Coherence, Consistency, Cogency, Congruity, Cohesiveness, &c.: Remain Calm! Don't Go Overboard!

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> In the tumultuous business of cutting in and attending to a whale, there is much running backwards and forwards among the crew. Now hands are wanted here, and then again, hands are wanted there. There is not staying in any one place, for at one and the same time everything has to be done everywhere. It is much the same with him who endeavors the description of the scene.
> —Herman Melville, *Moby-Dick*[1]

AND IT IS MUCH THE SAME when you're faced with the "leading questions" in our editor's letter of invitation: "As a matter of science or philosophy, does coherence name a totalized state or an organizing tendency? Do synchronic and diachronic modes of coherence reinforce or interfere with each other? Can theories of chaos bring their object to order without thereby eliminating it? Does the chaos-theory paradox have analogues in the human or social sciences? In cognitive or cultural processes, is total structure an inference from perception or its enabling precondition? Is incoherence a sustainable option for visual, musical, or literary art? Is coherence a property that methods of inquiry discover, or one that they produce? When historicist or cultural studies—often expressly disavowing coherentism—appeal from a local correspondence to an overarching totality, what grounds that appeal? What is the status of coherence in advanced scholarly argumentation? In rhetoric and composition teaching? Is the concept of coherence value-neutral or value-laden? How does it foster on the one hand an ethics of solidarity and community, on the other an imperial or totalitarian politics? How do the economics of globalization inflect coherentism today? Can one think of coherences in the plural, or is

there something in the logic of the concept that overrides differences and assimilates its instances to itself?"

Goodness! Now hands are wanted in epistemology, now in philosophy of science, now in aesthetics, now in cultural studies, and now in economics and political theory; and "at one and the same time everything has to be done everywhere."

I can offer only my reflections on some of the many roles played by some of the many concepts of the coherence family. "Concepts," in the plural; for "coherence" has a whole raft of meanings, distinct though sometimes subtly interrelated, and is applied to a whole range of very different things: what a logician means by speaking of the consistency of an axiomatic system, for example, is not what a literary critic means by speaking of the consistency of a fictional character or the congruity of this subplot with the overall theme of a novel; what an epistemologist means by speaking of the coherence of a set of beliefs or a scientist of the consilience of the physical with the social sciences is not what a sociologist or political theorist means by speaking of the cohesiveness of this society or the solidarity among the members of that trade union. So my first task, in what follows, will be simply to disentangle some of the multiple meanings and multiple objects of "coherent"; then, looking more closely at a field where coherence concepts have sometimes been asked to play a central role, I shall offer my assessment of "coherentism" in epistemology; and finally, by way of conclusion, I will suggest answers to at least some of the questions on our editor's extraordinary list.

I

Besides being used to describe the texture of batter or cement, "consistency" denotes one dimension of logical appraisal. A set of propositions is formally, or logically, inconsistent if and only if a contradiction—the conjunction of a formula and its negation, "p and not-p"—can be derived from it; otherwise, it is logically consistent. Inconsistent formulae can't be jointly true; hence the importance of consistency proofs, metalogical demonstrations that this or that formal logical system does not allow the derivation of a contradiction.[2] The need for such proofs became vividly clear early in the history of modern logic, when Frege's pioneering articulation of the unified propositional and predicate calculus turned out *not* to be consistent: Russell's Paradox ("the set of all sets which are not members of themselves is a member of itself if and only if it is not a member of itself") was derivable as a theorem.[3]

Outside formal-logical contexts, "consistent" is often used, not in this strict sense, but as a broader term connoting the mutual compatibility of

a set of propositions. In this usage, "consistent" takes into account not only logical form but also the meanings of words (for example, given the meaning of "bachelor," "Tom is a bachelor" and "Tom is married" are mutually incompatible, though not formally inconsistent). Of course, mutually incompatible propositions can no more be jointly true than formally inconsistent formulae can; there can't be incompatible truths or "knowledges." Yes, there are many *different* truths; but not incompatible ones. Yes, incompatible propositions can be *accepted* as true; but they can't all *be* true. And yes, sometimes we say that something is "true for you but not for me"; but this is just a misleadingly elliptical way of saying that you believe whatever-it-is (that tax cuts will stimulate the economy, that life on earth was seeded from other planets) but I don't, or else that whatever-it-is (liking Wagner, being over six feet tall) is true *of* you but not of me.

Since mutual compatibility is a necessary condition for the truth of a set of propositions, some philosophers have hoped, by adding to simple consistency or mutual compatibility such further requirements as comprehensiveness or mutual entailment, to devise a concept of coherence that would constitute both a necessary and a sufficient condition of truth. F. H. Bradley wrote that "[t]ruth is an ideal expression of the Universe, at once coherent and comprehensive";[4] and various versions of the coherence theory of truth were defended by other Idealists and sympathizers, among them H. H. Joachim, Brand Blanshard, Bernard Bosanquet, and A. C. Ewing. Though most Logical Positivists, including Moritz Schlick and Rudolf Carnap, favored some kind of correspondence theory, Otto Neurath defended a coherence approach.[5] Sometimes, as in Blanshard, coherence was held to constitute, not just the criterion, but the nature or definition of truth; but often, interest in coherence was really more epistemological than metaphysical. In 1973 Nicholas Rescher defended "the coherence theory of truth" in his book of the same title; what he proposed, however, was not that coherence could constitute a definition, or even a "guaranteeing" criterion, but only that it is an "authorizing" criterion, i.e., a fallible indication, of truth.

And it is in epistemology—the philosophical theory of knowledge, where at least since Plato one central concern has been to understand the difference between really *knowing* something, and merely believing something that happens to be true—that coherence concepts have of late played their most prominent philosophical role. One main focus has been on what makes a belief justified, what constitutes good or adequate grounds, reasons, or evidence; and coherentism, with its traditional rival, foundationalism, is one of the standard theories in this domain. Taking justification to require anchoring in the world,

foundationalist theories explain justified empirical belief as belief either directly justified by the subject's sensory and/or introspective experience, or else supported by beliefs which are so justified, or, etc.; taking justification to be a relation exclusively among beliefs, coherence theories explain justified empirical belief as belief that coheres with the subject's other beliefs.

I shall return to these rival theories of epistemological justification later; but will note here that justification is a synchronic concept, assessing a person's epistemic status with respect to some one belief at a time. Some have hoped that the concept of coherence, in some epistemological, consistency-plus sense, could serve as the basis for an account of rational belief-*change*, proposing that rational belief-revisions should maintain, or if necessary restore, coherence. At least construed as proposing a necessary but not a sufficient condition for rational belief-change, this seems on its face both more modest and more plausible than a coherence theory of justified belief.

And perhaps it gestures, at least, towards a deeper idea. Sometimes we speak of a "tension" between this idea and that; usually when, though they are not exactly incompatible, they pull strongly in opposite directions—as if one more step in the direction of either would land us in a contradiction (as a taut rope would break, or a taut sail tear, if subjected to even a little more strain). "Tension" is just the word that comes to mind when, for example, you think about the relation between the scientific and the religious world-pictures: no scientific theory says that there is no God, or that God did not create the universe, or, etc.; still, Stephen Hawking observes, "We are such insignificant creatures on a minor planet of a very average star in the outer suburbs of one of a hundred thousand million galaxies. So it is difficult to believe in a God that would care about us."[6] Tension can be fruitful, in more ways than one. Even outright inconsistency can be an important incentive to renewed intellectual effort, as with the many and various developments of set-theory after Frege. The effort to accommodate potentially conflicting desiderata is often the spur to intellectual advance; e.g., the need to acknowledge both that the world is independent of our beliefs about it and that we can sometimes manage to acquire knowledge of it, which underlies much recent debate over the various forms of realism and their rivals.[7] And the effort to express contrasting moods or competing values, as we shall see, can be artistically fruitful.

Sometimes we appraise, not sets of propositions or theories, not people's beliefs, but people's thinking, speech, and writing for coherence.

What counts as thinking coherently depends on the context: a physician checks whether a patient in shock knows his own name, what

day it is, who is currently president, and so forth; but the academic I describe as "not thinking coherently" can pass *that* test all right—the complaint is, rather, that his thinking is muddled, fuzzy, scrambled, perhaps outright contradictory. Of course, it's normal for one's first thoughts about a difficult question to be inchoate, or to shift up and back between one conclusion and its opposite; there's nothing wrong with that. Sometimes, though, rather than working through this frustratingly fuzzy initial stage, people seize on a confused or half-baked idea and rely on it in all their thinking on some subject, heedless of its inability to carry the burdens placed on it. As Peirce observed, the consequences can be disastrous: "It is terrible to see how a single unclear idea, a single formula without meaning, lurking in a young man's head, will sometimes act like an obstruction of inert matter in an artery, hindering the nutrition of the brain, and condemning its victim to pine away in the fullness of his intellectual vigor and in the midst of intellectual plenty."[8]

Sets of propositions can be inconsistent; situations or states of affairs cannot, but they can be chaotic or confused. And, as there can be a sober description of a drunken man, or an orderly description of "the tumultuous business of cutting in and attending to a whale," there can be a consistent description of an inconsistent set of propositions: the description I gave earlier of Frege's inconsistent logic, for example, or a detective's report of the inconsistency between witness A's testimony and witness B's. But often, when we speak of the coherence of a person's speech or writing, we have in mind, not consistency in the logical or quasi-logical sense, but something more pragmatic: as when we praise a colleague's or student's paper or presentation for its cogency, or complain that it is lazy, muddy, jumbled, hard to follow; or when we describe the speech of someone drunk, drugged, or mentally disturbed, or of an academic undone by too much Theory, as "incoherent"— disordered, rambling, garbled, a glossogonous word-salad, high-toned gobbledygook.

"Incoherent" is sometimes used, again of someone's speech or writing, in the rather more specialized philosophical sense of "self-undermining": as I might say that when a philosopher claims that truth is relative to culture, or that there are no beliefs—though neither the proposition that truth is relative to culture nor the proposition that there are no beliefs contains any hidden contradiction—*his asserting this* undermines what he asserts; for one who sincerely makes a categorical assertion expresses his belief, and makes a non-relative claim to truth.

When it is actions that are being appraised, "consistent" means something like "behaving in the same way in similar circumstances"; and so applies not to a single action, but to a person's (or sometimes an

institution's) practice or actions over time. The desirability or otherwise of consistency, so understood, depends on whether you are consistently following ill-considered ways of behaving for no better reason than that this is how you behaved in the past, or consistently following a well-considered policy of action—precisely the point of that famous observation of Emerson's, that "a foolish consistency is the hobgoblin of little minds, adored by little statesmen and philosophers and divines." Emerson rightly scorns the mental rigidity of one who refuses to change his beliefs in the face of new evidence, or who obsessively insists on doing things as he has always done them, regardless of the success or failure of those past actions: "He may as well conform himself with his shadow on the wall."[9] But the distinction between a wise consistency and a foolish, often forgotten when Emerson's observation is quoted only in part, is essential.

There's nothing objectionable about the concern for consistency shown by the copy editor who spots your two spellings of "judg[e]ment," or asks you please to decide whether "prima facie" should be in italic or roman type, and stick to it; but there *is* something objectionable about the concern for consistency shown by the copy editor who officiously imposes a dismal and pointless conformity of style or usage. Jacques Barzun reports a classic encounter with an icily polite young person who challenged his use of capitals to distinguish "Liberal," as in "Gladstone, the Liberal prime minister" from "liberal," as in "Edward VII, who was also liberal—toward his mistresses"; apparently, Barzun comments, the young man believed that "the firm's readers (the author's don't exist) will compare several of their books and exclaim, 'My, what inconsistent capitalization!'"[10]

However, since fairness demands that people similarly situated be similarly dealt with, consistency in practice is sometimes a legitimate, even an essential, concern—felt by the conscientious teacher grading papers, or the jurist looking to precedent (the concern expressed in the legal principle of *stare decisis*, standing by what was decided). But here too the desirability of consistency depends on the wisdom of the practice being consistently applied: it would be worse than foolish of me to continue adding up the marks for each question wrong, in order to maintain consistency with the mistake I made the first time; and, though we want the law to provide stability and predictability, we don't want it to stagnate, to be totally unresponsive to social change.[11]

Cognitive psychologists have their own word for a kind of incoherence that especially interests them, the tensions between a person's beliefs and his actions and preferences: Leon Festinger's "cognitive dissonance." This is the concept explored in his theoretical writings, and in his studies of millennial sects whose members react to the failure of their

prophecies of the End of the World, not by acknowledging that they were mistaken, but by reinterpreting their prophecy and proselytizing more energetically; it is also the theme of Alison Lurie's wickedly funny fictional variations on these real quirks of human nature in *Imaginary Friends*.[12]

As the example suggests, our appraisals of coherence and incoherence extend not only to theories, and not only to the speech, writing, beliefs, attitudes, and actions of real people, but also to literary texts and fictional characters. Occasionally, when we use "consistent" and "inconsistent" of works of literature, it is in much the same sense as when we appraise a theory, or someone's beliefs, for consistency: I once heard Peter Geach argue, against the proposal that we understand what a possible world is by analogy with a novel, that there are sometimes inconsistencies in novels—e.g., geographical inconsistencies in *War and Peace*; he meant "inconsistent," obviously, in the quasi-logical sense. (Though these inconsistencies are significant for Geach's logical point, they are of no real importance to our assessment of the novel; but one can easily imagine inconsistencies in a detective story, say, making a nonsense of the plot.) More often, though, in literary contexts the point is not the consistency or otherwise of the chronological, geographical, forensic, etc., details of a fictional work, but the consistent or inconsistent behavior of its characters, the congruence or incongruity of its themes, or the unity or disunity of its mode of presentation or its language.

In *The Way of All Flesh* Samuel Butler writes that his friends used to say of Ernest Pontifex (whose zigzag path to maturity the book chronicles) that "when he rose he flew like a snipe, darting several times in various directions before he settled down to a steady, straight flight," but that "once he had got into this he would keep to it"[13]—sending me first to my bird-book, and then back to Aristotle's observation that characters should be consistent, but "if inconsistency be part of the man before one for imitation as presenting that form of character, he should still be consistently inconsistent."[14] Here "consistent" is used in the same sense in which it applies to the behavior of real people, now extended to fictional characters. In *Daniel Deronda*, there is a satisfying congruity of intertwined narratives, unified by Eliot's theme of the Power of Ignorance: Deronda, originally unaware of his origins, and no less prejudiced against Jews than those around him, discovers that he is Jewish himself, and explores what that means to him; Gwendolen Harleth, too blithely and self-confidently ignorant to realize how ignorant she really is, makes a disastrous marriage in a desperate effort to save herself when her family faces financial ruin.[15] Here "congruous" means something like "illustrating the same theme."

But in a work of literature not only such congruities, but also, sometimes, the well-chosen *in*congruity may be pleasing. We enjoy not only narrative parallels but also contrasting intertwined plots and skillfully sliced and spliced narratives; we appreciate the well-chosen anachronism of the modern-dress production of a Shakespeare play that successfully conveys its lessons for our time; and we find the well-chosen grammatical incongruity not only a rich source of verbal humor, but also, sometimes, a wonderfully effective literary device: as with the pleasant shock of the opening line of chapter 5 of Ursula Le Guin's *The Left Hand of Darkness*: "My landlady was a voluble man"—a startling verbal incongruity that is exactly right given her cast of hermaphrodite, but otherwise very human, characters.[16]

Like "consistent," "cohesive" suggests physical as well as abstract sticking together: as a cookbook might instruct you to add water until the dough is cohesive in consistency. But, unlike "consistent," "cohesive" is often used of social groups, such as a tribe or society or church whose members are united by shared beliefs, attitudes, and goals. Some political thinkers, Plato among them, have placed a very high value on social cohesiveness, far outweighing their concern for citizens' freedom or happiness; others see social cohesiveness as sometimes benign, but sometimes a dangerous expression of tribalism.[17] Here I'm with the others: admirable as we might find the solidarity of the British as they pulled together, temporarily overcoming barriers of class and accent, in the fight against Hitler, we should never forget that "solidarity" has another, frightening face: the grim conformity of totalitarian states, the rigidly closed ranks and long-held grudges of Mafia families, and so on.

II

Now it is time, narrowing the focus somewhat, to look more closely at the role played by coherence concepts in epistemology, and specifically at the debates between foundationalist and coherentist theories of epistemological justification.

Coherentists believe that foundationalism is unable to acknowledge the pervasive mutual support among beliefs, and that it has no plausible account of how, exactly, experience is supposed to contribute to empirical justification. But foundationalists believe that coherentism is unable to acknowledge the relevance of experience to justification, and that its reliance on interrelations among beliefs only thinly disguises a vicious circularity of reasons. So the issues that have been most to the fore have been the role, if any, of a person's sensory and introspective

experience in the justification of his empirical beliefs, and the legitimacy, or otherwise, of mutual support among beliefs.

How could I be justified in believing there is a blue jay in the bougainvillea, unless I see the thing, or hear it, or rely on the report of someone who sees or hears it, or, etc.? On the face of it, the relevance of experience to empirical justification, the need for a person's beliefs about the world to be anchored in his interactions with the world, seems undeniable; yet coherentism seems to deny it. Many coherentists have tried to accommodate experience obliquely: by granting a distinguished status to perceptual beliefs, by introducing an additional requirement supposed to guarantee experiential input, or, etc. But the results have not been encouraging.

It is arbitrary to grant a distinguished initial status to perceptual beliefs, or to experiential beliefs generally, without some reason for privileging these particular kinds of belief rather than other kinds; but it is impossible to give the obvious reason—that experiential beliefs are justified at least in part not by the subject's other beliefs, but by his experience—without sacrificing coherentism. It is much the same with additional requirements to the effect that a coherent belief-set must be sensitive to experiential input, such as Lawrence BonJour's "Observation Requirement"—which turns out to be ambiguous: on one interpretation (the subject must believe that his belief-set includes highly reliable cognitively spontaneous, i.e., non-inferential, beliefs), it is coherentist, all right, but it doesn't guarantee experiential input; on the other interpretation (the subject's belief-set must actually include highly reliable cognitively spontaneous beliefs), it guarantees experiential input, all right, but is no longer coherentist.[18]

In epistemological contexts coherence is usually construed, as it was in the older coherence theories of truth, as requiring something more than simple consistency, even in the broader, quasi-logical sense: comprehensiveness, proposed by Bradley and, in the logically sophisticated form of "maximal consistency," by Rescher; explanatory coherence, suggested by Wilfrid Sellars;[19] probabilistic consistency, understood sometimes simply as requiring that the probabilities a person assigns to various propositions should be compatible with the axioms of the mathematical calculus of probabilities, but sometimes as identifying probabilities with degrees of belief, and recasting the whole epistemological picture in terms of the theory of probability. For all these elaborations of coherence, however, coherentists have mostly had surprisingly little to say about how, exactly, the mutual support they take to justify a person's beliefs differs from a vicious circle of reasons, beyond averring that there *is* a difference.[20] The standard foundationalist objections to coherentism, in short, seem to stick.

But so do the standard coherentist objections to foundationalism. Older foundationalists sometimes held that basic beliefs are fully justified by the subject's experience; more recently, most have held only that basic beliefs are justified by experience to some degree. Some older foundationalists eschewed mutual support altogether; but recently most have acknowledged that mutual support among derived beliefs may raise their degree of justification. Once you've gone this far, however, it is arbitrary to deny that the degree of justification of so-called "basic" beliefs may also be raised, or lowered, by their relations to other beliefs; but to grant this is to give up the distinction of basic versus derived beliefs altogether.

And foundationalists have had surprisingly little to say about how a proposition a person believes—that there's a bird in the bush, say—can be justified by his seeing the thing; when his seeing the bird is an event, not a proposition capable of standing in logical or quasi-logical relations to other propositions. The most apparently promising approach is to try to tie the relevance of experience to the fact that we learn certain words, the "observational" ones, ostensively, i.e., by direct association with this or that sensory experience; but this approach has come to seem less promising as doubts have grown about the viability of a sharp distinction between observational words and others.

In short, coherentism won't do; but foundationalism doesn't seem to be a viable option either.

The foundherentist theory I proposed in *Evidence and Inquiry* combined the strongest points of coherentism and foundationalism, while avoiding their weaknesses.[21] According to this theory, the structure of evidence is not linear and one-dimensional, like a mathematical proof; it is like a crossword puzzle, with experiential evidence the analogue of clues, and background beliefs the analogue of intersecting entries. The reasonableness of a crossword entry depends on how well it fits with the clue and any completed intersecting entries, how reasonable those other entries are, independent of the entry in question, and how much of the crossword has been completed; similarly, the degree to which a person is justified in a belief depends on how supportive his evidence is, how secure his reasons are, independent of the belief in question, and how much of the relevant evidence his evidence includes.

Supportiveness of evidence is explained in terms of explanatory integration. This is close kin to the older idea of consilience, meaning etymologically "jumping together," and introduced into philosophical discourse by the nineteenth-century philosopher of science William Whewell, who referred to the "consilience of inductions" when an explanatory conjecture made to account for one phenomenon turns out

also to account for other, different, phenomena as well.[22] It is also close kin to the more recent concept of explanatory coherence or mutual explanatoriness among beliefs. But the role of explanatory integration in the foundherentist theory is more modest than the role of explanatory coherence in the coherence theory; for in the foundherentist account supportiveness is only one of the several dimensions of evidential quality.

The foundherentist theory distinguishes legitimate mutual support among beliefs from a vicious circle of reasons: the degree to which a belief is justified depends in part on how justified the beliefs that support it are, *independent of any support they themselves get from the belief in question.* And the foundherentist theory does this without leaving us with a whole mesh of mutually supportive beliefs hanging in midair; for, though it requires no privileged class of basic beliefs, it allows the relevance of experience: experiential evidence—which, since it consists of perceptual events, not propositions believed, does not itself stand in need of justification—anchors the mesh to the world.[23]

At the time of *Evidence and Inquiry,* however, I had relatively little to say about exactly *how* experiential evidence anchors a person's empirical beliefs. The amplified and refined account developed in *Defending Science—Within Reason* fills this lacuna, starting from the old idea that the relevance of experience arises somehow from the way we learn language, but without requiring a sharp dichotomy of ostensive versus verbal definitions, observational versus non-observational predicates. As foundherentism says, experiential evidence and background beliefs work together, as clues and completed intersecting crossword entries do.[24] A person's experiential evidence, his seeing, etc., this or that, though not itself propositional, can support a proposition in virtue of the association of words with experience and with other words acquired as we learned language. But that association is multilayered: e.g., a child is first introduced to the word "dog" in the presence of clearly visible dogs, but later learns "looks like a dog, but . . . ," "toy dog," etc., and realizes that not everything that looks like this falls under "dog," and not everything that falls under "dog" looks like this. This subtler conception of language-learning motivates, not a foundationalist account in which there are basic beliefs justified by experience alone, but a foundherentist account in which the support given a subject's empirical belief by his experience may be raised, or lowered, by other beliefs of his.

Since foundherentism accommodates both foundationalist and coherentist insights, it offers a better way out of the impasse of foundationalism and coherentism than the relativization of justification to context or community that is sometimes proposed. According to

standard forms of contextualism,[25] epistemic justification consists in a subject's conformity to the epistemic practices of his community. Richard Rorty, who avers that "there is nothing more to be said about either truth or rationality apart from a description of the familiar procedures of justification which a given society—*ours*—uses," proposes a non-standard variant according to which justification consists in conformity to the epistemic practices of our community.[26] Very misleadingly, Rorty sometimes describes himself as a coherentist: perhaps simply because he rejects foundationalism, perhaps because he wants to ally himself with Davidson—or perhaps because he thinks of justification as agreement, not among a person's beliefs, but of one person's beliefs with other peoples'.

"The only sense in which science is exemplary is that it is a model of human solidarity,"[27] Rorty writes, thus giving social cohesiveness a starring epistemological role, and apparently assimilating the achievements of four centuries or so of scientific investigation to—what? a really good trade union? Yes, non-collusive agreement among witnesses is some indication of their truthfulness. Yes, science is a deeply social enterprise: the evidence with respect to scientific claims is usually a shared resource; and inquiry in the sciences is the work, cooperative and competitive, of generation upon generation of inquirers, who are able to complete new crossword entries in part because of the successes, or sometimes the failures, of those who have worked on the puzzle before them. And yes, consensus in the scientific community is epistemologically significant. But not in the way Rorty supposes: the fact that scientists agree on a theory doesn't warrant it; gradually killing off those who don't accept a new scientific idea, or playing a tape repeating "the earth moves" under the pillows of the holdouts while they sleep, won't make the claim in question any more likely true. No: consensus in the scientific community is epistemologically significant because—by no means always, but on the whole and in the long run, often enough—the strong evidence that warrants the theory also explains scientists' agreement.

Whether construed in the usual, relativist style, or in Rorty's more tribalist fashion, contextualism really is a desperate measure: abandoning the idea of objectively better or worse evidence, it would, among other things, knock away the essential epistemological underpinnings of the entire legal system. Fortunately, however, since foundherentism avoids the pitfalls of foundationalism and of coherentism, no such desperate measures are necessary.

III

And now, as I promised, back to the list of questions that started it all.

"Can one think of coherences in the plural, or is there something in the logic of the concept that overrides differences and assimilates its instances to itself?" "Coherence" has multiple meanings, and multiple objects; but it is better to say this directly, and to distinguish rather than assimilate those multiple meanings—paying due attention also to their interrelations, naturally—than to signal them obliquely by that coyly postmodern plural form, "coherences," without making the distinctions explicit.

"Do synchronic and diachronic modes of coherence reinforce or interfere with each other?" Well, the desirability of consistency in one's beliefs underlies both the concern to avoid contradiction among one's beliefs at a time, and the need to adjust one's beliefs when, over time, new evidence comes in that suggests that something you formerly believed is false. But the desirability of consistency in practice, in one's actions over time—when such consistency *is* desirable—stems not simply from the desirability of consistency in action as such, but from the desirability of a consistent practice of well-considered actions.

"Is the concept of coherence value-neutral or value-laden?" My first reaction was that, like the famous peppermint burgundy of Monty Python's "Wines of Australia" sketch, this question "should be laid down—and left." Talk of "the" concept of coherence is misleading, since there isn't just one concept in play; and "value-laden" seems to have become value-laden, a pejorative phrase that hints, without quite saying, that the concept in question covertly imposes an undesirable (usually, a politically undesirable) agenda. "Consistent," as I said, is used as a term of favorable logical appraisal, "coherent" as a term of favorable epistemological appraisal, "congruous" as a term of favorable literary appraisal, "cohesive" as a term of favorable political appraisal, and "cogent" as a favorable term of appraisal of thought, speech, and writing. Still, as I also said, inconsistency may prompt fruitful intellectual advance, coherence is only one component in an understanding of justified belief, incongruities of various kinds may be effective literary devices, social cohesiveness takes both desirable and undesirable forms, and so on. Coherence, in its various senses, has sometimes been undervalued; but it has sometimes, also, been overvalued.

This suggests a possible answer to the question of how coherence can "foster on the one hand an ethics of community or solidarity, on the other an imperial or totalitarian politics": that, as the propagandists of totalitarian regimes have always understood only too well, the ameliorative use of "cohesive" (or "unified," etc.) can disguise the fact that solidarity has its dark side.

"Is incoherence a sustainable option for . . . literary art?" It depends. There's certainly a role for incongruities in narrative, inconsistencies in character, verbal adventurousness and rule-breaking—of the right kinds, and in the right contexts; but not always or everywhere. An academic paper, in particular, is rarely an ideal context for the more adventurous kinds of rule-breaking that might work elsewhere. Hence my first response to the next question, "What is the status of coherence in advanced scholarly argumentation?": it is certainly better that an academic paper be cogent than not, and too-fancy literary forms are apt to get in the way of clear exposition; it would be much harder to explain the structure of DNA, or even the theory of poetic meter, in iambic pentameter than in plain prose. As usual, though, my first response needs amplification and qualification.

We value cogency in thinking at least as much as cogency in speech and writing. So we shouldn't forget that sometimes, when a person stumbles, mumbles, and fumbles in presenting his ideas, it is because what he is struggling to articulate is new and difficult; perhaps his thinking is coherent enough, but he can't yet quite articulate it, or perhaps his thinking is as yet inchoate, but potentially fruitful. Nor should we forget that superficially cogent presentation sometimes only disguises shallow or poorly thought-out ideas. And we shouldn't confuse real cogency with the prissy pseudo-precision of some neoanalytic philosophers, or with the portentous pseudo-profundity of some literary scholars; nor should we fool ourselves into thinking that humor,[28] a sense of style, or a good ear for prose rhythms are somehow inappropriate to the academic *genre*, a sign of insufficient seriousness.

"What is the status of coherence in rhetoric and composition teaching?" Analytic philosophers generally construe "rhetoric" as the art of persuasion by means of emotive language and such, by contrast with logic, the theory of good, valid arguments; and tend to look down on it. Literary scholars, on the other hand, generally construe "rhetoric" much more broadly, as the art of prose discourse, logic included; and value it quite highly. If "rhetoric" is narrowly construed, anyway, there is little question that, while incoherence of one kind or another may impede persuasion, it may, on the other hand, advance it. Gross incoherence was no obstacle to the effectiveness of Big Brother's propaganda, and it needn't be in real life, either; in fact, it can even be useful, for incoherent propaganda is sure to include something for everyone—and you really *can* fool too many of the people too much of the time.

What about coherence in composition teaching? At first blush, the answer seems easy enough: many students have had sadly limited experience of well-crafted English, and it is a real achievement to help

them write workmanlike, cogent prose; not least because learning to present your ideas cogently—and to try again, and again, when you fail—is such a significant step towards acquiring the discipline of hard thinking. Unfortunately, though, real cogency is subtle and difficult, and *ersatz* cogency much easier to teach than the real thing. So perhaps I need to add that we do our students a grave disservice if we encourage them, in the name of cogency, to mimic the constipated or windy style of their professors; or if we give them the impression that it is more important to shun the generic "he," or to get their bibliographies in impeccable Chicago Manual style, than to have something subtle and worthwhile to say, and to take pleasure in the flexibility and power of our language as they explore how best to say it.[29]

<div align="right">UNIVERSITY OF MIAMI</div>

NOTES

1   Herman Melville, *Moby-Dick: Or, the Whale* (1851; New York: Signet Classics / New American Library, 1998), 309.

2   In classical logic, moreover, any well-formed formula whatever is derivable from a contradiction. (In some non-classical, "paraconsistent" logics, however, the damage is contained.)

3   Gottlob Frege's *Begriffsschrift* (1879), along with Bertrand Russell's letter to Frege about the paradox and Frege's reply (1902), are reprinted in *From Frege to Gödel: A Source Book in Mathematical Logic 1879–1931*, ed. Jan van Heijenoort (Cambridge, MA: Harvard University Press, 1967), 1–82, 124–25, and 127–28.

4   F. H. Bradley, *Essays on Truth and Reality* (Oxford: Oxford University Press, 1914), 223.

5   See A. C. Ewing, *Idealism: A Critical Survey* (London: Methuen, 1934); Carl G. Hempel, "On the Logical Positivists' Theory of Truth," *Analysis* 2 (1935): 49–59; Nicholas Rescher, *The Coherence Theory of Truth* (Oxford: Clarendon Press, 1973), chap. 2.

6   The quotation is from a BBC television program called "Masters of the Universe": my source is Michael Shermer, *How We Believe: The Search for God in an Age of Science* (New York: W. H. Freeman and Company, 2000), 102.

7   See my "Realisms and Their Rivals: Recovering Our Innocence," *Facta Philosophica* 4.1 (2002): 67–88.

8   Charles Sanders Peirce, "How to Make Our Ideas Clear" (1878), in *Collected Papers*, ed. Paul Weiss, Charles Hartshorne, and Arthur Burks (Cambridge, MA: Harvard University Press, 1931–1958), 5.393. (The reference is by volume and paragraph number.)

9   Ralph Waldo Emerson, "Self-Reliance" (1841) in *The Complete Essays and Other Writings of Ralph Waldo Emerson*, ed. Brooks Atkinson (New York: Modern Library, 1940), 145–69, 152.

10 Jacques Barzun, "Dialogue in C-Sharp," in *A Word or Two Before You Go . . .* (Middletown, CT: Wesleyan University Press, 1986), 115–17, 117. See also his "A Copy-Editor's Anthology," 85–91, in the same volume.

11 On the principle of *stare decisis* and its motivation, see Morris L. Cohen, Robert C. Berring, and Kent C. Olson, *How to Find the Law* (St. Paul, MN: West Publishing Co., 1989), 3–4.

12 Leon Festinger, *A Theory of Cognitive Dissonance* (Evanston, IL: Row and Peterson, 1957); Leon Festinger, Henry W. Reicken, and Stanley Schachter, *When Prophecy Fails: A*

Social and Psychological Study of a Modern Group that Predicted the Destruction of the World
(Minneapolis, MN: University of Minnesota Press, 1956); Alison Lurie, *Imaginary Friends*
(New York: Owl Books / Henry Holt and Company, 1967).

13   Samuel Butler, *The Way of All Flesh* (1903; New York: Modern Library, 1998), 213.

14   Aristotle, *Poetics*, 1454a25, *The Basic Works of Aristotle*, ed. Richard Peter McKeon (New
York: Random House, 1941).

15   George Eliot, *Daniel Deronda* (1878; Harmondsworth, Middlesex, U.K.: Penguin
Books, 1967).

16   Ursula Le Guin, *The Left Hand of Darkness* (New York: Ace Books, 1969).

17   I offered some reflections on this dark, tribalist side of solidarity in my "9/11/02," *Free
Inquiry* 23 (2002–3): 9–12.

18   See for example Lawrence BonJour, *The Structure of Empirical Knowledge* (Cambridge,
MA: Harvard University Press, 1985); Donald Davidson, "A Coherence Theory of Truth
and Knowledge," in *Kant oder Hegel?* ed. Dieter Heinrich (Stuttgart: Klett-Cotta, 1983), 45–
38, reprinted in *Reading Rorty*, ed. Alan Malachowski (Oxford: Blackwell, 1990), 120–34.
Both are criticized in detail in my *Evidence and Inquiry: Towards Reconstruction in Epistemology*
(Oxford: Blackwell, 1993), chap. 3. (By 1997, BonJour had given up coherentism in favor
of a kind of foundationalism.)

19   Wilfrid Sellars, "Some Reflections on Language-Games," in *Science, Perception, and
Reality* (London: Routledge and Kegan Paul, 1963), 321–58.

20   In *Coherence in Thought and Action* (Cambridge, MA: Bradford Books / MIT Press,
2000), Paul Thagard claims that his coherentism avoids vicious circularity by providing
algorithms that "effectively calculate how a whole set of elements fit together, without
linear inference of p from q and then of q from p" (76). But his "elements" are
heterogeneous and ill-defined; his "algorithms" are vitiated by their reliance on purely
intuitive assignments of weight, undefined primitive terms such as "explains," etc.; and
when, on page 78, he presents a pair of diagrams to illustrate the difference between
mutual support and a vicious circle, the diagram representing legitimate mutual support
appears to consist of two diagrams representing vicious circles of reasons superimposed on
each other!

21   See Haack, "Theories of Knowledge: An Analytic Framework," *Proceedings of the
Aristotelian Society* 83 (1982–3): 143–57; *Evidence and Inquiry* (note 18 above), chap. 4; and
Haack, "A Foundherentist Theory of Empirical Justification," first published in *Theory of
Knowledge: Classic and Contemporary Sources*, 2nd ed., ed. Louis Pojman (Belmont, CA:
Wadsworth, 1998), 283–93, and reprinted (without the numerous mistakes introduced by
the copy editor) in *Epistemology: An Anthology*, ed. Ernest Sosa and Jaegwon Kim (Oxford:
Blackwell, 2000), 226–36, and in *Epistemology: Contemporary Readings*, ed. Michael Huemer
(New York: Routledge, 2002), 417–34.

22   William Whewell, *Philosophy of the Inductive Sciences* (1840), in *Selected Writings on the
History of Science*, ed. Yehuda Elkana (Chicago: University of Chicago Press, 1984), 121–254.
The term was recently adopted, and adapted, by E. O. Wilson, in a book entitled
Consilience: The Unity of Knowledge (New York: Knopf, 1998).

23   In *Coherence in Thought and Action* (note 20 above), 41 ff., Thagard claims that his
coherentist account "subsumes" foundherentism. But this is a serious misrepresentation,
and his discussion is badly confused. In brief: the crossword analogy is only one aspect of
the foundherentist theory; it is not a model simply of mutual support among beliefs, but
of the structure and quality of evidence, including the interaction of reasons and
experiential evidence; it is not intended as an explanation of explanatory coherence. In
the same few pages Thagard tells us that his Principle of Data Priority enables him to
accommodate experience as well as coherence of beliefs. But his principle fudges
experience and experiential propositions together; and so, like BonJour's Observation

Requirement, is either genuinely coherentist but unable to allow the relevance of experience, or else allows the relevance of experience but is not coherentist but foundationalist.

24 See Haack, "Clues to the Puzzle of Scientific Evidence," *Principia* 5, no. 1–2 (2001): 253–81; and Haack, *Defending Science—Within Reason: Between Scientism and Cynicism* (Buffalo, NY: Prometheus Books, 2003), chap. 3.

25 For a standard statement of the contextualist position, see David Annis, "A Contextualist Theory of Epistemic Justification," *American Philosophical Quarterly* 15, no. 3 (1978): 213–9.

26 The quotation is from Richard Rorty, "Science as Solidarity," in *The Rhetoric of the Human Sciences*, ed. John S. Nelson, Allan Megill, and Donald M. McCloskey (Madison, WI: University of Wisconsin Press, 1987), 42. Chapter 9 of my *Evidence and Inquiry* includes a detailed critique of Rorty's critique of epistemology.

27 Rorty, "Science as Solidarity," 46.

28 Robert Klee, editor of *Scientific Inquiry: Readings on the Philosophy of Science* (New York: Oxford University Press, 1999), feels that he must "give the reader warning" in his introduction that certain of the selections—safely corralled in sections headed "Polemical Interlude"—are written in "a somewhat witty style" (4). Oh dear.

29 My thanks to Mark Migotti for helpful comments on a draft.