REVIEWS

William G. Lycan, *Judgement and Justification*,
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This is a volume that is easier to admire than to classify. It is, Lycan tells us,

> neither a straightforward collection of previously published essays nor an entirely
> new book. Most of the material it contains has appeared before in one form or
> another (typically in very obscure places). But most of it has been rearranged,
> updated, augmented, and supplemented, to a particular corporate end, and there are
> several new chapters. (p. xi)

Seven of the eleven chapters retain the titles of previous published essays, although "some
have been mixed with others to the point of unrecognizability." (p. xiii) There is more
than a little potential for scholarly confusion here, since there are now seven titles each of
which is attached to a pair of distinct papers. But grumping about the chapter headings in
this book would be a bit like being invited to a banquet and complaining about the names
the chef has chosen for his dishes. The banquet analogy is an entirely appropriate one,
since Lycan's book is a real philosophical feast, full of bold theses, challenging argu-
ments, and valuable insights. The prose is clear, the style is informal and engaging, and
the author's enthusiasm and whimsical humor are manifest in every chapter.

The volume has a pair of goals: First, "to present a coherent ontology of belief and
believing," and second, to develop "a global theory of epistemic warrant for beliefs." (p.
xi) Belief and believing are center stage in the first four chapters, while epistemological
themes predominate in the remainder of the book. The exposition and defense of the
central doctrines is interspersed with a good deal of other material. And, while these side
trips are uniformly interesting, it is also the case that in some spots the development of
the central themes is cut short before we've been offered all the details one might like.

The basic outline of Lycan's position in the philosophy of mind is well known: he is a
"Homuncular Functionalist."

> The Homuncular Functionalist sees a human being as a kind of corporate entity -
> as an integrated system of intercommunicating "departments" that cooperatively
> go about the business of interpreting the stimuli that impinge on the corporate
> organism and of producing appropriate behavioral responses. In this model, a
> psychological description of a human being will consist of a set of flowcharts,
> nested hierarchically. The top or "master" flowchart will depict the person's
> immediate subsystems or departments... . The subsystems will be characterized in

> terms of their respective corporate responsibilities... . The psychologist will also
> characterize each of the sub-subsystems, and all of the ensuing sub-...systems, in
> terms of their respective tasks or responsibilities. (p. 5)

Within this general framework, Lycan urges, occurrent beliefs can be identified with
"sentencelike representations stored and played back" by the appropriate sort of
psychological subsystem. In saying that these representations are "sentencelike" Lycan
"mean[s] just that our psychological theory will characterize them in the same sorts of
syntactic/semantic terms that linguists use in characterizing sentences of natural
languages." (p. 6) Or, to put it "Homunctionally,"

> To judge or believe occurrently that P is to have a storage-and-playback mecha-
> nism that in a certain distinctive way harbors a representation whose syntactic/
> semantic structure is analogous to that of the sentence that replaces "P." (p. 6)

Lycan's rather liberal account of belief "leaves it open—indeed positively suggests—
that not only we ourselves but out component homunculi may have beliefs... . For
example, homuncular employees of the perceptual system would have beliefs...about the
orientation of the eyeballs or about texture gradients." (p. 12) With some plausibility,
Lycan argues that this liberal line has a variety of advantages. (pp. 12-15) But it also
poses a problem: If our sub-sub...systems do indeed store sentencelike representations
with semantic properties analogous to those of sentences in natural language, what sort
of account can be given of the semantic properties of those states? For the beliefs at the
highest level of the system—those that we would ordinarily attribute to the person—
Lycan suggests that we use a pair of accounts of their semantic properties. On one
account, which Lycan credits to Sellars, a representation has the content that P "just in
case that item plays approximately the same inferential role within its own surrounding
conceptual framework that the sentence [P] plays within ours." (p. 8) On the other
account, a state's content will be determined by it's truth conditions, where these are
fixed by something along the lines of "Kripkean causal-historical theories." But, at first
blush at least, both of these strategies face serious obstacles when we try to apply them
to the representational states of our perceptual sub-system and other sub-subsystems.

The Sellarsian account requires that we compare the inferential role of a state whose
content we are trying to specify with the role of various sentences in our public language.
But given the rather exotic pre-occupations of our sub-subsystems, it is not at all clear
how these comparisons would work. Unlike the "homuncular employees of my percep-
tual system," I (or, more accurately, the belief-box in my "master flowchart") have very
few beliefs about matters related to texture gradients. Moreover, my vocabulary and
conceptual repertoire in this domain is very limited indeed. On the other hand, the few
thoughts that I can entertain about texture gradients are inferentially connected with
beliefs on all sorts of topics. I believe that if my texture gradients were radically different
from what they are, my depth perception would be badly impaired, and if my depth
perception were badly impaired, I'd no longer be able to drive safely, and if I were no
longer able to drive safely, then I'd get to the theater in New York much less frequently.
But all of these beliefs, and the inferential patterns that they facilitate, are simply beyond
the ken of my perceptual homunculi. Could it nonetheless be the case that some state in
one of my perceptual homunculi "plays approximately the same inferential role" as a

sentence in my public language? Perhaps. But I, for one, would welcome a lot more detail on what the requisite similarity comes to.

The obstacles facing Kripke style causal-historical accounts for sub-subsystem semantics are, if anything, more daunting. The usual versions of Kripke style accounts begin with the introduction of a term, when the person doing the "dubbing" is in perceptual contact with an appropriate example of the stuff the term denotes. Under the right circumstances, the term can then be conveyed from user to user, preserving reference.[1] Perhaps there is some way of recasting this story and applying it to the symbols invoked by our sub-subsystems. But I have no idea how the story would go, and Lycan does not tell us.

When his focus shifts to epistemological topics, Lycan's "main concern is to defend a version of epistemological explanationism." (p. xi) "[C]rudely put, [this is] the doctrine that all justified reasoning is fundamentally explanatory reasoning that aims at maximizing the 'explanatory coherence' of one's total belief system." (p. 128) "The explanationist's basic mode of ampliative inference is given by the following schema...:

$F_1,...,F_n$ are facts.

Hypothesis H explains $F_1,..., F_n$.

No available competing hypothesis explains the F_i as well as H does.

∴ [probably] H is true." (p. 129)

As Lycan notes, this schema raises a number of questions including: "What are 'facts' and where do they come from? What exactly is meant by 'explain'? [and] What makes one explanation a *better* explanation than another?" (p. 129) Lycan says a fair amount about each of these questions, and as one would expect, most of it is both subtle and sophisticated. Since no serious summary is possible in the limited space available for this review, I'll focus on a central, and by my lights quite unconvincing theme in Lycan's epistemological thinking.

According to Lycan, a "mechanism for selecting the *best*...explanation must take the form of a set of rules or canons of theory-preference." (p. 129) Ideally, Lycan would have us discover the appropriate canons by a painstaking study of justified and unjustified choices in the history of science. But short of that he offers a few examples of what the right rules might look like. They include:

1. Other things being equal, prefer T_1 to T_2 if T_1 is simpler than T_2.

3. Other things being equal prefer T_1 to T_2 if T_1 is more readily testable than T_2.

5. Other things being equal, prefer T_1 to T_2 if T_1 squares better with what you already have reason to believe. (p. 130)

These rules, Lycan maintains, "comprise the foundation of ampliative inference." (p. 134) They are "ultimate, not themselves justified by any more fundamental epistemic norms." But, as he goes on to note, "this raises the specter of skepticism... ." (p. 134) For even if the rules are, in some sense, "the rules that human beings are built to use," they nonetheless

seem quite arbitrary. Why should "virtually *aesthetic*" properties" like simplicity, or pragmatic properties like testability "count in any way toward *truth*?" (p. 134)

Lycan makes a valiant effort to convince us that these questions and the skepticism they suggest are somehow misguided. Citing Bentham, he insists that *some* epistemic methods *must* be fundamental and not susceptible of proof. "Basic epistemic norms, like moral norms..., are justified not by being deduced from more fundamental norms (an obvious impossibility), but by their ability to sort specific individual normative intuitions...into the right barrels in an economical and illuminating way." (pp. 135-6) But this, it would seem, does little to undercut the suspicion that the resulting rules are arbitrary. If a proposed set of rules sorts my individual intuitions in the right way, this may indeed by good evidence that the rules are those underlying my actually theory-preference. But so what? Couldn't other people use other rules? And if they did, wouldn't the same facts lead them to prefer different theories? why are my choices better than theirs? Why are my theories more likely to be true?

I am not entirely sure I understand how Lycan would answer these questions. Part of his answer, it seems, is that other people *couldn't* use other rules, since the ones we use are not acquired. "[P]robably they are hard-wired." (pp. 138-9) Thus, in one sense at least, the rules are not arbitrary. But he offers no evidence at all for the claim that the rules we use are "hard-wired," and I know of no reason to think it is true. Another part of his answer is the "Panglossian" contention that the rules are just the ones that a "skillful and benevolent Mother Nature" has fashioned for us. But Panglossian portraits of the products of natural selection have had a pretty rough time of it of late.[2] And the stronger the optimality claim, the more implausible the Panglossian thesis becomes. This bodes ill for Lycan, since to blunt the arbitrariness objection, it seems that he needs a very strong claim indeed. Something like: No biologically possible system of theory-preference rules that differs from the one we use could result in a level of fitness that is equal to or better than our current level. That would be a deeply depressing claim, if it weren't wildly implausible.

Well, I've now more than used up my space, and I've only succeeded in discussing about ten pages of the book. A detailed critique would require a doctoral dissertation, and I predict that there will be no shortage of them.

Notes

[1]See, for example, Michael Devitt & Kim Sterelny, *Language and Reality* (Cambridge, MA, MIT Press, 1987) Chapters 4 & 5.

[2]For a review of some of the problems confronting Panglossian accounts of the mechanisms underlying human reasoning, see my *The Fragmentation of Reason,* (Cambridge MA, MIT Press, 1990), Chapter 3.