doing this is what 'being reasonable' means in such a context. (pg. 257)

Succinctly put, Strawson's basic point is the following: Just as the claim that S is an unmarried man entails the claim S is a bachelor by virtue of what we mean by the word 'bachelor', (1) entails (2') by virtue of what we mean by 'reasonable belief'.

- Another way of putting Strawson's point is as follows: The conditional:

(#) If all observed As have been Bs, then we have reason to believe that the next A will be a B

is an analytic truth (i.e., It is true by virtue of what we mean by 'reasonable belief'.), a conceptual truth (i.e., It is true by virtue of our concept of reasonable belief.), and therefore an *a priori* truth (i.e., It does not depend on experience for its justification.). Any subject who possesses the concept of reasonable belief is thereby in a position to recognize that (#) is true, and thus that (1) entails (2').

- One natural worry about Strawson's deflationary response is that it makes the problem of induction *too easy*. Or, to take the flip-side of this coin: Though philosophers are prone to all sorts of blindness, blunder, and stupidity, is it really plausible to claim that they have missed out on the fact that (#) is an analytic or conceptual truth? It appears to be a consequence of Strawson's view that a philosopher who questions whether inductive inference provides us with reasonable beliefs is about as confused as anyone who wonders whether unmarried men are bachelors. It is not at all plausible that philosophers are making an error of this magnitude.

- Strawson's implicit response is that philosophers are making a mistake that is much more subtle. Consider the uniformity principle:

**(UP)** Observed regularities and patterns in nature will generally hold up in unobserved cases.

According to Strawson, the truth of (UP) is a necessary condition for the *continued success of inductive inference*. If (UP) is false, inductive inference will no longer provide us with accurate predictions. However, according to Strawson, the truth of (UP) is *not* a necessary condition for the *reasonableness of inductive inference*. The reasonableness of inductive inference is guaranteed by our concept of reasonable belief. The subtle mistake made by philosophers is the following: They have conflated the necessary conditions for the continued success of induction with the necessary conditions for the reasonableness of induction.

## 2. Strawson versus Hume

• The following premise is the crux of Hume's argument for scepticism about the observed, and thus scepticism about induction:

(\*) For S to have reason to believe any matter of fact claim about the unobserved, S must first have reason to believe that (UP) is true.

In fact, Hume's sceptical argument appears to be valid, and (\*) seems to be the only contentious premise. What would Strawson say about (\*)? Why does he think it is false. Is there anything compelling that Hume might say in defense of (\*)?

• Here's one thing Hume might say in defense of (\*). Suppose S forms some belief about the unobserved (e.g., The sun will rise tomorrow). Suppose, further, that S has no reason to believe that (UP) is true. Well, doesn't it follow that S's belief about the unobserved is no better than a blind shot in the dark, given that he has no reason to think that observed regularities will generally hold up in unobserved cases? If so, it's plausible to think that reasonable beliefs about the unobserved presuppose reasonable belief in (UP), which is precisely what is affirmed by (\*).

## 3. Stroud's counterexample

• On page 65, Stroud develops a compelling counterexample to Strawson's fundamental claim that (1) entails (2'). Suppose that every coin I've picked from my pocket this month has been a penny. Suppose, further, that I have not changed my pants or emptied my pockets this month, and that I do a lot of shopping at places other than my neighborhood 99-cents store. Given these suppositions, the following claims both seem to be true:

(i) All coins that have been observed to come out of my pocket this month have been pennies.

(ii) I do *not* have reason to believe that the next coin pulled out of my pocket will be a penny.

If (i) and (ii) are both true, then we have a counterexample to Strawson's basic claim that (1) entails (2').

• With a bit of thought, it's obvious that Stroud's counterexample hinges on the following feature: In the case described, I have *independent reason* to believe that the next A will *not* be a B.

• This suggests an obvious way of refining Strawson's basic claim so that it is immune to counterexamples of this sort. Whereas (1) does *not* entail (2'), Strawson may suggest that (1') does indeed entail (2'):

(1) All observed As have been Bs (for a large sample observed across variegated conditions) and we do not have independent reason to believe that the next A will not be a B.

---

(2') We have reason to believe that the next A will be a B.

• Despite the fact that Strawson's basic line of thought can be patched to handle Stroud's counterexample, Stroud's discussion directs our attention to an important distinction. Consider the following generalizations:

(a) The sun rises each morning.

(b) All emeralds are green.

(c) Every coin found in my pocket this month is a penny.

We feel that there is an important distinction between (a) and (b), on the one hand, and (c) on the other. We think that (a) and (b) are *lawlike generalizations*. They don't merely happen to be true by chance. Rather, they are supported or backed by some law of nature. By contrast, (c) strikes us as an *accidental generalization*. Though it may be true, this is only due to chance. There is no law operative in the natural world that supports (c). The distinction between lawlike and accidental generalizations will play a central role in Goodman's New Riddle of Induction.

#### 4. Goodman's New Riddle of Induction

• One way of putting Hume's problem, or the "Old Riddle of Induction", is in the form of a question: How can observed correlations or patterns provide us with reasonable beliefs about the unobserved? Of course, Hume's problem does not simply reduce to this question. Hume also has a powerful argument, the conclusion of which is that observed correlations do not suffice to provide us with reasonable beliefs about the unobserved.

• Suppose, however, we accept a particular solution to Hume's problem. We may, say, accept Strawson's claim that (1) entails (2'):<sup>1</sup>

(1) All observed As have been Bs (for a large sample observed across variegated conditions).

(2') We have reason to believe that the next A will be a B.

Goodman's key maneuver is that of devising *gruesome* predicates. In doing so, he devises a strategy for showing that if observed correlations license *any* beliefs about the unobserved, they license virtually *all* beliefs about the unobserved, *including completely wild beliefs and contradictory beliefs*. Under the Old Riddle of Induction, we worried about whether any beliefs about the unobserved were licensed by observed correlations. Under the New Riddle, our worry is that all beliefs about the unobserved, no matter how crazy, are licensed by such correlations.

• Following Goodman, let's define a one-place predicate 'grue'. An entity *e* is grue iff:

(i) *e* is green and observed before some arbitrary time *t* in the future; or

(ii) *e* is blue.

Now, the following two statements are both true:

(I) All observed emeralds are green.

(II) All observed emeralds are grue.

Thus, if observed correlations provide us with reasonable beliefs about unobserved cases, we have equal reason to believe the following two claims:

(I') The first emerald observed after *t* will be green.

(II') The first emerald observed after *t* will be grue.<sup>2</sup>

However, given our definition of 'grue', (II') entails:

(II'') The first emerald observed after *t* will be *blue*.

Thus, a pattern of observed correlations licenses wild beliefs about the unobserved like (II''), as well as contradictory beliefs, like the pair (I') and (II''), or the pair (I') and (II') for that matter.

• There is obviously something fishy about the predicate 'grue'. As opposed to the predicate 'green', it does not seem to be *projectable* to future cases. Another way of putting this point is that (a) seems like a lawlike generalization, whereas (b) does not:

(a) All emeralds are green.

(b) All emeralds are grue.

The point, here, is not that we believe that (a) is true and (b) is false. It is, rather, that we take (a), but not (b), to be a type of claim that could be supported by a law of nature in our universe.

• Like the Old Riddle of Induction, Goodman's New Riddle can be articulated in the form of a question or challenge: Can we come up with a principled ground that distinguishes projectable from non-projectable predicates? Perhaps an equivalent way of putting the challenge is as follows: What is it that distinguishes lawlike generalizations from accidental correlations?

---

<sup>1</sup> This basic formulation of Strawson's view has to be revised in light of Stroud's counterexample. However, the relevant revision appears to have no bearing on Goodman's New Riddle and I have suppressed it for reasons of expository economy.

<sup>2</sup> Given another standard formulation of inductive inference, we also have reason to believe:

(III') All emeralds are grue.

Note that (III') does not entail that emeralds change color at *t*. It is compatible with *both* of the following claims:

(i) Emeralds change their color from green to blue at *t*.

(ii) No emeralds change color at *t*, but all emeralds that have not been observed by *t* are, and have always been, blue.

## 5. An attractive response debunked

- One attractive response, considered by Goodman, is that the predicates that figure in lawlike generalizations—that is, the projectable predicates—are *non-positional*. That is, they do not make reference to particular times or locations. There is something appealing about this response. It does seem to identify what is fishy about the predicate ‘grue’. Furthermore, it may be a defining feature of scientific laws that they do not contain positional predicates.<sup>3</sup>

- Goodman’s rejoinder is extremely clever. Let’s say an entity *e* is bleen iff:

(i) *e* is blue and observed before *t*; or

(ii) *e* is green.

Given that our language employs the predicates ‘blue’ and ‘green’, as opposed to the predicates ‘grue’ and ‘bleen’, the latter predicates have to be defined positionally. However, suppose that our language employed the predicates ‘grue’ and ‘bleen’, as opposed to the predicates ‘blue’ and ‘green’. Under this stipulation, ‘blue’ and ‘green’ would have to be defined positionally. We would, say, have to define ‘green’ as follows.

An entity *e* is green iff:

(i) *e* is grue and observed before *t*; or

(ii) *e* is bleen.

A similar definition would be required for the predicate ‘blue’.

- Goodman’s fundamental complaint is that the response from positionality collapses into brute *linguistic chauvinism*. ‘Blue’ and ‘green’ are projectable, but ‘grue’ and ‘bleen’ are not, because the former, but not the latter, *happen to be employed in our language*. The fact that a particular predicate is one we simply happen to use does not seem like a particularly principled, or even plausible, way of screening off the projectable predicates from those that are not projectable.

---

<sup>3</sup> They can, of course, contain individual constants, like the gravitational constant that occurs in various laws of basic physics. The point, here, is that these individual constants cannot refer to particular places or times.