

The Illusionist David Bentley Hart

From Bacteria to Bach and Back:

The Evolution of Minds

By Daniel C. Dennett

W. W. Norton $\sim 2017 \sim 476$ pp.

\$28.95 (cloth)

I t seems to me that we have come this way before. Some of the signposts are new, perhaps— "Bacteria," "Bach," and so on—but the scenery looks very familiar, if now somewhat overgrown, and it is hard not to feel that the path is the same one that Daniel Dennett has been treading for five decades. I suppose it would be foolish to expect anything else. As often as not, it is

the questions we fail to ask—and so the presuppositions we leave intact—that determine the courses our arguments

take; and Dennett has been studiously avoiding the same set of questions for most of his career.

In a sense, the entire logic of *From Bacteria to Bach and Back* (though not, of course, all the repetitious details) could be predicted simply from Dennett's implicit admission on page 364 that no philosopher of mind before Descartes is of any consequence to his thinking. The whole pre-modern tradition of speculation on the matter—Aristotle, Plotinus, the Schoolmen, Ficino, and so on—scarcely qualifies as prologue. And this means that, no matter how many times he sets out, all his journeys can traverse only the same small stretch of intellectual territory. After all, Descartes was remarkable not because, as Dennett claims, his vision was especially "vivid and compelling"—in comparison to the

> subtleties of earlier theories, it was crude, bizarre, and banal—but simply because no one before him had attempted

systematically to situate mental phenomena within a universe otherwise understood as a mindless machine. It was only thus that the "problem" of the mental was born.

The modern scientific novum organum—as Francis Bacon dubbed the new rationality that he hoped would replace classical and medieval sophistries—achieved its first systematic expression in the seventeenth century. With its ambition to perfect a method of pure induction, it proposed to the imagination the idea of a "real" physical world hidden behind the apparent one, an occult realm of pure material causation, utterly devoid of all the properties of mind, most especially intentional purposes. From at least the time of Galileo. a division was introduced between what Wilfrid Sellars called the "manifest image" and the "scientific image"-between, that is, the phenomenal world we experience and that imperceptible order of purely material forces that composes its physical substrate. And, at least at first, the divorce was amicable, inasmuch as phenomenal qualities were still granted a certain legitimacy; they were simply surrendered to the custody of the immaterial soul. But mind was now conceived as an exception within the frame of nature.

In the pre-modern vision of things, the cosmos had been seen as an inherently purposive structure of diverse but integrally inseparable rational relations—for instance, the Aristotelian *aitia*, which are conventionally translated as "causes," but which are nothing like the uniform material "causes" of the mechanistic philosophy. And so the natural order was seen as a reality already akin to intellect. Hence the mind, rather than an anomalous tenant of an alien universe, was instead the most concentrated and luminous expression of nature's deepest essence. This is why it could pass with such wanton liberty through the "veil of Isis" and ever deeper into nature's inner mysteries.

The Cartesian picture, by contrast, was a chimera, an ungainly and extrinsic alliance of antinomies. And reason abhors a dualism. Moreover, the sciences in their modern form aspire to universal explanation, ideally by way of the most comprehensive and parsimonious principles possible. So it was inevitable that what began as an imperfect method for studying concrete particulars would soon metastasize into a metaphysics of the whole of reality. The manifest image was soon demoted to sheer illusion, and the mind that perceived it to an emergent product of the *real* (which is to say, mindless) causal order.

Here, in this phantom space between the phenomenal and physical worlds, is just where the most interesting questions should probably be raised. But Dennett has no use for those. He is content with the stark choice with which the modern picture confronts us: to adopt either a Cartesian dualism or a thoroughgoing mechanistic monism. And this is rather a pity, since in fact both options are equally absurd.

Not that this is very surprising. After five decades, it would be astonishing if Dennett were to change direction now. But, by the same token, his project should over that time have acquired not only more complexity, but greater sophistication.

¹¹⁰ \sim The New Atlantis

And yet it has not. For instance, he still thinks it a solvent critique of Cartesianism to say that interactions between bodies and minds would violate the laws of physics. Apart from involving a particularly doctrinaire view of the causal closure of the physical (the positively Laplacian fantasy that all physical events constitute an inviolable continuum of purely physical causes), this argument clumsily assumes that such an interaction would constitute simply another *mechanical* exchange of energy in addition to material forces.

In the end, Dennett's approach has remained largely fixed. Rather than a sequence of careful logical arguments, his method remains, as ever, essentially fabulous: That is, he constructs a grand speculative narrative, comprising a disturbing number of sheer assertions, and an even more disturbing number of missing transitions between episodes. It is often quite a beguiling tale, but its power of persuasion lies in its sprawling relentlessness rather than its cogency. Then again, to be fair, it is at least consistent in its aims. No less than the ancient Aristotelian model of reality, Dennett's picture is meant to be one in which nature and mind are perfectly congruent with one another, and in which, therefore, the post-Cartesian dilemma need never rear its misshapen head.

Rather, however, than attempt to explain nature in terms of a "mindlike" order of rational relations, as

Aristotelian tradition did, Dennett seeks to do very nearly the opposite: to reduce mind and nature alike to a computational system, which emerges from "uncomprehending competences," as he calls them-small, particulate functions wholly unaware of the larger functions they accomplish in the aggregate-of the sort first fully understood by Alan Turing. And those functions, as retained, combined, and developed by the slow, diffident, mindless designing hand of natural selection, are-like the hugely intricate ensemble of discrete lines of code hiding behind the illusory simplicity of the icons on a computer's screen—the real engines of everything that happens, hiding behind the phenomenal simplicity of perceptible nature.

In Dennett's telling, it is all very obvious: Under certain chemical and environmental conditions, life will emerge in time and develop organisms with large brains, and these organisms will of necessity be social organisms. And social organisms require mental activity to survive and flourish. For Dennett, all evolutionary developments occur because they incorporate useful adaptations. He has no patience for talk of "spandrels"-phenotypic traits that are supposedly not adaptations but byproducts of the evolution of other traits-or of large, inexplicable, fortuitous hypertrophies (such as, say, the sudden acquisition of language) that have no specific evolutionary rationale at all.

Summer/Fall $2017 \sim 111$

So sanguine, in fact, is Dennett in his certainty that adaptive usefulness is sufficient explanation for why things happen that he often fails to consider whether the things that he claims have happened are, strictly speaking, possible. For him it seems evident that in the right circumstances, in time, natural selection will generate and preserve ever more competences without comprehension until, at some point of cumulative complexity, certain ensembles of those competences will become comprehension. Slowly, what we think of as self-awareness and reflective consciousness emerged from, and in fact remains wholly dependent upon, innumerable small, unconscious, discrete forces.

Exactly how all of this happens, of course-how physical causality is wondrously inverted into phenomenal awareness-is never quite clear. But for Dennett, once again, the distinction between the useful and the possible is a hazy one at best. And in a sense it hardly matters, since even the appearance of rational conscious agency, as something in addition to or formally distinguishable from those tiny competences underlying it, is for Dennett only a useful illusion; and, again, since usefulness explains all things-well, I shall return to this below.

In any event, something happened, and then there was language, which (once more) was very, very useful, and therefore naturally emerged, under the pressure of the social need to communicate, out of originally quite meaningless sounds and gestures. And once there were minds using language, culture evolved, and brains began shaping the reality they inhabited far more rapidly than the previous dynamisms of natural selection ever had. Even so, however, the process was more or less the same: an algorithmic distillation and recombination of "uncomprehending competences."

Even the mental and cultural worlds were, it turns out, emergent results of such competences rather than consciously designing or designed realities. They were the product of "memes," fragments of cultural usage that colonized and slowly reconfigured anthropoid brains and societies, and perished or survived according to the mindless logic of natural selection.

And that—though agonizingly protracted over several hundred pages is the tale Dennett tells. Were it not for a half-dozen or so explanatory gaps, some of which are positively abyssal in size, it would no doubt amount to something more than just a ripping yarn. But, as it stands, it is nonsense.

A dmittedly, part of the problem bedeviling Dennett's narrative is the difficulty of making a case that seems so hard to reconcile with quotidian experience. But that difficulty is only exacerbated by his fierce

112 \sim The New Atlantis

Copyright 2017. All rights reserved. See <u>www.TheNewAtlantis.com</u> for more information.

adherence to an early modern style of materialism, according to whose tenets there can be no aspect of nature not reducible to blind physical forces. For him, the mechanistic picture, or its late modern equivalent, is absolute; it is convertible with truth as such, and whatever appears to escape its logic can never be more than a monstrosity of the imagination. But then the conscious mind constitutes a special dilemma, since this modern picture was produced precisely by excluding all mental properties from physical nature. And so, in this case, physicalist reduction means trying to explain one particular phenomenon-uniquely among all the phenomena of nature-by realities that are, in qualitative terms, quite literally its opposite.

Really, in this regard, we have progressed very little since Descartes's day. The classical problems that mental events pose for physicalism remain as numerous and seemingly insoluble as ever. Before all else, there is the enigma of consciousness itself, and of the qualia (direct subjective impressions, such as color or tone) that inhabit it. There is simply no causal narrative-and probably never can be one-capable of uniting the phenomenologically discontinuous regions of "third-person" electrochemical brain events and "first-person" experiences, nor any imaginable science *logically* capable of crossing that absolute qualitative chasm.

Then there is the irreducible unity of apprehension, without which there could be no coherent perception of anything at all, not even disjunctions within experience. As Kant among others realized, this probably poses an insuperable difficulty for materialism. It is a unity that certainly cannot be reduced to some executive material faculty of the brain, as this would itself be a composite reality in need of unification by some still-more-original faculty, and so on forever, and whatever lay at the "end" of that infinite regress would already have to possess an inexplicable prior understanding of the diversity of experience that it organizes. For, even if we accept that the mind merely represents the world to itself under an assortment of convenient fictions, this would involve a translation of sense data into specific perceptions and meanings; and translation requires a competence transcending the difference between the original "text" and its rendition.

This problem, moreover, points toward the far more capacious and crucial one of mental intentionality as such—the mind's pure directedness (such that its thoughts are *about* things), its interpretation of sense experience under determinate aspects and meanings, its movement toward particular ends, its power to act according to rationales that would appear nowhere within any inventory of antecedent physical causes. All of these indicate an irreducibly teleological structure to thought incongruous with a closed physical order supposedly devoid of purposive causality.

Similarly, there is the problem of the semantic and syntactic structure of rational thought, whose logically determined sequences seem impossible to reconcile with any supposed sufficiency of the continuous stream of physical causes occurring in the brain. And then there is the issue of abstraction, and its necessary priority over sense experience-the way, for instance, that primordial and irreducible concepts of causality and of discrete forms are required for any understanding of the world of events around us, or the way some concept of resemblance must already be in place before one is able to note likenesses and unlikenesses between things, or even the way in which the bare concepts of Euclidean geometry permit us to recognize their imperfect analogues in nature. And then, also, there are those more than abstract-in fact, transcendentalorientations of the mind, such as goodness or truth or beauty in the abstract, which appear to underlie every employment of thought and will, and yet which correspond to no concrete objects within nature. And so on and so forth.

Traditionally, most philosophical approaches to these issues have merely restated the problems without any real advance in clarity (theories of supervenience, for example), or tried awkwardly to evade them altogether (neutral monism, mysterianism). Sometimes a certain fatigue with the inconclusiveness of simple reductionism has prompted vogues in more exotic naturalisms (say, materialist panpsychism or quantum theories of consciousness), but these simply defer the question to an atomic or subatomic level without in any way diminishing the enigma. In a sense, perhaps, Dennett should be commended for his fidelity to the purer reductionisms of early modernity. In its austere emergentism, his position is very near to eliminativism: Whatever cannot be reduced to the most basic physical explanations cannot really exist.

But, alas, his story does not hold together. Some of the problems posed by mental phenomena Dennett simply dismisses without adequate reason; others he ignores. Most, however, he attempts to prove are mere "userillusions" generated by evolutionary history, even though this sometimes involves claims so preposterous as to verge on the deranged.

In every case, most of his argument consists in a small set of simple logical errors. The most conspicuous is one I think of as the "pleonastic fallacy": the attempt to explain away an absolute qualitative difference—such as that between third-person physical events and first-person consciousness—by positing an indefinite number of minute quantitative steps, genetic or structural, supposedly sufficient to

114 ~ The New Atlantis

Copyright 2017. All rights reserved. See <u>www.TheNewAtlantis.com</u> for more information.

span the interval. Somewhere in the depths of phylogenic history something happened, and somewhere in the depths of our neurological machinery something happens, and both those somethings have accomplished within us an inversion of brute, mindless, physical causality into, at the very least, the *appearance* of unified intentional consciousness.

Then also there is Dennett's tendency to confuse questions about natural capacities for questions about their contents, as when he repeatedly mistakes the issue of intrinsic, subjective, qualitative consciousness for the issue of the extrinsic, objective verifiability of the objects of consciousness; or as when he fails to distinguish between the mystery of rational thought as such and the simple etiological question of how sophisticated practices of reasoning might have evolved. And then there is what one might call his "Narcissan fallacy": to wit, the tendency to mistake the reflection of human intentional agency in mindless objects, such as computers, for something analogous to a separate instance of mental agency. And then, also, there is his frequent failure to discern the difference between the literal and the metaphorical....But I am getting ahead of myself.

Dennett is an orthodox neo-Darwinian, in the most gradualist of the sects. Everything in nature must for him be the result of a vast sequence of tiny steps. This is a fair enough position, but the burden of any narrative of emergence framed in those terms is that the stochastic logic of the tale must be guarded with untiring vigilance against any intrusion by "higher causes." But, where consciousness is concerned, this may very well be an impossible task.

The heart of Dennett's project, as I have said, is the idea of "uncomprehending competences," molded by natural selection into the intricate machinery of mental existence. As a model of the mind, however, the largest difficulty this poses is that of producing a credible catalogue of competences that are not dependent for their existence upon the very mental functions they supposedly compose.

Certainly Dennett fails spectacularly in his treatment of the evolution of human language. As a confirmed gradualist in all things, he takes violent exception to any notion of an irreducible, innate, universal grammar, like that proposed by Noam Chomsky, Robert Berwick, Richard Lewontin, and others. He objects even when those theories reduce the vital evolutionary saltation between pre-linguistic and linguistic abilities to a single mutation, like the sudden appearance in evolutionary history of the elementary computational function called "Merge," which supposedly all at once allowed for the syntactic combination of two distinct elements, such as a noun and a verb.

Fair enough. From Dennett's perspective, after all, it would be hard to reconcile this universal grammar-an ability that necessarily began as an internal faculty of thought, dependent upon fully formed and discrete mental concepts, and only thereafter expressed itself in vocal signs-with a truly naturalist picture of reality. So, for Dennett, language must have arisen out of social practices of communication, rooted in basic animal gestures and sounds in an initially accidental association with features of the environment. Only afterward could these elements have become words, spreading and combining and developing into complex structures of reference. There must then, he assumes, have been "protolanguages" that have since died away, liminal systems of communication filling up the interval between animal vocalizations and human semiotic and syntactic capacities.

Unfortunately, this simply cannot be. There is no trace in nature even of primitive languages, let alone proto-languages; all languages possess a full hierarchy of grammatical constraints and powers. And this is not merely an argument from absence, like the missing fossils of all those dragons or unicorns that *must* have once existed. It is logically impossible even to reverse-engineer anything that would qualify as a proto-language. Every attempt to do so will turn out secretly to rely on the syntactic and semiotic functions of fully developed human language. But Dennett is quite right about how immense an evolutionary saltation the sudden emergence of language would really be. Even the simple algorithm of Merge involves, for instance, a crucial disjunction between what linguists call "structural proximity" and "linear proximity"-between, that is, a hypotactic or grammatical connection between parts of a sentence, regardless of their spatial and temporal proximity to one another, and the simple sequential ordering of signifiers in that sentence. Without such a disjunction, nothing resembling linguistic practice is possible; yet that disjunction can itself exist nowhere except *in* language.

Dennett, however, writes as if language were simply the cumulative product of countless physical ingredients. It begins, he suggests, in mere phonology. The repeated sound of a given word somehow embeds itself in the brain and creates an "anchor" that functions as a "collection point" for syntactic and semantic meanings to "develop around the sound." But what could this mean? Are semiotic functions something like iron filings and phonemes something like magnets? What is the physical basis for these marvelous congelations in the brain? The only possible organizing principle for such meanings would be that very innate grammar that Dennett denies exists-and this would seem to require distinctly mental concepts. Not that Dennett appears to think

¹¹⁶ \sim The New Atlantis

the difference between phonemes and concepts an especially significant one. He does not hesitate, for instance, to describe the "synanthropic" aptitudes that certain organisms (such as bedbugs and mice) acquire in adapting themselves to human beings as "semantic information" that can be "mindlessly gleaned" from the "cycle of generations."

But there is no such thing as mindless semantics. True, it is imaginable that the accidental development of arbitrary pre-linguistic associations between, say, certain behaviors and certain aspects of a physical environment might be preserved by natural selection, and become beneficial adaptations. But all semantic information consists in the interpretation of signs, and of conventions of meaning in which signs and references are formally separable from one another, and semiotic relations are susceptible of combination with other contexts of meaning. Signs are intentional realities, dependent upon concepts, all the way down. And between mere accidental associations and intentional signs there is a discontinuity that no gradualist-no pleonastic-narrative can span.

Similarly, when Dennett claims that words are "memes" that reproduce like a "virus," he is speaking pure gibberish. Words reproduce, within minds and between persons, by being intentionally adopted and employed.

Here, as it happens, lurks the most incorrigibly problematic aspect of

Dennett's project. The very concept of memes-Richard Dawkins's irredeemably vague notion of cultural units of meaning or practice that invade brains and then, rather like genetic materials, thrive or perish through natural selection—is at once so vapid and yet so fantastic that it is scarcely tolerable as a metaphor. But a depressingly substantial part of Dennett's argument requires not only that memes be accorded the status of real objects, but that they also be regarded as concrete causal forces in the neurology of the brain, whose power of ceaseless combination creates most of the mind's higher functions. And this is almost poignantly absurd.

Perhaps it is possible to think of intentional consciousness as having arisen from an improbable combination of purely physical ingredientseven if, as yet, the story of that seemingly miraculous metabolism of mechanism into meaning cannot be imagined. But it seems altogether bizarre to think of intentionality as the product of forces that would themselves be, if they existed at all, nothing but acts of intentionality. What could memes be other than mental conventions, meanings subsisting in semiotic practices? As such, their intricate interweaving would not be the source, but rather the product, of the mental faculties they inhabit; they could possess only such complexity as the already present intentional powers of the mind could

Summer/Fall $2017 \sim 117$

impose upon them. And it is a fairly inflexible law of logic that no reality can be the emergent result of its own contingent effects.

This is why, also, it is difficult to make much sense of Dennett's claim that the brain is "a kind of computer," and mind merely a kind of "interface" between that computer and its "user." The idea that the mind is software is a fairly popular delusion at the moment, but that hardly excuses a putatively serious philosopher for perpetuating it-though admittedly Dennett does so in a distinctive way. Usually, when confronted by the computational model of mind, it is enough to point out that what minds do is precisely everything that computers do not do, and therein lies much of a computer's usefulness.

Really, it would be no less apt to describe the mind as a kind of abacus. In the physical functions of a computer, there is neither a semantics nor a syntax of meaning. There is nothing resembling thought at all. There is no intentionality, or anything remotely analogous to intentionality or even to the illusion of intentionality. There is a binary system of notation that subserves a considerable number of intrinsically mindless functions. And, when computers are in operation, they are guided by the mental intentions of their programmers and users, and they provide an instrumentality by which one intending mind can transcribe meanings into traces, and another can translate

those traces into meaning again. But the same is true of books when they are "in operation." And this is why I spoke above of a "Narcissan fallacy": computers are such wonderfully complicated and versatile abacuses that our own intentional activity, when reflected in their functions, seems at times to take on the haunting appearance of another autonomous rational intellect, just there on the other side of the screen. It is a bewitching illusion, but an illusion all the same. And this would usually suffice as an objection to any given computational model of mind.

But, curiously enough, in Dennett's case it does not, because to a very large degree he would freely grant that computers only *appear* to be conscious agents. The perversity of his argument, notoriously, is that he believes the same to be true of us.

For Dennett, the scientific image is the only one that corresponds to reality. The manifest image, by contrast, is a collection of useful illusions, shaped by evolution to provide the interface between our brains and the world, and thus allow us to interact with our environments. The phenomenal qualities that compose our experience, the meanings and intentions that fill our thoughts, the whole world of perception and interpretation-these are merely how the machinery of our nervous systems and brains represent reality to us, for purely practical reasons.

¹¹⁸ \sim The New Atlantis

Just as the easily manipulated icons on a computer's screen conceal the innumerable "uncomprehending competences" by which programs run, even while enabling us to use those programs, so the virtual distillates of reality that constitute phenomenal experience permit us to master an unseen world of countless qualityless and purposeless physical forces.

Very well. In a sense, Dennett's is simply the standard modern account of how the mind relates to the physical order. The extravagant assertion that he adds to this account, however, is that consciousness itself, understood as a real dimension of wholly first-person phenomenal experience and intentional meaning, is itself only another "user-illusion." That vast abyss between objective physical events and subjective qualitative experience that I mentioned above does not exist. Hence, that seemingly magical transition from the one to the other-whether a genetic or a structural shift-need not be explained, because it has never actually occurred.

The entire notion of consciousness as an illusion is, of course, rather silly. Dennett has been making the argument for most of his career, and it is just abrasively counterintuitive enough to create the strong suspicion in many that it must be more philosophically cogent than it seems, because surely no one would say such a thing if there were not some subtle and penetrating truth hidden behind its apparent absurdity. But there is none. The simple truth of the matter is that Dennett is a fanatic: He believes so fiercely in the unique authority and absolutely comprehensive competency of the third-person scientific perspective that he is willing to deny not only the analytic authority, but also the actual existence, of the first-person vantage. At the very least, though, he is an intellectually consistent fanatic, inasmuch as he correctly grasps (as many other physical reductionists do not) that consciousness really is irreconcilable with a coherent metaphysical naturalism. Since, however, the position he champions is inherently ridiculous, the only way that he can argue on its behalf is by relentlessly, and in as many ways as possible, changing the subject whenever the obvious objections are raised.

For what it is worth, Dennett often exhibits considerable ingenuity in his evasions-so much ingenuity, in fact, that he sometimes seems to have succeeded in baffling even himself. For instance, at one point in this book he takes up the question of "zombies"-the possibility of apparently perfectly functioning human beings who nevertheless possess no interior affective world at all-but in doing so seems to have entirely forgotten what the whole question of consciousness actually is. He rejects the very notion that we "have 'privileged access' to the causes and sources of our introspective convictions," as

Summer/Fall $2017 \sim 119$

though knowledge of the *causes* of consciousness were somehow germane to the issue of knowledge of the *experience* of consciousness. And if you believe that you *know* you are not a zombie "unwittingly" imagining that you have "real consciousness with real qualia," Dennett's reply is a curt "No, you don't"—because, you see, "The only support for that conviction is the vehemence of the conviction itself."

It is hard to know how to answer this argument without mockery. It is quite amazing how thoroughly Dennett seems to have lost the thread here. For one thing, a zombie could not unwittingly *imagine* anything, since he would possess no consciousness at all, let alone reflective consciousness; that is the whole point of the imaginative exercise. Insofar as you are convinced of anything at all, whether vehemently or tepidly, you do in fact know with absolute certitude that you yourself are not a zombie. Nor does it matter whether you know where your convictions come from; it is the very state of having convictions as such that apprises you of your intrinsic intentionality and your irreducibly private conscious experience.

Simply enough, you cannot suffer the illusion that you are conscious because illusions are possible only for conscious minds. This is so incandescently obvious that it is almost embarrassing to have to state it. But this confusion is entirely typical of Dennett's position. In this book, as he has done repeatedly in previous texts, he mistakes the question of the *existence* of subjective experience for the entirely irrelevant question of the objective *accuracy* of subjective perceptions, and whether we need to appeal to third-person observers to confirm our impressions. But, of course, all that matters for this discussion is that we have impressions at all.

Moreover, and perhaps most bizarrely, Dennett thinks that consciousness can be dismissed as an illusion-the fiction of an inner theater, residing in ourselves and in those around us-on the grounds that behind the appearance of conscious states there are an incalculable number of "uncomprehending competences" at work in both the unseen machinery of our brains and the larger social contexts of others' brains. In other words, because there are many unknown physical concomitants to conscious states, those states do not exist. But, of course, this is the very problem at issue: that the limpid immediacy and incommunicable privacy of consciousness is utterly unlike the composite, objective, material sequences of physical causality in the brain, and seems impossible to explain in terms of that causality-and yet exists nonetheless, and exists more surely than any presumed world "out there."

That, as it happens, may be the chief question Dennett neglects to

120 \sim The New Atlantis

Copyright 2017. All rights reserved. See <u>www.TheNewAtlantis.com</u> for more information.

ask: Why presume that the scientific image is true while the manifest image is an illusion when, after all, the scientific image is a supposition of reason dependent upon decisions regarding methods of inquiry, whereas the manifest image-the world as it exists in the conscious mind—presents itself directly to us as an indubitable, inescapable, and eminently coherent reality in every single moment of our lives? How could one possibly determine here what should qualify as reality as such? Dennett certainly provides small reason why anyone else should adopt the prejudices he cherishes. The point of From Bacteria to Bach and Back is to show that minds are only emergent properties of our brains, and brains only aggregates of mindless elements and forces. But it shows nothing of the sort.

The journey the book promises to describe turns out to be the real illusion: Rather than a continuous causal narrative, seamlessly and cumulatively progressing from the most primitive material causes up to the most complex mental results, it turns out to be a hopelessly recursive narrative, a long, languid lemniscate of a tale, twisting back and forth between low and high-between the supposed basic ingredients underlying the mind's evolution and the fully realized mental phenomena upon which those ingredients turn out to be wholly dependent. It is nearly enough to make one suspect that Dennett must have the whole thing backward.

Perhaps the scientific and manifest images are both accurate. Then again, perhaps only the manifest image is. Perhaps the mind inhabits a real Platonic order of being, where ideal forms express themselves in phenomenal reflections, while the scientific image—a mechanistic regime devoid of purpose and composed of purely particulate causes, stirred only by blind, random impulses—is a fantasy, a pale abstraction decocted from the material residues of an immeasurably richer reality. Certainly, if Dennett's book encourages one to adopt any position at all, reason dictates that it be something like the exact reverse of the one he defends. The attempt to reduce the phenomena of mental existence to a purely physical history has been attempted before, and has so far always failed. But, after so many years of unremitting labor, and so many enormous books making wildly implausible claims, Dennett can at least be praised for having failed on an altogether majestic scale.

David Bentley Hart is a fellow at the Notre Dame Institute for Advanced Study. He is the author, most recently, of The Hidden and the Manifest: Essays in Theology and Metaphysics (Eerdmans, 2017) and The New Testament: A Translation (Yale, 2017). He is also a contributing editor of First Things.

Summer/Fall $2017 \sim 121$