Susan Haack, "A Foundherentist Theory of Empirical Justification"[1]

> Let us remember how common the folly is, of going from one faulty extreme into the opposite.[2]

Does the evidence presented establish beyond a reasonable doubt that the defendant did it? Given the evidence recently discovered by space scientists, am I justified in believing there was once bacterial life on Mars? Is scientific evidence especially authoritative, and if so, why? Should we take those advertisements claiming that the Holocaust never happened seriously, and if not, why not? . . . Questions about what makes evidence better or worse, about what makes inquiry better or worse conducted, about disinterestedness and partiality, are of real, daily—and sometimes of life-and-death—consequence.

Of late, however, cynicism about the very legitimacy of such questions has become the familiar philosophical theme of a whole chorus of voices, from enthusiasts of the latest developments in neuroscience, to radical self-styled neo-pragmatists, radical feminists and multiculturalists, and followers of (by now somewhat dated) Paris fashions.

This cynicism is unwarranted; but dealing with it requires something a bit more radical than epistemological business-as-usual. Evidence is often messy, ambiguous, misleading; inquiry is often untidy, inconclusive, biased by the inquirers' interests; but it doesn't follow, as the cynics apparently suppose, that standards of good evidence and well-conducted inquiry are local, conventional, or mythical. And an even half-way adequate understanding of the complexities of real-life evidence and the untidiness of real-life inquiry requires a re-examination of some of those comfortably familiar dichotomies on which recent epistemology has relied—the logical versus the causal, internalism versus externalism, apriorism versus naturalism, foundationalism versus coherentism.

Although the other dichotomies will also come under scrutiny, the main theme here will be that foundationalism and coherentism—the traditionally rival theories of justified belief—do not exhaust the options, and that an intermediate theory is more plausible than either. I call it "foundherentism."

Susan Haack, *The Theory of Knowledge*, 2nd edn, ed. Louis Pojman (Belman, Calif.: Wadsworth, 1998), pp. 283–93.

The case for foundherentism

Foundationalist theories of empirical justification hold that an empirical belief is justified if and only if it is either a basic belief justified by the subject's experience,[3] or else a derived belief justified, directly or indirectly, by the support of basic beliefs. Coherentist theories of empirical justification hold that a belief is justified if and only if it belongs to a coherent set of beliefs. In short, foundationalism requires a distinction of basic versus derived beliefs and an essentially one-directional notion of evidential support, while coherentism holds that beliefs can be justified only by mutual support among themselves.

The merit of foundationalism is that it acknowledges that a person's experience—what he sees, hears, etc.—is relevant to how justified he is in his beliefs about the world; its drawback is that it requires a privileged class of basic beliefs justified by experience alone but capable of supporting the rest of our justified beliefs, and ignores the pervasive interdependence among a person's beliefs. The merit of coherentism is that it acknowledges that pervasive interdependence, and requires no distinction of basic and derived beliefs; its drawback is that it allows no role for the subject's experience.

Foundationalists, naturally, are keenly aware of the problems with coherentism. How could one possibly be justified in believing that there is a dog in the yard, they ask, if what one sees, hears, smells, etc., plays no role? And isn't the coherentist's talk of mutual support among beliefs just a euphemism for what is really a vicious circle in which what supposedly justifies the belief that p is the belief that q, and what justifies the belief that q the belief that r, . . . and what justifies the belief that z is the belief that p?

Coherentists, naturally, are no less keenly aware of the problems with foundationalism. What sense does it make to suppose that someone could have a justified belief that there is a dog in the yard, they ask, except in the context of the rest of his beliefs about dogs, etc.? Besides, why should we suppose that there *are* any beliefs both justified by experience alone and capable of supporting the rest of our justified beliefs? After all, foundationalists can't even agree among themselves whether the basic beliefs are about observable physical objects, along the lines of "there is a dog," or are about the subject's experience, along the lines of "it now seems to me that I see what looks like a dog" or "I am appeared to brownly." And anyway, only propositions, not events, can stand in logical relations to other propositions; so how *could* a subject's experience justify those supposedly basic beliefs?

As the two styles of theory have evolved, with each party trying to overcome the difficulties the other thinks insuperable, they have come closer together.

Strong foundationalism requires that basic beliefs be fully justified by the subject's experience; pure foundationalism requires that derived beliefs be justified exclusively by the support, direct or indirect, of basic beliefs. But weak foundationalism requires only that basic beliefs be justified to some degree by experience; and impure foundationalism, though requiring all derived beliefs to get some support from basic beliefs, allows mutual support among derived beliefs to raise their degree of justification.

Uncompromisingly egalitarian forms of coherentism hold that only overall coherence matters, so that every belief in a coherent set is equally justified. But

moderated, inegalitarian forms of coherentism give a subject's beliefs about his present experience a distinguished initial status, or give a special standing to beliefs that are spontaneous rather than inferential in origin.

In a way, these moderated forms of foundationalism and coherentism lean in the right direction. But the leaning destabilizes them.

Weak foundationalism concedes that basic beliefs need not be fully justified by experience alone; but then what reason remains to deny that they could get more (or less) justified by virtue of their relations to other beliefs? Impure foundationalism concedes that there can be mutual support among derived beliefs; but then what reason remains to insist that more pervasive mutual support is unacceptable? And weak, impure foundationalism allows both that basic beliefs are less than fully justified by experience, and that derived beliefs may be mutually supportive; but now the insistence that derived beliefs can give no support to basic beliefs looks arbitrary, and the distinction of basic and derived beliefs pointless.[4]

Moderated, inegalitarian coherentism concedes that some beliefs are distinguished by their perceptual content or "spontaneous" origin; but isn't this implicitly to concede that justification is not after all a relation exclusively among beliefs, that input from experience is essential?

Not surprisingly, these fancier forms of foundationalism and compromising kinds of coherentism, though more sophisticated than their simpler ancestors, tend to be ambiguous and unstable. On the foundationalist side, for example, under pressure of just the kinds of difficulty my analysis identifies, C.I. Lewis moves from a pure to an impure foundationalism and then, briefly, to a kind of proto-foundherentism.[5] And on the coherentist side, under pressure of just the kind of difficulty my analysis identifies, BonJour tries to guarantee experiential input by adding an "Observation Requirement"—which, however, is ambiguous; on one interpretation it is genuinely coherentist, but doesn't allow the relevance of experience, and on the other it allows the relevance of experience, but isn't genuinely coherentist.[6] (BonJour now acknowledges that, after all, coherentism won't do.)[7]

Neither of the traditionally rival theories can be made satisfactory without sacrificing its distinctive character. The obvious conclusion—although those still wedded to the old dichotomy will doubtless continue to resist it—is that we need a new approach which allows the relevance of experience to empirical justification, but without postulating any privileged class of basic beliefs or requiring that relations of support be essentially one-directional: in other words, a foundherentist theory.

Explication of foundherentism

The details get complicated, but the main ideas are simple.

A foundherentist account will acknowledge (like foundationalism) that how justified a person is in an empirical belief must depend in part on his experience—my version will give a role both to sensory experience, and to introspective awareness of one's own mental states. As coherentists point out, although experience can stand in causal relations to beliefs, it can't stand in logical relations to propositions. But what this shows is not that experience is irrelevant to empirical justification, but that justification is a double-aspect concept, partly causal as well as partly logical in character.

A foundherentist account will acknowledge (like coherentism) that there is pervasive mutual support among a person's justified beliefs. As foundationalists point out, a belief can't be justified by a vicious circle of reasons. But what this shows is not that mutual support is illegitimate, but that we need a better understanding of the difference between legitimate mutual support and vicious circularity—my version will rely on an analogy between the structure of evidence and a crossword puzzle.

Of course, the viability of the foundherentist approach does not depend on my being completely successful in articulating it. No doubt there could be other versions of foundherentism falling within these general contours but differing in their details.

I take as my starting point the following vague, but very plausible, formulation: "A is more/less justified, at *t*, in believing that *p*, depending on how good his evidence is."

By starting from here I take for granted, first, that justification comes in degrees: a person may be more or less justified in believing something. (I also assume that a person may be more justified in believing some things than he is in believing others.)

I also take for granted, second, that the concepts of evidence and justification are internally connected: how justified a person is in believing something depends on the quality of his evidence with respect to that belief.

I assume, third, that justification is personal: one person may be more justified in believing something than another is in believing the same thing—because one person's evidence may be better than another's. (But although justification is personal, it is not subjective. How justified A is in believing that *p* depends on how good his, A's, evidence is. But how justified A is in believing that *p* doesn't depend on how good A *thinks* his evidence is; and anyone who believed the same thing on the same evidence would be justified to the same degree.)

And I assume, fourth, that justification is relative to a time: a person may be more justified in believing something at one time than at another—because his evidence at one time may be better than his evidence at another.

"A is more/less justified, at *t*, in believing that *p*, depending on how good his evidence is." The main tasks, obviously, are to explain "his evidence" and "how good." The double-aspect character of the concept of justification is already in play; for "his," in "his evidence," is a causal notion, while "how good" is logical, or quasi-logical, in character.

The concept of justification is causal as well as logical across the board[8]—its causal aspect is not restricted to experiential evidence alone. Quite generally, how justified someone is in believing something depends not only on *what* he believes, but on *why* he believes it. For example: if two people both believe the accused is innocent, one because he has evidence that she was a hundred miles from the scene of the crime at the relevant time, the other because he thinks she has an honest face, the former is more justified than the latter. In short, degree of justification depends on the quality of the evidence that actually causes the belief in question.

The word "belief" is ambiguous: sometimes it refers to a mental state, someone's believing something [an S-belief];[9] sometimes it refers to the content of what is believed, a proposition [a C-belief]. "A's evidence" needs to be tied

somehow to what causes A's S-belief, but must also be capable of standing in logical or quasi-logical relations to the C-belief, the proposition believed.

The idea is to begin by characterizing A's S-evidence with respect to *p*—this will be a set of states of A causally related to his S-belief that *p*; and then to use this as the starting point of a characterization of A's C-evidence with respect to *p*—this will be a set of propositions capable of standing in logical or quasi-logical relations to the C-belief that *p*.

If A initially came to believe that the rock-rabbit is the closest surviving relative of the elephant because a fellow tourist told him he read this somewhere, and later still believes it, but now because he has learned all the relevant biological details, he is more justified at the later time than at the earlier. So, if they are different, "A's S-evidence with respect to *p*" should relate to the causes of A's S-belief that *p* at the time in question rather than to what prompted it in the first place.

What goes on in people's heads is very complicated. There will likely be some factors inclining A towards believing that *p*, and others pulling against it. Perhaps, e.g., A believes that Tom Grabit stole the book because his seeing Grabit leave the library with a shifty expression and a suspicious bulge under his sweater exerts a stronger positive pull than his belief that it is possible that Tom Grabit has a light-fingered identical twin exerts in the opposite direction. Both sustaining and inhibiting factors are relevant to degree of justification, so both will included in A's S-evidence.

In this vector of forces [the causal nexus of A's S-belief that *p*], besides A's present experience and present memory traces of his past experience, and other S-beliefs of his, such factors as his wishes, hopes, and fears will often play a role. But A's desire not to believe ill of his students, say, or his being under the influence of alcohol, although they may affect whether or with what degree of confidence he believes that Grabit stole the book, are not themselves part of his evidence with respect to that proposition.

So "A's S-evidence with respect to *p*" will refer to those experiential and belief-states of A's which belong, at the time in question, to the causal nexus of A's S-belief that *p*. The phrase "with respect to" signals the inclusion of both positive, sustaining, and negative, inhibiting, evidence [respectively, A's S-evidence for *p*, and A's S-evidence against *p*]. A's S-evidence with respect to *p* will include other beliefs of his [A's S-reasons with respect to *p*]; and his perceptions, his introspective awareness of his own mental goings-on, and memory traces of his earlier perceptual and introspective states [A's experiential S-evidence with respect to *p*].

The part about memory needs amplifying. A's experiential S-evidence may include present memory traces of past experience—such as his remembering seeing his car-keys on the dresser. This corresponds to the way we talk of A's remembering seeing, hearing, reading, etc.,. . . . We also talk of A's remembering that *p*, meaning that he earlier came to believe that *p* and has not forgotten it. How justified A is in such persisting beliefs will depend on how good his evidence is—his evidence at the time in question, that is. A person's evidence for persisting beliefs will normally include memory traces of past perceptual experience; my belief that my high-school English teacher's name was "Miss Wright," for instance, is now sustained by my remembering hearing and seeing the name used by myself and others.

Testimonial evidence, in a broad sense—what a person reads, what others tell him—enters the picture by way of his hearing or seeing, or remembering hearing or seeing, what someone else says or writes. Of course, A's hearing B say that *p* will not contribute to his, A's, believing that *p*, unless A understands B's language. But if A believes that *p* in part because B told him that *p*, how justified A is in believing that *p* will depend in part on how justified A is in thinking B honest and reliable. But I anticipate.

A's S-evidence with respect to *p* is a set of states of A causally related to his S-belief that *p*. But in the part of the theory that explains what makes evidence better or worse, "evidence" will have to mean "C-evidence," and refer to a set of propositions. The two aspects interlock: A's C-evidence with respect to *p* will be a set of propositions, and how good it is will depend on those propositions' logical or quasi-logical relations to *p*; but *which* propositions A's C-evidence with respect to *p* consists of, depends on which of A's S-beliefs and perceptual, etc., states belong to the causal nexus of the S-belief in question.

A's C-reasons with respect to *p*, obviously enough, should be the C-beliefs, i.e., the propositions, which are the contents of his S-reasons. For example, if one of A's S-reasons with respect to *p* is his S-belief that female cardinal birds are brown, the corresponding C-reason will be the proposition that female cardinal birds are brown.

But what about A's experiential C-evidence? My proposal is that "A's experiential C-evidence with respect to *p*" refer to propositions to the effect that A is in the perceptual/introspective/memory states that constitute his experiential S-evidence with respect to *p*. Since a perceptual, etc., state can not be part of the causal nexus of A's S-belief that *p* unless A is *in* that state, these propositions are all true. But they need not be propositions that A believes.[10]

So A's experiential C-evidence has a distinctive status. A's C-reasons may be true or may be false, and A may be more or less justified, or not justified at all, in believing them. But A's experiential C-evidence consists of propositions all of which are, *ex hypothesi*, true, and with respect to which the question of justification doesn't arise. (This is the foundherentist way of acknowledging that the ultimate evidence for empirical beliefs is experience—very different from the forced and unnatural way in which foundationalism tries to acknowledge it, by requiring basic *beliefs* justified by experience alone.)

In line with the way we ordinarily talk about the evidence of the senses—"Why do I think there's a cardinal in the oak tree? Well, I can see the thing; that distinctive profile is clear, although the light's not too good, and it's quite far away, so I can't really see the color"—I suggest a characterization of A's experiential C-evidence in terms of propositions to the effect that A is in the sort of perceptual state a normal subject would be in when seeing this or that in these or those circumstances. For example, if A's experiential S-evidence with respect to *p* is his perceptual state, its looking to him as it would to a normal observer seeing a female cardinal bird at a distance of 40 feet in poor light, the corresponding experiential C-evidence will be a proposition to the effect that A is in the kind of perceptual state a normal observer would be in when looking at a female cardinal bird in those circumstances.

Built into my account of experiential evidence is a conception of perception as,

in a certain sense, direct. This is not to deny that perception involves complicated neurophysiological goings-on. Nor is it to deny that the judgments causally sustained by the subject's experience are interpretive, that they depend on his background beliefs as well—which, on the contrary, is a key foundherentist thought. It is only to assert that in normal perception we interact with physical things and events around us, which look a certain way to all normal observers under the same circumstances.

You may be wondering why I include the subject's sensory and introspective experience as evidence, but not, say, his extrasensory perceptual experience. Well, the task here is descriptive—to articulate explicitly what is implicit when we say that A has excellent reasons for believing that *p*, that B is guilty of wishful thinking, that C has jumped to an unjustified conclusion, and so on. As those phrases "excellent reasons" and "guilty of wishful thinking," indicate, his other beliefs should be included as part of a subject's evidence, but his wishes should not. Actually, I think it most unlikely there is such a thing as ESP; but it is excluded because—unlike sensory experience, for which we even have the phrase "the evidence of the senses"—it has no role in the implicit conception of evidence I am trying to make explicit.

The concepts of better and worse evidence, of more and less justified belief, are evaluative; so, after the descriptive task of explication, there will be the ratificatory question, whether our standards of better and worse evidence really are, as we hope and believe they are, indicative of truth. But that comes later.

The present task is to explicate "how good" in "how good A's C-evidence is." What factors raise, and what lower, degree of justification?

Foundationalists often think of the structure of evidence on the model of a mathematical proof—a model which, understandably, makes them leery of the idea of mutual support. My approach will be informed by the analogy of a crossword puzzle—where, undeniably, there is pervasive mutual support among entries, but, equally undeniably, no vicious circle. The clues are the analogue of experiential evidence, already completed intersecting entries the analogue of reasons. As how reasonable a crossword entry is depends both on the clues and on other intersecting entries, the idea is, so how justified an empirical belief is depends on experiential evidence and reasons working together.

Perhaps needless to say, an analogy is only an analogy, not an argument. Its role is only to suggest ideas, which then have to stand on their own feet. And there are always disanalogies; there will be nothing in my theory analogous to the solution to today's crossword that appears in tomorrow's newspaper, for instance, nor any analogue of the designer of a crossword.

But the analogy does suggests a very plausible multi-dimensional answer to the question: what makes a belief more or less justified? How reasonable a crossword entry is depends on how well it is supported by the clue and any already completed intersecting entries; how reasonable those other entries are, independent of the entry in question; and how much of the crossword has been completed. How justified A is in believing that *p*, analogously, depends on how well the belief in question is supported by his experiential evidence and reasons [supportiveness]; how justified his reasons are, independent of the belief in question [independent security]; and how much of the relevant evidence his evidence includes [comprehensiveness].

On the first dimension, A's C-evidence may be conclusive for *p*, conclusive against *p*, supportive-but-not-conclusive of *p*, undermining-but-not-conclusive against *p*, or indifferent with respect to *p*/with respect to not-*p*.

Foundationalists often take for granted that evidence is conclusive just in case it deductively implies the proposition in question; but this is not quite right. Inconsistent premisses deductively imply any proposition whatever; but inconsistent evidence is not conclusive evidence for anything—let alone conclusive evidence for everything! Think, for example, of a detective whose evidence is: the murder was committed by a left-handed person; either Smith or Brown did it; Smith is right-handed; Brown is right-handed. Although this deductively implies that Smith did it, it certainly is not conclusive evidence for that belief (let alone conclusive evidence for the belief that Smith did it *and* conclusive evidence for the belief that Brown did it *and* conclusive evidence for the belief that extra-terrestrials did it!).

Deductive implication is necessary but not sufficient for conclusiveness. Evidence E is conclusive for *p* just in case the result of adding *p* to E [the *p*-extrapolation of E] is consistent, and the result of adding not-*p* to E [the not-*p*-extrapolation of E] is inconsistent. E is conclusive against *p* just in case its *p*-extrapolation is inconsistent and its not-*p*-extrapolation consistent. But if E itself is inconsistent, both its *p*-extrapolation and its not-*p*-extrapolation are also inconsistent, so E is indifferent with respect to *p*.

Often, though, evidence is not conclusive either way, nor yet inconsistent and hence indifferent, but supports the belief in question, or its negation, to some degree. Suppose the detective's evidence is: the murder was committed by a left-handed person; either Smith or Brown did it; Smith is left-handed; Brown is left-handed; Smith recently saw the victim, Mrs. Smith, in a romantic restaurant holding hands with Brown. Though not conclusive, this evidence is supportive to some degree of the belief that Smith did it—for, if he did, we have some explanation of why.

The example suggests that supportiveness depends on whether and how much adding *p* to E makes a better explanatory story. But a better explanatory story than what? Conclusiveness is a matter of the superiority of *p* over its negation with respect to consistency. But if *p* is potentially explanatory of E or some component of E, it is not to be expected that not-*p* will be too. So I construe supportiveness as depending on the superiority of *p* over its rivals with respect to explanatory integration; where a rival of *p* is any proposition adding which to E improves its explanatory integration to some degree, and which, given E, is incompatible with *p*.

The word "integration" was chosen to indicate that E may support *p* either because *p* explains E or some component of E, or vice versa—that there is "mutual reinforcement between an explanation and what it explains."[11] (So the concept of explanatory integration is closer kin to the coherentist concept of explanatory coherence than to the foundationalist concept of inference to the best explanation.)

Usually, as conclusiveness of evidence is taken to be the province of deductive logic, supportiveness of evidence is taken to be the province of inductive logic. But at least if "logic" is taken in its now-usual narrow sense, as depending on form alone, this looks to be a mistake. Explanation requires generality, kinds, laws—a motive for the murder, a mechanism whereby smoking causes cancer,

and so forth. If so, explanatoriness, and hence supportiveness, requires a vocabulary that classifies things into real kinds; and hence depends on content, not on form alone. (Hempel drew the moral, many years ago now, from the "grue" paradox.)[12] But there is supportive-but-not-conclusive evidence, even if there is no formal inductive logic.

Supportiveness alone does not determine degree of justification, which also depends on independent security and comprehensiveness. Suppose our detective's evidence is: the murder was committed by a left-handed person; either Smith or Brown did it; Smith is right-handed, but Brown left-handed. The detective's evidence is conclusive that Brown did it; nevertheless, he is not well justified in believing this unless, among other things, he is justified in believing that the murder was committed by a left-handed person, that either Smith or Brown did it, etc.

The idea of independent security is easiest to grasp in the context of the crossword analogy. In a crossword, how reasonable an entry is depends in part on its fit with intersecting entries, and hence on how reasonable those entries are, independently of the entry in question. Similarly, how justified a person is in believing something depends in part on how well it is supported by his other beliefs, and hence on how justified he is in believing those reasons, independently of the belief in question.

It is that last phrase—in my theory as with a crossword puzzle—that averts the danger of a vicious circle. The reasonableness of the entry for 3 down may depend in part on the reasonableness of the intersecting entry for 5 across—independent of the support given to the entry for 5 across by the entry for 3 down. Similarly, how justified A is in believing that *p* may depend in part on how justified he is in believing that *q*—independent of the support given his belief that *q* by his belief that *p*.

And, though "justified" appears on the right-hand side of the independent security clause, there is no danger of an infinite regress—any more than with a crossword puzzle. As in the case of a crossword eventually we reach the clues, so with empirical justification eventually we reach experiential evidence. And experiential C-evidence does not consist of other C-beliefs of the subject, but of propositions all of which are, *ex hypothesi*, true, and with respect to which the question of justification does not arise. This is not to deny that, as crossword clues may be cryptic, experiential evidence may be ambiguous or misleading; on the contrary, my account of experiential C-evidence is intended to recognize that it often is. It is only to say that the question of justification arises with respect to a person's beliefs, but not with respect to his experiences.

As how reasonable a crossword entry is depends not only on how well it is supported by the clue and other intersecting entries, and on how reasonable those other entries are, but also on how much of the crossword has been completed, so degree of justification depends not only on supportiveness and independent security, but also on comprehensiveness—on how much of the relevant evidence the subject's evidence includes.

Comprehensiveness promises to be even tougher to spell out than supportiveness and independent security; the crossword analogy isn't much help here, and neither is the nearest analogue in the literature, the total evidence requirement on inductions, which refers, not to the totality of relevant evidence, but to the

totality of relevant available evidence—and then there is the further problem that relevance itself comes in degrees.

I am assuming, however, that (degree of) relevance is an objective matter. Naturally, whether I think your handwriting is relevant to your trustworthiness depends on whether I believe in graphology; but whether it *is* relevant depends on whether graphology is *true*.

As this reveals, although relevance, and hence comprehensiveness, is objective, judgments of relevance, and hence judgments of comprehensiveness, are perspectival, i.e., they depend on the background beliefs of the person making them. The same goes for judgments of supportiveness and independent security. How supportive you or I judge E to be with respect to *p*, for example, will depend on what rivals of *p* we happen to be able to think of; but how supportive E *is* of *p* does not. Quality of evidence is objective, but judgments of quality of evidence are perspectival.

Because quality of evidence is multi-dimensional, we should not necessarily expect a linear ordering of degrees of justification; e.g., A's evidence with respect to *p* might be strongly supportive but weak on comprehensiveness, while his evidence with respect to *q* might be strong on comprehensiveness but only weakly supportive. Nor, *a fortiori*, does it look realistic to aspire to anything as ambitious as a numerical scale of degrees of justification. But something can be said about what is required for A to be justified to *any* degree in believing that *p*.

One necessary condition is that there *be* such a thing as A's C-evidence with respect to *p*. If A's S-belief that *p* is caused simply by a blow to the head, or by one of those belief-inducing pills philosophers are fond of imagining, A is not justified to any degree in believing that *p*. Since it is the justification of empirical beliefs that is at issue, another necessary condition is that A's C-evidence should include some experiential C-evidence—present experiential evidence, or memory traces of what he earlier saw, heard, read, etc. This is my analogue of BonJour's Observation Requirement, obviously much more at home in foundherentism than his requirement was in his coherentist theory. (It is not meant to rule out the possibility that some of a person's beliefs may not be sustained directly by experiential evidence, not even by memory traces, but rely on other beliefs and their experiential evidence—as in an unconventional crossword some entries might have no clues of their own but rely on other entries and their clues.)[13] A third necessary condition is that A's C-evidence with respect to *p* should meet minimal conditions of supportiveness, independent security, and comprehensiveness; e.g., it should be better than indifferent in terms of supportiveness. Jointly, these necessary conditions look to be sufficient.

What about the upper end of the scale? Our ordinary use of phrases like "A is completely justified in believing that *p*" is vague and context dependent, depending *inter alia* on whether it is A's particular business to know whether *p*, and how important it is to be right about whether *p*; perhaps it also runs together strictly epistemological with ethical concerns. This vague concept [*complete* justification] is useful for practical purposes—and for the statement of Gettier-type paradoxes. In other philosophical contexts, however, "A is completely justified in believing that *p*" is used in a context-neutralized, optimizing way, requiring conclusiveness, maximal independent security, and full comprehensiveness of evidence [COMPLETE justification].

The account sketched here has been personal, i.e., focused firmly on our friend A. But this is not to deny that in even the most ordinary of our everyday beliefs we rely extensively on testimonial evidence. And where the sciences are concerned, reliance on others' evidence—and hence on the interpretation of others' words and judgments of others' reliability—is absolutely pervasive. (This reveals that not only the social sciences but also the natural sciences presuppose the possibility of interpreting others' utterances: think, e.g., of an astronomer's reliance on others' reports of observations.)

Anyhow, thinking about evidence in the sciences prompts me to ask whether it is possible to extrapolate from my account of "A is more/less justified in believing that *p*" to a concept of justification applicable to groups of people. It might be feasible to do this by starting with the degree of justification of a hypothetical subject whose evidence includes all the evidence of each member of the group, and then discount this by some measure of the degree to which each member of the group is justified in believing that other members are competent and honest.

The ratification of foundherentism

Thus far the task has been to articulate our standards of better and worse evidence, of more and less justified belief. But what do I mean by "our"? And what assurance can I give that a belief's being justified, by those standards, is any indication that it is true?

When I speak of "our" standards of better and worse evidence, I emphatically do not mean to suggest that these standards are local or parochial, accepted in "our," as opposed to "their," community. Rather, I see these standards—essentially, how well a belief is anchored in experience and how tightly it is woven into an explanatory mesh of beliefs—as rooted in human nature, in the cognitive capacities and limitations of all normal human beings.

It is sure to be objected that the evidential standards of different times, cultures, communities, or scientific paradigms differ radically. But I think this supposed variability is at least an exaggeration, and quite possibly altogether an illusion, the result of mistaking the perspectival character of judgments of evidential quality for radical divergence in standards of better and worse evidence.

Because judgments of the quality of evidence are perspectival, people with radically different background beliefs can be expected to differ significantly in their judgments of degree of justification. It doesn't follow that there are no shared standards of evidence. If we think of the constraints of experiential anchoring and explanatory integration rather than of specific judgments of the relevance, supportiveness, etc., of this or that evidence, I believe we will find commonality rather than divergence.

Again, the point is easier to see in the context of the crossword analogy. Suppose you and I are both doing the same crossword puzzle, and have filled in some long central entry differently. You think, given your solution to that long central entry, that the fact that 14 down ends in a "T" is evidence in its favor; I think, given my solution to that long central entry, that the fact that it ends in an "D" is evidence in its favor. Nevertheless, we are both trying to fit the entry to its clue and to other already completed entries. Now suppose you and I are both on

an appointments committee. You think the way this candidate writes his "g"s indicates that he is not to be trusted; I think graphology is bunk and scoff at your "evidence." Because of a disagreement in background beliefs, we disagree about what evidence is relevant. Nevertheless, we are both trying to assess the supportiveness, independent security, and comprehensiveness of the evidence with respect to the proposition that the candidate is trustworthy.

But even if I am wrong about this, even if there really are radically divergent standards of evidential quality, it wouldn't follow that there are no objective indications of truth; *variability* of standards does not, in and of itself, imply *relativity* of standards.[14] So those epistemic relativists who have inferred that, since judgments of justification vary from community to community, there can be no objectively correct standards of better and worse evidence, have committed a *non sequitur* as well as relying on a dubious premiss.

As for those who have succumbed to epistemic relativism because they have given up on the concept of truth, I have room here only to say that theirs seems to me an entirely factitious despair.[15] In any case, all that will be required of the concept of truth in what follows is that a proposition or statement is true just in case things are as it says.

Supposing—as I believe, and so do you—that we humans are fallible, limited but inquiring creatures who live in a world which is largely independent of us and what we believe about it, but in which there are kinds, laws, regularities; and supposing—as I believe, and so do you—that our senses are a source, though by no means an infallible source, of information about things and events in the world around us, and introspection a source, though by no means an infallible source, of information about our own mental goings-on; then, if any indication of how things are is possible for us, how well our beliefs are anchored in our experience and knit into an explanatory mesh is such an indication. (And supposing—as I believe, and so, probably, do you—we have no other sources of information about the world and ourselves, no ESP or clairvoyance or etc., then this is the only indication we can have of how things are.)

That last paragraph was nothing like an a priori ratification of foundherentism; for those "supposing" clauses are empirical in character. Assumptions about human cognitive capacities and limitations are *built into* our standards of evidential quality; so the truth-indicativeness of those standards depends on the truth of those empirical assumptions. But neither was that last paragraph much like the appeals to psychology or cognitive science on which some epistemological naturalists of a more extreme stripe than mine propose to rely; for the assumptions referred to in my "supposing" clauses, though empirical, are of such generality as to be rather philosophical than scientific in character.

Those assumptions would surely be presupposed by any conceivable scientific experiment. But they are well integrated with what the sciences of cognition have to tell us about the mechanisms of perception and introspection, and of when and why they are more or less reliable, and with what the theory of evolution suggests about how we came to have the sort of information-detecting apparatus we do. As one would hope, the epistemological part of my crossword—the part where the entries are themselves about crosswords—interlocks snugly with other parts.

But what am I to say to those readers familiar with Descartes' failed attempt to prove "what I clearly and distinctly perceive is true," who are bound to suspect

that I must be arguing in a circle? After pointing out that I have not offered a ratificatory argument in which some premiss turns out to be identical with the conclusion, nor an argument relying on a certain mode of inference to arrive at the conclusion that this very mode of inference is a good one—only that, to borrow Peirce's words, by now "the reader will, I trust, be too well-grounded in logic to mistake mutual support for a vicious circle of reasoning."[16]

And what am I to say to readers worried about the Evil Demon, who are bound to object that I have not ruled out the possibility that our senses are not a source of information about the external world at all? After pointing out that since, *ex hypothesi*, his machinations would be absolutely undetectable, if there were an Evil Demon *no* truth-indication would be possible for us—only that my claim is a conditional one: that, if any truth-indication is possible for us, the foundherentist criteria are truth-indicative. (I could discharge the antecedent, and arrive at a categorical conclusion, by adopting a definition of truth along Peircean lines, as the opinion that would survive all possible experiential evidence and the fullest logical scrutiny; but I prefer the more cautious, and more realist, strategy.)

Determined skeptics won't be persuaded; but determined skeptics never are! And the rest of you may notice that foundherentism enables us to sidestep another dichotomy which has—if you'll pardon the pun—bedeviled recent epistemology: *either* a hopeless obsession with hyperbolic skepticism, *or* a hopeless relativism or tribalism preoccupied with "our (local, parochial) epistemic practices." Foundherentism, I believe, provides a more realistic picture of our epistemic condition—a robustly fallibilist picture which, without sacrificing objectivity, acknowledges something of how complex and confusing evidence can be.

Notes

1 This brief statement of foundherentism is based primarily on my *Evidence and Inquiry: Towards Reconstruction in Epistemology* (Oxford: Blackwell, 1993), especially chapters 1, 4, and 10. I have also drawn on material from earlier articles of mine, especially "Theories of Knowledge: An Analytic Framework," *Proceedings of the Aristotelian Society* 83 (1982–3): 143–57 (where foundherentism was first introduced); "C.I. Lewis" in *American Philosophy*, ed. Marcus Singer, Royal Institute of Philosophy Lecture Series, 19 (Cambridge: Cambridge University Press, 1985), pp. 215–39; and "Rebuilding the Ship While Sailing on the Water" in *Perspectives on Quine*, ed. R. Barrett and R. Gibson (Oxford: Blackwell, 1990), pp. 111–27 (where some of the key ideas of foundherentism were developed). I have drawn as well on material from the symposium on *Evidence and Inquiry* published in *Philosophy and Phenomenological Research* 56 (1996): 611–57, and from my "Reply to BonJour," *Synthese* 112 (1997): 25–35.

2 Thomas Reid, *Essays on the Intellectual Powers* (1785) in R.E. Beanblossom and K. Lehrer, eds., *Thomas Reid's Inquiry and Essays* (Indianapolis, Ind.: Hackett, 1983), VI.4.

3 I restrict my attention here to experientialist forms of foundationalism, ignoring, e.g., foundationalist theories of a priori knowledge.

4 My characterization of foundationalism is quite standard; cf. for example, Alston's in E. Sosa and J. Dancy, eds, *Companion to Epistemology* (Oxford:

Blackwell, 1992), p. 144, or Sosa's in "The Raft and the Pyramid," *Midwest Studies in Philosophy* 5 (1980): 23–4. But matters have been confused because, in "Can Empirical Knowledge Have a Foundation?", *American Philosophical Quarterly* 15 (1978): 1–13, and *The Structure of Empirical Knowledge* (Cambridge, Mass.: Harvard University Press, 1986), p. 28, BonJour uses "weak foundationalism" to refer a style of theory that is both weak *and* impure, in my sense, and in addition allows mutual support among basic beliefs and—apparently—allows "basic" beliefs to get support from "derived" beliefs. As my scare quotes indicate, once one-directionality has been so completely abandoned it is unclear that the theory really qualifies as foundationalist at all; certainly the basic/derived distinction has become purely *pro forma*. See also Haack, "Reply to BonJour," *Synthese* 112 (1997): 25–35.

5 See *Evidence and Inquiry*, chapter 2 for details.

6 See *Evidence and Inquiry*, chapter 3 for details.

7 Laurence BonJour, "Haack on Justification and Experience," *Synthese* 112 (1997): 13–15.

8 An idea I first began to work out in "Epistemology *With* a Knowing Subject," *Review of Metaphysics* 33 (1979): 309–36.

9 Expressions introduced in square brackets are my new, technical terms, or special, technical uses of familiar terms.

10 So my theory is not straightforwardly externalist, since A's S-evidence must consist of states of A—states, furthermore, of which A can be aware; but neither is it straightforwardly internalist, since A's experiential C-evidence consists of propositions A need not believe or even conceive.

11 Quine, W.V. and Ullian, J., *The Web of Belief* (New York: Random House, 1970), p. 79.

12 Goodman, N., "The New Riddle of Induction" (1953) in *Fact, Fiction and Forecast*, 2nd edn (Indianapolis, Ind.: Bobbs-Merrill, 1965), pp. 59–83; Hempel, C.G., "Postscript on Confirmation" (1964) in *Aspects of Scientific Explanation* (New York: Free Press, 1965), pp. 47–52.

13 In case a desperate foundationalist is tempted to try seizing on this in hopes of salvaging the derived/basic distinction, let me point out that beliefs without direct experiential evidence could contribute to the support of beliefs with direct experiential evidence; and that this maneuver would identify no plausible *kind* of belief as basic/as derived—think, e.g., of a scientist whose belief that electrons are composed thus and so is sustained by what he sees in the bubble chamber.

14 See also Haack, "Reflections on Relativism: From Momentous Tautology to Seductive Contradiction," *Noûs*, Supplement (1996): 297–315; also in James E. Tomberlin, ed., *Philosophical Perspectives, 10: Metaphysics* (Oxford: Blackwell, 1996), pp. 297–315; reprinted in Haack, *Manifesto of a Passionate Moderate: Unfashionable Essays* (Chicago: University of Chicago Press, 1998), pp. 149–66.

15 I have more to say in "Confessions of an Old-Fashioned Prig" in *Manifesto of a Passionate Moderate*, pp. 7–30.

16 C.S. Peirce, *Collected Papers*, ed. C. Hartshorne, P. Weiss, and A. Burks (Cambridge, Mass.: Harvard University Press, 1931–58), 6.315.