Don Ross

In November 1998, a group of fifteen scholars gathered at Memorial University in St. John's, Newfoundland, with Daniel C. Dennett, to study his corpus of books and articles as a set, and assess the extent to which the pieces fit together as a comprehensive philosophical system. In his work on consciousness, Dennett has considered puzzles over how the complex components of mental processing all seem to "come together" in serial, relatively coherent, narratives we tell ourselves about ourselves. At the conference, we stepped one level higher and asked "How do the complex components of Dennett's work on intentionality, consciousness, evolution, and ethics "come together" into a coherent view of the world?"

"System-building" has had rather a bad odor among philosophers in the analytic tradition. This is hardly surprising: It is implicit in the very label "analytic," an approach that seeks to deconstruct (in the dictionary sense of the term) complex problems into manageable pieces. Now, Dennett has never claimed to be trying to build any sort of grand unified system in the way that, for example, Kant or Hegel did. But if one now turns back and reads his first book Content and Consciousness (1969), one finds in it the anticipatory seeds of most of his later work. The early book is among the first in analytic philosophy to even consider the problem of consciousness; furthermore, it does so within constraints drawn from what natural selection could plausibly design, another aspect of Dennett's approach that is now common, but was in 1969 almost unheard-of in

philosophy. Dennett has since withdrawn or amended some of the specific hypotheses advanced in *Content and Consciousness*, but his then-original project has remained consistent with its aims. It is difficult to be as original in approach as Dennett then was and avoid implying a wide-ranging philosophical system, whether one has that intention or not.

It is unlikely that Dennett would ever be referred to as "a philosopher's philosopher," given the extent to which he eschews the analytic philosopher's main tool: the semiformal, quasi-deductive argument. Of course, many analytic philosophers, including, notably, Russell, Quine, Ryle, Lewis, and Fodor, have also used vivid examples, rhetorical questions, and wit to press for clearer thinking on various problems and for revisions to inherited conceptual schemes. However, in analytic contexts such persuasive devices have usually been intended to test conceptual distinctions against intuitions. The need for such distinctions, with which philosophy of course teems, usually arises from attempts to fix the scopes of terms used in deductive or semideductive arguments. In this atmosphere, Dennett's career-long barrage of "intuition pumps"—thought experiments, empirical examples, rhetorical challenges, which are difficult to place within the context of implicit formal arguments—has seemed to some philosophers to border on irresponsibility. Dennett, one often hears it said, is "slippery." In the present philosophical culture, this is at best an indicator of unease.

This book, like the conference from which it arose, is motivated by the conviction that Dennett's work is deeply serious, and that the manner in which his conversations with other philosophers have been conducted is itself of philosophical import. With one exception, these essays are written by philosophers, and their authors work in the typical philosophical style: They elucidate concepts, they split hairs, they test sets of premises for consistency of implications. However, all are predicated on the belief that Dennett's recent work is much more than a series of lively essays in popular science, and that it continues to offer some of the most significant contributions to professional philosophy available. Indeed, the authors here accepted a general challenge from the editors to contribute to a project that some of Dennett's intellectual critics—not to mention many

who are sympathetic with his views—might find preposterous: to evaluate the extent to which Dennett's corpus comprises a coherent philosophical system. It must be left to the reader of this book to decide whether the ambition *was* preposterous. However, after providing a synopsis of the themes around which the volume is organized, I will offer and explain my own verdict; this will at least offer a point of departure to which a skeptical reader can react.

Among philosophers, Dennett continues to be best known for his distinctive theory of mental content, which has been with us for three decades now. Talk about "mental content" inevitably involves—is, perhaps, identical with—debates over theories of "intentionality." Such a theory's basic problem is "How is it that a state in a mind, brain, or mind/brain can be about something specific outside of itself?" Only once this general question has been answered with some plausible hypotheses can one then go on to usefully wonder how to assign particular content to particular mental states. Of course, different general hypotheses will generate different answers at the level of specific content-assignments. Dennett's general hypothesis, as advanced in two major collections of essays, Brainstorms (1981) and The Intentional Stance (1987), is that content is fixed by adopting the "intentional stance" toward a system, treating it for purposes of prediction and explanation as if it has beliefs, goals, and capacities that are related in a systematic way. Now, at first this seems circular: It does not appear informative to say "A system is deemed to have intentionality by virtue of having the intentional stance taken toward it." For this reason, Dennett has often been regarded as an instrumentalist about intentionality: We say that a system is a mental system just in case we find it useful for practical purposes to do so. In that case, it would not be obvious that intentionality exists in any scientific sense, its subconcepts—beliefs, desires, and so on—being merely artifacts of the way we find it natural to talk. Some philosophers, notably Paul Churchland and Richard Rorty, have defended exactly this view.

Dennett, however, has resisted the instrumentalist label. His basis for this resistance is that, essentially, "the way we find it natural to talk" is not something anyone *decided* or *chose*; it is a function of the way in which natural selection designed our brains and nervous

systems. Of course, natural selection does not deliberately decide anything. As Dennett has emphasized throughout his career, natural selection is an engineer without foresight: It simply tries one design after another, and eliminates those that don't work as well, given their environmental niches, as competing designs. This is generally a poor engineering procedure given constraints of time and other resources; but natural selection has, effectively, all the time and resources in the world. Given this absence of economic limitations, blind trial-and-error is a *more* powerful technique than deliberation, because it allows a countless variety of avenues and contingencies to be investigated, rather than only those challenges that the deliberative engineer can anticipate. Thus, for Dennett, the ultimate source of types of human intentions is a designer we usually don't regard as having intentions at all, namely, natural selection. Dennett has worked strenuously to break apart what he regards as the overly close association between intentionality in general and deliberative intentionality. Thus too, in Dennett's opus Consciousness Explained (1991a), he develops his theory of the architecture supporting consciousness by applying the technique of "reverse engineering," that is, working backward from the "specifications" evident in our actual design, through the trajectory in "design space" followed by natural selection. Since natural selection cannot go back and reengineer a design, once environmental and morphological constraints start it down such a trajectory, the available room within design space shrinks tightly enough to permit reverse engineering to generate constrained and principled hypotheses.

Attaching such primacy to natural selection as a source of constraints on theories of intentionality and consciousness has led Dennett into explorations of the impact this has upon ethics and the possibility of free will. Put very broadly, Dennett's view is that Darwinian theory is a "universal acid" insofar as it dissolves any hope of establishing transcendental foundations for either morality or free will. However, he maintains in Elbow Room (1984), his book on free will, and in Darwin's Dangerous Idea (1995), that we should feel no need for such foundations in the first place. Since we are constrained by what natural selection has wrought, but since our deliberate actions also influence the region of design space open to

biological—and, importantly, cultural—evolution, our sense that we have responsibility over our future, the exercise of which depends upon our reflectively chosen values, ensures that neither free will nor moral obligations are mere illusions. We have, as Dennett puts it, "all the free will worth wanting." This may seem reassuring, but it implies a problem that has echoes of Nietzschean existential freedom. If there is no transcendental foundation for ethics, we cannot hope to fall back on a set of predetermined rules that will advise us on what to do in every morally challenging situation. As discussed above, there are severe limitations on what can be achieved by deliberative engineering, which cannot anticipate all, or even most, contingencies that cultural evolution and chance might throw at us. Therefore, Dennett argues, the best sort of contribution ethicists can provide is a "moral first aid manual" (Dennett 1988), a basic toolkit of concepts flexible enough to permit exaptation to as wide a range as possible of new situations and challenges.

I have tried to sketch, in broad brushstrokes, the themes that recur in Dennett's work, and which give it its systematic appearance. After doing this at the conference, we then attempted to tug at any loose planks we could find in the edifice to see how well it could withstand pressure from various different directions. Is Dennett's "philosophical first aid manual" a sufficiently robust set of tools? (This metaphor seems apt, since it is obviously not a set of axiomatic first principles of the Spinozistic sort.) The fifteen plenary papers were divided among five sessions, on Evolution, Intentionality, Consciousness, Ontology, and Ethics/Free Will. Dennett replied to each paper. In addition, a number of poster submissions were displayed and commented upon by their authors. On the final morning, a roundtable was held at which themes that had reemerged repeatedly from session to session were subjected to further analysis and debate by all participants. The plenary papers, along with Dennett's replies, are now gathered here. (Sadly, Kathleen Akins's outstanding contribution was already claimed for another publication, and so does not appear in this book.)

The wide topical range of Dennett's work presented us with a challenge in organizing the Newfoundland conference, and in editing this book. On the one hand, we sought a group of papers that would

jointly capture the full sweep of Dennett's professional interests. On the other hand, we certainly did not want a dozen papers all trying to synthesize his entire corpus. We decided not to commission papers by topic; instead, we invited contributors with an eye to achieving a match between the range of principal interests on which the panel had collectively published and Dennett's. Invitees were advised as to the intended overall product of the conference—an assessment of the extent to which Dennett's publications on an array of localized subjects fit together into a coherent philosophical view—but no suggestions were given as to the specific subjects of the papers. They were sorted into thematic blocks that became the basis for organizing the conference sessions and the sections of this book, only after all of the contributors had completed first drafts. We are satisfied that this trusting to chance—within pre-fixed constraints—was generally successful.

In all of Dennett's work, the possibility-space for psychological and biological mechanisms left open by natural selection fundamentally defines the conceptual terrain. The book therefore follows the order of presentation at the conference in opening with papers addressed to issues in the philosophy of biology. Tim *Crowe*, an evolutionary zoologist, presents a novel challenge to Dennett's adaptationism. The technique of explaining by simulated reverse engineering obviously requires the assumption that, although geological, geographical, and other contingencies determine the topology—both metaphorically and (often) literally—of evolutionary design space, our default principle must be that biological organs and behaviors exist because they are well adapted to an environment, and that this well-adaptedness explains their existence. This default principle has been challenged, most ferociously by Stephen Jay Gould, and the resulting debate between Gould and Dennett has been quite heated. Gould argues (at least, when at his most provocative) that events of speciation are mainly accidents, that is, nonadaptations. Crowe goes further: In his paper, he cites his own extensive research on African guineafowl to suggest that, from the gene's-eye point of view made famous by Dawkins (1976) and which Dennett accepts, speciation events are often maladaptations, where, through pure accident, random ethological changes have reduced the sizes

of the pools in which genes can operate. This seems to be a challenge that Dennett must meet if his method of hypothesis-formation is not to reduce to pure speculation. However, it is not obvious that Dennett must embrace Dawkins's "strong genic selectionism" for the sake of the rest of his philosophy, in which case Crowe's argument cuts no deeper than those of Gould, which Dennett has already sought to answer. In the second paper on evolution, Paul Dumouchel challenges Dennett from exactly the other side. If strong adaptationism is true, Dumouchel argues, then all of natural selection's moves through design space are "forced," and the room for cultural-evolutionary feedback pressures exploited by Dennett in his work on free will seems threatened. Dumouchel is not content with merely raising this problem; he also seeks to solve it, using first a well-crafted set of rhetorical questions that probe Dennett's concept of an evolutionary algorithm. He then goes on to suggest that Dennett's distinction between "Good Tricks" and "Forced Moves" involves us in "an antimony of natural reason." The style of the inquiry here is tightly Dennettian, torturing the distinction to see if it represents a difference that makes a difference, a favorite and recurring question posed by Dennett in several domains. Dennett makes no secret of the fact that he regards epistemological verificationism (as opposed to the obviously mistaken semantic verificationism defended by the logical empiricists) as a sound, indeed necessary, principle of good science.

Indeed, this issue was central in the discussions on consciousness. Dennett's most controversial claim about consciousness is that, in adjudicating between questions as to what information in the brain is processed "preconsciously" and what information is processed "postconsciously," there is no fact of the matter. Put more vividly, there is no discernible difference between "real seemings" and "mere seemings." When this distinction is denied, the point of talking about "seemings" disappears entirely: There is merely processed information, and judgments about the source and interpretation, in natural language, of that information. Here, the influence of Dennett's great mentor, Gilbert Ryle, shows clearly. At the conference, several speakers on themes related to consciousness tried to "domesticate" this radical implication of Dennett's view. Andrew *Brook* used

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this phrase explicitly. According to Brook, Dennett's "multipledrafts" theory of consciousness is merely compatible with, but does not imply, the thesis that "seemings" have no place in a naturalistic ontology. If this is the case, however, it invites another question that would reverse Brook's moral: Does Dennett's epistemological verificationism imply the abandonment of "seemings," in which case the multiple-drafts model would be a demonstration that a neo-Rylean can tell a story that saves the phenomena? That verificationism is crucial to Dennett's project is suggested by his purely epistemological arguments to the effect that zombies, creatures behaviorally indistinguishable from conscious subjects but lacking phenomenal qualia, are incoherent posits. In his essay, Tom Polger argues that zombies, even if they are biologically impossible (as most contributors to the debate concede), nevertheless serve as useful conceptual fictions in testing the scope of psychological and neurological hypotheses. I think it fair to say that Dennett is not at all convinced by this argument, and that his verificationist premises, if accepted, block it more or less immediately. (See below for more on this point.) This fundamental epistemological divide has arisen repeatedly, though usually in unexpected and therefore enlightening ways. David *Thompson* attempts to persuade Dennett that he and Husserl have more in common than Dennett has elsewhere implied, since both deny that the content of a representation is an internal "seeming." I suspect that many philosophers will be surprised at how far Dennett, in his reply, is willing to go with this suggestion. That Dennett, Husserl, Thompson, and Brook are all naive realists about the contents of linguistically interpreted representations is clear. It is not at all clear, however, that a third-person verificationist such as Dennett could endorse the possibility of learning anything about the basis of consciousness through the Husserlian method of epoché. Indeed, it is difficult to see how, on Dennett's view, epoché could even be possible, since the subject has no available standpoint from which she could hope to accurately "bracket" the contents of consciousness.

If Brook, Thompson, and Polger try, in their different ways, to "domesticate" Dennett, other commentators on the themes of consciousness, intentionality, and ontology—which often run tightly to-

gether, as they do in Dennett's work—encourage him to break out of stockades that they take to be of his own making. Dan Lloyd amplifies Dennett's dissatisfaction with language-of-thought models by focusing on the nature of propositional content assignments "from outside." Lloyd agrees with Dennett that content cannot be fixed by trying to correlate it with some neo-Cartesian state, but he then takes the case further: We cannot gain a stable purchase on linguistically represented content unless we go beyond the organism and attend to its environmental locus. The problem, as Lloyd analyzes it, taking his cue directly from Dennett, is that many content-ascriptions refer to properties that exist only given the possibility of a detector of such properties. If, then, we do not consider minds in situ, we shall be driven all the way back to a Cartesian view about the ontological status of such properties: The sorts of objects we refer to by appeal to them will have no possible home but a (distributed) "Cartesian cineplex." Lloyd therefore advocates what he calls "phenomenal realism": Phenomena (e.g., those properties that depend on a potential detector for existence) exist in just the same sense as other properties, because, as a matter of fact, there are not only potential reliable detectors of them, but actual ones. If Lloyd is correct, however, that being realists about phenomenal properties while avoiding residual Cartesianism requires taking minds and relevant parts of the world as our systems for analysis, then the likelihood of any neat mapping between neural or perceptual content (or, to speak more cautiously, "sublinguistic content") and propositional content becomes vanishingly small. This suggestion urged by Lloyd, insofar as it requires an entire abandonment of the representational paradigm, would pull Dennett still closer to Husserl, or at least the version of Husserl described by Thompson.

Dennett has always explicitly embraced a robust Quinean naturalism. Naturalism, however, does not by itself decide between the naive realism of Brook and Thompson, and the "revisionist realism," if I may call it that, promoted by Lloyd. But another generic philosophical theme has recently been gaining increasing prominence in Dennett's work, a theme alluded to earlier: verificationism. Dennett calls his verificationism "mild" because it is not strict *semantic* verificationism of the Carnapian sort. However, several papers here,

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most notably Tim Kenyon's and William Seager's, argue that it has a great deal of bite. Kenyon maintains that both Dennett's antireductionism about the mental and his insistence on the underdetermination of intentional properties by physical ones require verificationism, but not Quinean indeterminacy, a thesis couched in a realist idiom that Kenyon finds incompatible with the rest of Dennett's project. Seager, in an essay of dazzling sweep, studies the tension between naturalism and antireductionism. Seager's conclusion is that if Dennett wishes to maintain that types recognized from the intentional stance are as real as types recognized by physics, as he does (see Dennett 1991b), while avoiding a generalized antirealism, then he must adopt what Seager calls "surface metaphysics." If a thesis saves the phenomena, Seager argues, then there is nothing further the Dennettian can consistently ask of it in judging its status as a contender in the effort to describe reality. The objects referred to in physical theories then—and only then—come out as being on all fours with the objects referred to in the intentional idiom. This ontological parity between intentional and other sorts of objects is also sought in the paper by Don Ross, though I approach it by broadening the scope of the predicate "real," in accordance with some suggestions of Dennett's, rather than by directly deflating the metaphysical commitment involved in calling something "real." I argue for a view I call "Rainforest Realism" (the adjective rainforest deriving from taking Quine's image of the metaphysician trimming our ontology of overgrowth as my foil). Like Seager and Lloyd, I defend the idea that if beliefs and other propositional attitudes are to be regarded as properly real, then all vestiges of ontological reductionism must be scotched. I thus argue that Dennett should abandon the distinction between *illata*, that is, entities that exist entirely independently of our conceptualization of the world, and abstracta, entities that depend on conceptualizations such as "taking the intentional stance." To avoid an infinite ontology, I then offer a definition of existence that reformulates Occam's Razor in information-theoretic terms, and ties pattern-existence to the physical possibility of a pattern-detector. This second aspect avoids metaphysical anthropocentrism, and is in accord with Lloyd's formulation of pattern-dependent existence, though more explicit. My

primary concern with ontological matters, however, leads me to make less use of Dennett's epistemic verificationism than Kenyon or Seager. I suggest that if the papers of Lloyd, Kenyon, Ross, and Seager are taken together, one arrives at "radical Dennettianism"—or perhaps we should say "Ryleanism updated in light of cognitive science."

Chris *Viger* also addresses his paper to the nature of Dennett's realism about the patterns tracked from the intentional stance. Viger argues that Dennett is advancing not so much an ontological claim as an epistemological one, about the grounds that warrant confidence that a stance is conducive to adequate explanation. Again, verificationist principles play a crucial role in Viger's explication of Dennett's implicit epistemology. Viger's paper also seems complimentary to what I just labelled 'radical Dennettianism.'

Kenyon, as noted above, argues that Dennett's verificationism renders his thesis that content-fixation from the intentional stance is indeterminate unnecessary for interpreting his relevant intuition pumps, and so turns radical indeterminacy into a piece of gratuitous metaphysics. Dennett, in his reply, resists this attempt to systematize him, arguing that although the indeterminacy may not require or be required by his other leading theses, he nevertheless has good reasons—reflections on cases, as usual—for regarding it as true. Both Ruth Millikan and David Rosenthal argue, in different ways, for mitigating the force of this indeterminacy. Millikan's view, as outlined in Millikan (1984) and elaborated upon in Millikan (1993), is that the space within which meanings can range is fixed by natural functions, which are determined through asking what an organ, behavioral disposition, or signaling capacity was selected for. This thesis, according to which facts about evolution provide a basis for arriving at facts about the interpretation of intentional states, is among the most widely discussed contemporary approaches to the analysis of meaning, and owes a large—and often acknowledged debt to Dennett's introduction of evolutionary foundations for the philosophy of mind in his first book, Content and Consciousness (1969). Despite their affinities, Millikan notes an important space of possible disagreement between them: Whereas Dennett insists on Quinean indeterminacy of meaning with respect to intentional

states, Millikan supposes that indeterminacy is localized by evolutionary facts; indeed, this is the point of her so-called teleosemantics. She then seeks to diagnose a more general difference that underlies this relatively contained one. Dennett, she suggests, holds the intentional stance to be more basic than the design stance, whereas she takes the order of logical priority to be reversed. As in the case of Kenyon, then, Millikan's approach through the indeterminacy thesis leads her to highly general issues in the foundations of cognitive science and epistemology. In response, Dennett offers one of his more virtuoso intuition pumps, his "Quinean crossword puzzle." This is intended to suggest that although there can be irreducible indeterminacy of meaning, the space in which it can realistically arise is vanishingly small. This might appear to be a substantial concession to Millikan and to Kenyon. However, as Dennett's full reply makes clear, the issue of the logical relationship between the intentional and design stances is indeed deeper than the problems associated with indeterminacy to which it gives rise. Here, Dennett stands his ground. All philosophers of mind should find a great deal of insight into the views of both Millikan and Dennett in this dialogue, and it is sure to be much discussed over the next few years.

Rosenthal argues that although subcognitive content is indeed semantically indeterminate for the reasons that Dennett claims, judgments, as higher-order thoughts whose content is sharply constrained by the external demands and semantic richness of public language, are subject to only "garden-variety," as opposed to radical Davidsonian, indeterminacy. In this case, Dennett is again concerned less with indeterminacy per se than with the deeper assumptions that motivate Rosenthal's skepticism about it. In Dennett's view, Rosenthal's insistance that a conscious state must be a possible object of a higher-order thought extends application of the concept of "consciousness" beyond what is required for either scientific progress or philosophical clarity.

Finally, in a response to Dennett's various writings on ethics and free will, Brian *Mooney* relates Dennett's "moral first-aid manual" to similar themes found in both ancient and modern virtue ethics. Mooney's antiperfectionism seems well in accord with Dennett's views in this area, and is integrated into the broader Dennettian phi-

losophy through reference to the idea that no preengineered "moral technology" could possibly compete with exaptation from a more flexible, multipurpose set of moral concepts, concepts that, furthermore, evolve under pressures of cultural selection.

In response to these essays, Daniel *Dennett* provides yet another inimitable example of his philosophical style. Considering these responses as a set will much help scholars seeking to evaluate the order of priority among his various philosophical commitments. However, although a distinctive philosophical style is evident here, the question as to whether it stems from an integrated *philosophy* in the classical sense is not explicitly addressed. Dennett's coyness in response to the attempts to fashion one—notable, for example, in the papers of Kenyon, Lloyd, Ross, and Seager—may make our editorial project of finding a system beneath the details seem to have been preposterous after all. In light of this, I will sketch an impression of my own sense of the unifying threads in Dennett's corpus, based mainly on the points of consensus found in these essays and in Dennett's replies to them.

Dennett himself has often disclaimed ambitions to systematicity, and a method that typically consists in attacking putative conceptual necessities through invocation of intuition pumps, against which these "necessities" are held to founder, hardly seems to be that of the system-builder. In Consciousness Explained, Dennett cites Ryle and Wittgenstein as his prime sources of philosophical inspiration; and it is difficult to find thinkers more skeptical of conceptual systems than that pair. However, Dennett's skepticism is primarily of the road-clearing variety associated with his third regularly acknowledged mentor, Quine. Unlike the cases of Ryle and the later Wittgenstein, Dennett offers a connected set of positive conceptual theories: of intentionality, of consciousness, of the narrative self, of the foundations of biology, and of the sources of the sense of free will. Furthermore, if one compares the instances of his skepticism, one finds a distinctive and common logical pattern uniting its targets: Almost all are rigid conceptual boundaries of one sort or another. Between the paradigmatically intentional and the paradigmatically nonintentional, Dennett tries to convince us, there is no sharp divide, but only a smooth gradation from the minded to

the mindless. Within the sphere of the intentional, the same point is emphasized concerning the distinction between conscious minds and unconscious ones. When we think about the nature of evolution or about the problem of free will, Dennett would have us shake off false dichotomies descended from a basic one, that between absolute historical contingency and algorithmic determinism. Qualia are quined not because Dennett imagines that there is nothing it is like to be conscious, but because no clear demarcation can be drawn between representations of qualitative properties and representations of other sorts of states. This skepticism about "necessary" distinctions often cuts quite fine: Among the theses defended in *Consciousness Explained* that have provoked the most resistance is the claim that there is no fact of the matter as to whether nonveridical perceptual memory results from preconscious or postconscious misrepresentation.

Of course, Dennett is hardly the first philosopher to campaign against essentialism. Indeed, antiessentialism is the clearest theme uniting Ryle, Quine, and the later Wittgenstein. However, Dennett reacts against firm conceptual lines not simply on the basis of nominalistic temperament. The essentializing impulse that is a fundamental motivation behind much philosophical speculation is flatly at odds with naturalism, because it arises from the mistake of supposing that the structure of our logical and linguistic representational systems must map neatly onto the structure of the world. We not only do things with words, Dennett reminds us; words also do things with us. We could not have science without a digitalizing system that enables us to make and store precise measurements, and that allows for immense informational compression. However, this "von Neumann machine" that, according to Dennett, is the basis of the narrative sense of self and of all the grand (and awful) cultural and scientific projects that selves narrate, is also an impediment to science the moment one imagines that nature must have joints just where our system of words draws them. We draw sharp distinctions between animal classes, which is a sensible thing to do given the time-scale at which most of our observations and reasoning must guide us; but then we may suppose that when the biologist tells us that mammals are descended from reptiles, this implies the absurdity that some

mammal did not have a mammal for a mother. The mistake here consists, of course, in thinking that there is some "mammalian essence" that processes of recombination and mutation miraculously crossed. Notice that this example, a favorite of Dennett's, must be interpreted in a certain way if it is to have its intended force. Every scientifically literate person has gotten used to the idea that an attempted refutation of Darwinism based on the "paradox of mammalian descent" would involve a failure to respect evolutionary gradualism. We might thus suppose that only the ignorant are prone to essentialistic blunders of this sort. However, the disposition to over-digitalize the world is ubiquitous, and unavoidable unless our thinking is both very careful and always open to correction. Even scientific geniuses, Dennett argues in Darwin's Dangerous Idea, often fall victim to implicit postulation of counter-naturalistic "skyhooks" when they must think inside the glacial pace of evolutionary change. Similarly, neuroscientists abolish the ghostly Cartesian theater but then frequently end up with something yet more wondrous: a physical Cartesian theater. Note, as an example, the crucial role that essentialism plays in the genesis of this last mistake. In the environmental settings about which we typically speak, representations are produced for the consumption of whole minds, and they have their impressive causal effects by virtue of such consumption. It becomes natural to think that suitability for processing by a mindful audience is part of what it *means* for something to be a representation. At that point, it becomes difficult to talk about inner representation without smuggling a cunning homunculus into our conception. And if one is studying the computational processes of, say, a peripheral perceptual module, so that banishing the homunculus is somebody else's job, it is easiest to simply live with ridiculous posits. These, however, are most pernicious when we are used to them. Consider the "occult" action at a distance that made Newton wary of attaching physical reality to gravitational force. A century after his death, the mystery was as great as ever, but few were much bothered by it anymore, since the concept was so demonstrably practical. The confusions bred of essentialism hide more easily in familiar conceptions than in novel ones. Thus, when Dennett tries to abolish the Cartesian theater, and venerable notions that travel with it, such as that of a quale, this strikes many people as less intelligible than the quaint picture of the mind he seeks to overthrow.

Essentialism is an elusive target, because in the contemporary philosophical literature it is usually accidental. Few philosophers believe in metaphysical essences of the old sort. Even those who are persuaded that natural kind terms refer uniquely in all possible worlds buttress this logical essentialism with a naturalistic story about causal relations that must undergird the logical ones. This, I suggest, accounts in part for the unease with which Dennett's work is often viewed. Philosophers regularly accuse one another of having inadequately justified opinions, but it is implicit in many of Dennett's campaigns that his opponents don't quite understand the opinions they defend. Of course, the same could be said of Wittgenstein. But his critique of the philosophical project has the double screen of being aphoristic and of seldom associating any names with the views it undermines except Wittgenstein's own. Furthermore, given his vintage one can read him in his skeptical moments as aiming narrowly at positivism, a position no one has defended for years. However, I think that Dennett is correct in emphasizing his affinities with Wittgenstein. Both work through force of examples to cast doubt on the unintended essentialism that arises not from metaphysical convictions but from the nature of the philosophical enterprise. Most philosophical theories are precisely about the boundaries of concepts, and so must try to identify properties of types that can serve as centers of conceptual gravity, holding their associated concepts in place and apart. These may not be essences of the traditional sort, but they are useful for the same reason: They prevent concepts from sliding about when we are trying to do argumentative work with them. This is genuine utility, as Dennett nowhere denies. However, he is a pragmatist about concepts (and here Quine's influence shows itself at its most abstract level). Regimented concepts are useful precisely to the extent that they help us to investigate the nature of real processes that operate as they do independently of our conceptualizations (except where they involve intentions in irreducible causal roles; see Dennett's comments on Viger's essay). It is when he finds conceptual conservatism interfering with our ability to dissolve mysteries that Dennett reaches for his intuition pumps.

To maintain that conceptual joints can and should be trumped by nature's (typically fuzzy) ones is to endorse some version of realism or other. With respect to the question of just what sort of realism this is, relative to the traditional philosophical alternatives, Dennett is himself unsure. Several papers in this volume attempt to pin him down on this, but Dennett, in his concluding comments, declines to be pinned; "My ontological convictions," he says there, "are now in happy disarray." Since I am among those who try to force Dennett's intuitions, I risk abusing my editorial privilege in trying to diagnose the source of this disarray. I venture the hypothesis, however, that what causes Dennett's hesitation may be the fact that most of us attempt to force him to one or another philosophical theory, that is, a set of metaphysical propositions. Now, Dennett's work does not display the fanatical squeamishness about such propositions expressed by (for example) the logical positivists. However, he appears to be wary about them for the following general reason. A philosophical thesis must mainly appeal to the virtue of consistency among beliefs we are already disposed to hold on the basis of experience. Most such beliefs have a property that must be grounds for suspicion to a radical naturalist such as Dennett: They will have been entertained for long enough (at least by somebody) to have grown comfortable. This implies both that they will have settled into our belief corpus through being domesticated by our intuitions, and that they will have had some influence on that corpus through the process of making themselves at home. As memes, they are both parasitic residents of minds and part-authors of those very minds. Occasional memes promote skepticism about themselves (e.g., the philosopher's venerable "bent stick" meme), but most clearly do just the opposite. A philosophical system that tries to resolve inconsistencies among them will thus tend to conceptual conservatism. One of the best devices for removing local threats of inconsistency is to define concepts in such a way that their boundaries do not cross; and this, of course, is precisely the sort of move that calls forth Dennett's skeptical tactics.

What has all this to do with an attitude toward metaphysics? Organization of our concepts by a philosophical theory must come at a price, that of making them more resistant, through the strength of

mutual support, to overthrow in the face of novelties discovered by science. However, being dangerous is one of the important things that, according to Dennett, good science is for. Darwin's idea is dangerous because it threatens our conceptual structure more deeply than even most biologists realize. For Dennett, the fact that we are thus forced to revise and reconstruct that structure, including those parts of it relevant to ethics, is among the idea's greatest merits. Metaphysical habits, however, may throw up a buffer that interferes with the realization of this virtue, providing both a basis and an additional motivation for sheltering traditional concepts against the corrosive effects of more recent discoveries. Furthermore, metaphysical theories, if they are of any worth at all, must have implications for what we should expect to find in nature; and of course we tend to interpret findings according to expectations. There is little we can or should do about this natural cognitive disposition, but to privilege products of reflection over deliberate observation and experiment is to make that in which we are less confident the basis for evaluating that in which we should be more confident. And so, I suggest, Dennett is reluctant to accept metaphysical claims because he is skittish about the prospect of taking on board unnoticed implications that might conflict with some sound scientific conclusion, in which case he would, upon discovery of the conflict, have to go back and revisit everything he had thought while under the influence of such claims.

This attitude of Dennett's, then, reflects his commitment to empiricism. This empiricism, however, does not involve any endorsement of a "myth of the given," and so it is not the sort of empiricism that directly conflicts with realism (except locally, when it runs against Dennett's modest verificationism, as in the case of putative distinctions between states of consciousness that are too fine-grained for conscious awareness to track). Dennett's realism sometimes seems to be of the naive variety, as when, in *Consciousness Explained*, he takes the everyday manifold of macroscopic physical objects for granted, while at other times his concerns seem to be those of the scientific realist, as in "Real Patterns." In this volume, Seager tugs in the direction of Dennett's empiricist intuitions, Brook pulls with his naive realist ones, and Lloyd and Ross emphasize his scientific-realist moments. Among all of these countervailing pressures, Den-

nett mainly just tries to hold his boat in place—wherever, exactly, that place is. This, I think, suggests that we are looking in the wrong place if we try to settle the question of Dennett's wide philosophical attitude in the context of sets of metaphysical and/or epistemological propositions he might or might not endorse. There is, as I will discuss below, something like a Dennettian method, but this noun connotes both too much and too little: too much because Dennett's approach is neither original nor easily replicable as a procedure, and too little because his general attitude *does* involve *some* clear—and controversial—epistemological commitments. What Dennett offers the philosopher at the general level, I will now maintain, is best captured by first explicating a concept that has been of tremendous importance over the course of his career: that of a "stance."

When we adopt the physical or the design or the intentional stance towards a system or process, we are not, if we are true to Dennett's usage, simply viewing the system or process as if it were physical or designed or minded. We are doing that, of course, but it is not all we are doing. If it were, this would be straightforward instrumentalism, an epistemology Dennett has struggled to disown. We cannot seriously take the intentional stance toward a rock or an electron because the facts of the matter in these cases will not support our doing so. And we *must* take the design stance toward the agents depicted in history or economics because if we do not we will be missing the *real* patterns we must track if we wish to gain any understanding of what is going on in these domains. When Dennett and Millikan, in this volume, disagree about the circumstances necessary for assuming the design stance, they both take their differences of opinion to depend upon facts. There is-of course-a gradation of cases between the extremes of the "simply physical" and the "irreducibly intentional," instances where either stance could capture an aspect of reality missed by the other. This does not imply that our decision between them is ever independent of what is the case. A stance is a foregrounding of some (real) systematically related aspects of a system or process against a compensating backgrounding of other aspects. It is both possible and useful to pick out these sets of aspects because (as a matter of fact) the boundaries of patterns very frequently do not correspond to the boundaries of the

naive realist's objects. If they always *did* correspond, the design and intentional stances would be worthless, though there would have been no selection pressure to design a community in which this could be thought; and if they never corresponded, the physical stance, which puts essential constraints on reasonable design- and intentional-stance accounts, would be inaccessible. Because physical objects are stable patterns, there is a reliable logical basis for further order, but because many patterns are not coextensive with physical objects (in any but a trivial sense of "physical object"), a sophisticated informavore must be designed to, or designed to learn to, track them. To be a tracker of patterns under more than one aspectualization is to be a taker of stances.

Now then: If we try to be precise in our use of the notion of a stance, so that "stance" is not simply a loose synonym of "perspective" or "attitude," what can we say about patterns in philosophical thought such that it might be appropriate to say that Dennett tries to track them from a distinctive stance? I have so far been approaching this question from one side by focusing on Dennett's theoretical commitments (or refusal of them). Let us now try to corner the quarry by bringing a sortie up the other side and examining Dennett's typical method. He begins by taking in mind a concept intentionality, consciousness, free will, or one of the many logical offspring of these grand memes, for example, qualia—about which intuitions are unsure and on which philosophical energy has been spent. He then draws out of the philosophical traditions sets of properties that philosophers seem to have roughly agreed to be at least jointly necessary for the application of the concept in question. (This, of course, is an ideal moment for Dennett's targets to try to avoid the coming train by looking for ways in which his round-up of the herd has missed what is distinctive about their own view.) The object of inquiry thus identified, the battery of intuition pumps can fire: Dennett presents a series of real cases, and carefully imagined ones, in which . . . but now something completely different happens, to paraphrase Monty Python. A typical philosopher would, at this point, apply one or both of Mill's methods at the level of conceptual inquiry. That is, we would get an analysis according to which the necessary properties are all in place but our intuitions nevertheless

refuse to assign the concept in question, or in which they do assign the concept but at least one of the necessary properties is missing; or we would be provided with instances of both sorts of case. Dennett, of course, often argues in this fashion, but when he is after big game he usually does another, quite distinctive thing: He asks us to imagine paramaterizing values for the putative property. (So it's colored? What shade? So it has discrete instantiations? How many?) The point of this sort of exercise is to lead us to doubt that we had actually imagined *literally* limning the concept in question in terms of the specified properties. (Do you *really* suppose, after all, that you form a mental image of a red thing in which the image is literally red? Surely not. And once you've been shown that your image also has no edges, and no depth, and so on . . . in what sense are you literally postulating an image? Do saltationists really imagine paradigmatic members of one species giving birth to paradigmatic members of another species? If so, they believe something that's simply nutty, even according to their own theoretical lights. If not, their saltationism is just Darwinian selection with the film sped up.)

This way of using thought experiments, when successful, does not just lead us to adjust our conceptual theories by shuffling putatively necessary properties about. It is intended to show us that we have been *utterly* confused about the concept in question, usually, exactly to the extent that we have framed it in an essentialistic way. The approach has famous antecedents, Berkeley's criticism of the concept of matter being an obvious example. In Dennett's case, however, it is the basic critical technique. Sometimes it is mustered in support of a claim to the effect that a concept is hopelessly incoherent; qualia or zombies, for example. More often, it is intended to clear the ground for a fresh start. Seldom, however, does reconstruction proceed by way of direct analysis. In light of what has been said above, this should not be surprising; Dennett's brand of antiessentialism would be inconsistent with efforts at replacing sets of supposedly necessary properties with others. The next move in a typical Dennettian campaign is to ask how the concept could possibly have arisen. This is not an exercise in philology, since most of the concepts that interest Dennett are not pure cultural artifacts; rather, their history encapsulates attempts to make sense of a biologically

designed but culturally interpreted and enhanced set of mechanisms, behaviors, or dispositions, such as language. Since the point of these "how possibly" stories is to dispel mystery, attention shifts from the concept that was the original object of investigation to the natural processes which it is the concept's function to help us understand, explain, and predict. The eliminativist element sometimes associated with Dennett arises from the fact that he seldom explains a concept in terms of other concepts. Rather, he tries to understand the mechanism that gives rise to the phenomena (and I use the plural in earnest) that the original concept was intended to denote, and to which the simplicity of the denotation relation lent a misleading appearance of unity. Dennett is therefore frequently criticized on grounds that his deconstructed concepts are not quite put back together; it is thus a well-known quip, the original authorship of which I have not been able to trace, that "Consciousness Explained should have been called 'Consciousness Explained Away.'" But this sort of complaint simply misunderstands the general project. For Dennett, a concept that represents a partly biological phenomenon can only be in good working order to the extent that it is not thought to denote a neatly unified type, since evolution does not and cannot produce such things. A Dennettian conceptual reconstruction, therefore, could not be thought by its author to have been successful if it were a *perfect* reconstruction.

We may now turn directly to the nature of a possible "Dennettian stance" toward the philosophical project. An aspect of the project, which one might call "the Platonic stance," consists, like Dennett's, in seeking to eliminate half-hidden inconsistencies in our uses of concepts. To the extent that this involves erecting necessary-and-sufficient-condition definitions of concepts that are intended to do extraformal work for us, however, it must appear from the Dennettian stance to be a distorting exaggeration of a sound impulse. It is an equally important task of philosophy to try to resist the sort of rigid thinking that overdigitalization of reality encourages, and to try to invest our thought-implements with a degree of fluidity suitable to natural and cultural spaces in which there are few sharp lines but many gentle gradations around basins of attraction in similarity matrices. Hence Dennett's unease with large-scale philosophical

"-isms"—realism, instrumentalism, empiricism, and so forth—that are massively priorized commitments to build the conceptual grid within the limits of particular recipes. Hence in turn the fact that we cannot associate Dennett with a neat set of epistemological or metaphysical principles, at least outside of localized problem spaces. What we find in Dennett is a combination of an attitude, one that favors the piecemeal construction of a worldview using the box of epistemic kludges that the development of science has opportunistically collected (and that philosophers have, as is their wont, tried to forge into a single self-consistent "scientific method"), and a manner of critical technique and partial reconstruction that I have tried to sketch. Like the intentional and design stances that Dennett has spent three decades describing, this combination of attitude and rough procedure is consistently applicable without being reducible to a set of rules and principles, and emphasizes certain aspects of the philosophical project while shifting others into the background.

Dennett's, then, is certainly not a "system" in the classical sense of the term. However, the Dennettian stance has something important in common with the true philosophical systems: Like them, it can readily be applied to areas of philosophical inquiry that are outside of its original domains of application. Dennett has himself shown the way in his work on free will and in his occasional forays into moral philosophy. In normative domains, there are two leading ways of being rigid. Attempting to devise procedural rules for all possible contexts is one of them, and this theme is explored here in the dialogue between Dennett and Mooney. The other principal obstacle to taking morality seriously, and the more common one in applied contexts, is the same habit of mind that is Dennett's generic target as a philosopher: essentialism about types of people and/or actions. If we ask "Was that really a lie?" or "Is that really rape?" we might simply be expressing, in a compressed way, questions about whether a particular episode falls within a settled part of our normative sphere. However, this mode of rhetorical address can be dangerous, since, again, words do things with us. If we begin thinking that what matters first is whether an action does or does not have some essential properties by virtue of which it counts as an instance of lying or of rape, and that this decision, rather than careful reflection

on the particular details of the episode in its context, is then the appropriate basis for determining a suitable response, we are likely to commit egregious sins of *both* forgiveness and intolerance. When types of people are essentialized, the danger is both greater and more obvious—so obvious, one might suppose, that only a person of dismally unreflective moral sensibilities could fall into the mistake. I am not so confident. In South Africa, where I live, there is a lively debate going on among intellectuals, journalists, and politicians over what constitutes a "real African," and the regularly touted necessary conditions almost invariably appeal to racial or cultural histories. The fact that these answers are not immediately seen as exposing the pernicious foolishness of the question suggests that the virtues of the Dennettian stance in public moral life need reinforcement.

Dennett's own views on normative matters reflect his general philosophical stance. Though he believes that the impulse to make moral judgments has and requires a biological basis, he is opposed to any principle that would elide over Hume's guillotine by supposing that we must "side with our genes." Dennett thus agrees with most philosophers in regarding the content of morality as a cultural product. However, whereas many philosophers feel compelled to block a threatened slide from this conclusion into moral skepticism through construction of complex procedural or metaphysical theories of moral justification, Dennett's reflections indicate serene unconcern with morality's metaphysical status, but some dissatisfaction with the way in which it is thought about and practised in situ. The recent direction of his work suggests that these interests now carry high cerebral fame with him: The last third of Darwin's Dangerous *Idea* is devoted to them, and his present book project revisits the issues of Elbow Room in an expanded theoretical setting. Might we soon have a set of new intuition pumps encouraging us to shed essentialistic habits in moral reflection, in preparation for the reconstruction of a "moral stance"? I have no inside information on where Dennett's current thinking on free will and responsibility is going, but the normative domain seems well suited to being understood by means of the "stance" stance. Morality deeply puzzles philosophers, and attracts much of their attention, for the same basic

reason that the ontology of mind does: because it and its associated concepts do not drop easily into a naturalistic perspective. Dennett's approach to this difficulty where mind is concerned has been to urge the end of attempts at chiseling and torturing the concept until it can be wrenched into place; the mystery is instead to be dissolved indirectly, through showing that evolutionary design considerations are not only compatible with, but can actually explain the basis of, a plurality of stances that carve one world across different sets of joints. Might we best understand morality by first grasping in detail its biological basis, but then backgrounding Mother Nature's interests and viewing the web of—real—relationships between our own interests, obligations, and responsibilities from a "moral stance" that abstracts away from naturally designed functions while still acknowledging their causal potency by treating them as the principal elements of noise in our patterns of moral response and judgment? If Dennett himself has no inclinations in this direction, then it seems to me that some other philosopher who works inside the Dennettian stance might usefully give it a try.

These last reflections on Dennett and moral philosophy lead us to a more incidental, but certainly not unimportant, respect in which Dennett is reminiscent of the systematic philosophers. Like them, he has written something of importance on almost every subject of traditional philosophical attention (the exception being the nature of the *polis*). As noted above, few authors here reach for this broad scope—though Seager and Lloyd come close—and that is likely for the best. What gives these essays their unity is that all, with the possible exceptions of Crowe's and Polger's, work to a large extent from inside the Dennettian stance. This leads them to converge on a number of large themes. By way of illustration, no author here explicitly sets out to write on Dennett's brand of verificationism, yet several end up giving it pride of place from different angles. Thus Kenyon, while mainly concerned to argue that Dennett's theory of intentionality does not depend upon or imply Quinean indeterminacy and would, indeed, be better off traveling without it, finds it necessary to forge connections between Dennett's picture of meaning and those of Wright and Dummett. This is an innovation in the literature, and one that philosophers of semantics should find both

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surprising and worthy of further attention. The link is established by way of reflections on the relationship between realism and verificationism, something visited within different contexts by at least four other authors. In general, where verificationism is mentioned in this volume the tone is sympathetic. This is unusual, to say the least. Is the epistemology that has dared not speak its name for over two decades about to come out of the closet—and in alliance with realism, the very force that drove it underground in the first place?

Grand philosophical themes such as the foregoing are not what one would expect to find in a book about Dennett, and the organizers of the Newfoundland conference were surprised at the amount of attention they received. It did not seem to be anyone's impression that this resulted from a desire by participants to wander off topic. Perhaps we should hypothesize that it is not as easy to discuss philosophical issues in abstinence from classical problems as immersion in the Dennettian stance might have us think.

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