The Argument from Language and the Existence of God*

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I

We want to put forward for consideration and assessment some potential evidence for the God of Western theism. Our evidence is a special case of the teleological argument, but we believe that the particular sort of structure, order, and purpose we focus on has an as yet unrecognized value to natural theologians. Some philosophers of religion have recently focused attention on unique mental features of human beings—consciousness and moral reasoning come immediately to mind.[1] As difficult as it is to account for these cognitive processes from a completely naturalistic perspective, human language ability may present an even more challenging case for the secular naturalist.

Consider the following summary of our current understanding of human language:

> All human societies have language. As far as we know they always did; language was not invented by some groups and spread to others like agriculture or the alphabet. . . . The grammars of industrial societies are no more complex than the grammars of hunter-gatherers. . . . Within societies, individual humans are proficient language users regardless of intelligence, social status, or level of education. Children are fluent speakers of complex grammatical sentences by the age of three, without benefit of formal instruction. They are capable of inventing languages that are more systematic than those they hear, showing

* It is commonplace to acknowledge the contributions of anonymous reviewers in academic publications. We are anxious to express our heartfelt gratitude to two anonymous reviewers whose comments were of extreme help in revising this article. We only wish that we could do so in person.

[1] Richard Swinburne makes the case for the evidential value of human cognitive characteristics as forcefully as any in *The Existence of God* (New York: Oxford University Press, 1979), pp. 152–79.

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resemblances to languages that they have never heard, and obey grammatical principles for which there is no evidence in their environments.[2]

Stephen Pinker and Paul Bloom draw the obvious conclusion. "The ability to use a natural language belongs more to the study of human biology than human culture; it is a topic like echolocation in bats or steropsis in monkeys, not like writing or the wheel."[3] Some theists, of course, will be appalled that human evolutionary biology would enter a theological discussion with any hint of credibility. We suggest, however, that sophisticated theists should embrace natural selection and turn results in physics, biology, and cognitive science to their own advantage.[4] What is the best explanation of these facts about human language? There is wide consensus that there is something innate and almost certainly biological, but a totally secular evolutionary account is maddeningly difficult to produce. Theists, however, can easily hypothesize that both a uniquely human ability to acquire and use a natural language as well as mental syntax that structures human thought in a quasi-linguistic manner (a language of thought) are the products of an infinitely wise and beneficent creator.[5]

II

We see the relationship between evidence and the theory that is offered to defend it as an explanatory one—good evidence is best explained by the preferred theory. Richard Swinburne is perhaps the most noteworthy advocate of this approach to theological evidence: "Scientists, historians, and detectives observe data and proceed thence to some theory that best explains the occurrence of these data. We can analyse the criteria which they use in reaching a conclusion that a certain theory is better supported by the data than a different theory—that is, is more likely, on the basis of those data, to be true."[6] He then proceeds to marshal an elaborate case for the existence of God.

Using those same criteria, we find that that there is a God explains *everything* we observe, not just a narrow range of data. It explains the fact that there is a universe at all, that scientific laws operate within it, that it contains conscious

[2] Stephen Pinker and Paul Bloom, "Natural Language and Natural Selection," in *The Adapted Mind*, ed. Jerome H. Barkow, Lida Cosmides, and John Toby (New York: Oxford University Press, 1992), p. 451.

[3] Ibid.

[4] See Jeffery L. Johnson, "Inference to the Best Explanation and the New Teleological Argument," *Southern Journal of Philosophy* 31, no. 2 (1993): 193–203.

[5] J. A. Fodor, *The Language of Thought* (New York: Crowell, 1975).

[6] Richard Swinburne, *Is There a God?* (New York: Oxford University Press, 1996), p. 2.

animals and humans with very complex intricately organized bodies, that we have abundant opportunities for developing ourselves and the world, as well as the more particular data that humans report miracles and have religious experiences. In so far as scientific causes and laws explain some of these things (and in part they do), these very causes and laws need explaining, and God's action explains them. The very same criteria which scientists use to reach their own theories lead us to move beyond those theories to a creator God who sustains everything in existence.[7]

What we are calling the argument from language focuses on a very intriguing "narrow range of data" from linguistics, psycholinguistics, and cognitive science. The argument has the following schematic structure:

1. All human societies have language.
2. They always have.
3. Language was not invented and did not spread.
4. Contemporary grammars are no more complex than those of hunter-gatherers.
5. Humans are proficient language users regardless of intelligence, social status, or level of education.
6. Children are fluent speakers of complex grammatical sentences by the age of three, without benefit of formal instruction.
7. Children are capable of inventing languages that are more systematic than those they hear, showing resemblances to languages that they have never heard and obeying grammatical principles for which there is no evidence in their environments.
8. Therefore, God exists and endowed humans with an innate ability to acquire and use language.

As the moniker suggests, "inference to the best explanation" is an inherently comparative device. We can only feel any degree of confidence that the original theory best explains these data after we have compared its explanatory virtues and vices to other plausible accounts. Within natural theology there are many viable rival explanations that are worthy of scholarly consideration—specific nontheistic religions, religious pluralism, so-called thin theism, and the like. In the present discussion, however, we will limit our examination to the predominant view in the human and natural sciences. For secular naturalism, the physical, natural world is all there is to reality. Any adequate accounts of the natural world must be articulated in these terms alone. Natural

[7] Ibid.

science offers the most promising methodological perspective. We want briefly to survey two prominent accounts of human language acquisition and skill within the secular naturalistic tradition.

III

Since before the time of Charles Darwin, the obvious rival explanation of order, structure, and purpose in the natural world has been an appeal to mechanistic processes that are simply a part of the normal physical order. With the advent of natural selection, however, secular naturalists were given a powerful device for explaining a huge range of biological order, structure, and purpose. "Darwinism encompasses all of life—human, animal, plant, bacterial. . . . It provides the only satisfying explanation of why we all exist, why we are the way that we are. It is the bedrock on which rest all of the disciplines known as the humanities. . . . Darwinian evolution as one reviewer has observed 'is the most portentous natural truth that science has yet discovered.'"[8] An evolutionary account of language has always been the preferred, but unstated, mechanism for secular psychologists and linguists. With the advent of contemporary cognitive science, psycholinguistics, and evolutionary psychology, however, the theory finds clear and eloquent expression: "Human language, like other specialized biological systems, evolved by natural selection. [This] conclusion is based on two facts. . . . Language shows signs of complex design for the communication of prepositional structures, and the only explanation for the origin of organs with complex design is the process of natural selection."[9]

A Darwinian account of language has the potential to short-circuit the argument from language in the same way that natural selection hastened the demise of the classical teleological argument and the theists' divine design accounts of the eye. It was not so much that the Darwinian story was incompatible with the existence of God but that the evolutionary hypothesis made God in many ways redundant to the account of structure, order, and purpose so manifest in the casual inspection of the vertebrate eye. Much of the contemporary literature uncritically buys into this dismissive assessment of the explanatory value of the theological hypothesis. Notice the irony in Elizabeth Bates's mention of the theistic account of language: "If the basic structural principles of language cannot be learned (bottom up) or derived

[8] Richard Dawkins, *The Blind Watchmaker* (New York: Norton, 1996), p. x.
[9] Pinker and Bloom, p. 486.

(top down), there are only two possible explanations for their existence: either Universal Grammar was endowed to us directly by the Creator, or else our species has undergone a mutation of unprecedented magnitude, a cognitive equivalent of the Big Bang."[10]

We believe that theists would be forced to abandon the argument from language and seek their evidence for the existence of God in other venues except for one striking fact. There remain, as the above quote hints, profound problems for a completely naturalistic account of the evolution of language.

IV

We want to sketch very briefly three unresolved problems for the Darwinian account of language acquisition and competence. All of them are offshoots of a more general issue—every account offered for the adaptive mechanisms for the evolution of a "language instinct" has a bit of the "just so" structure. As strident of a defender of the evolution of language as Pinker concedes, "We know few details about how the language instinct evolved."[11] Our lack of knowledge about the details, indeed even the broad outlines, of the adaptive story on language forces us either to speculate beyond credible empirical and theoretical support or simply to proclaim a faith that where there is complexity and purpose, there will be natural selection at work.

Consider, for example, Pinker's acknowledgment of, but immediate response to, a serious explanatory hurdle for an evolutionary account of language: "First, if language involves, for its true expression, another individual, who did the first language mutant talk to? One answer might be: the fifty percent of the brothers and sisters and sons and daughters who shared the new gene by common inheritance. But a more general answer is that the neighbors could have partly understood what the mutant was saying even if they lacked the newfangled circuitry, just using overall intelligence."[12] This seems problematic, however, for many reasons. First, if general intelligence is enough to allow for successful communication, the strong adaptive value of a universal grammar and its incredibly rapid rise in our species are brought, at least implicitly, into question. Second, the hypothesis seems to play

[10] Elizabeth Bates, D. Thal, and J. S. Janowsky, "Symbols and Syntax: A Darwinian Approach to Syntax," in *Biological and Behavioral Determinants of Language Development,* ed. N. A. Krasnegor, D. M. Rumbaugh, R. L. Schiefbush, and M. Suddert-Kennedy (Hillsdale, N.J.: Erlbaum, 1991), quoted in Steven Pinker, *The Language Instinct* (New York: Harper, 1995), p. 342.

[11] Pinker, p. 333.

[12] Ibid., p. 336.

directly into the hands of skeptics of the adaptive account like Noam Chomsky and Stephen Jay Gould who see language as a nonadaptive trait that piggybacked on other cognitive features like general intelligence (a hypothesis to be addressed directly). But finally, according to one of the most intriguing implications of the innateness hypothesis, it is not only spoken grammar that is biologically hardwired, but a deeper "language of thought" that is part and parcel of the basic human intelligence on which this account depends.

Equally vexing is the adaptive value of intermediate stages of a universal grammar. "What protoform can we possibly envision that could have possibly given birth to constraints on the extraction of noun phrases from an embedded clause? What could it conceivably mean for an organism to possess half a symbol, or three quarters of a rule? . . . Monadic symbols, absolute rules and modular systems must be acquired as a whole, on a yes-or-no basis—a process that cries out for a Creationist explanation."[13] Pinker continually expresses frustration with this strategy on the part of critics, asking rhetorically, "What could it mean to have half a head or three quarters of an elbow?"[14] But the worry is that a universal grammar seems digital; intermediary forms would be of little (no?) adaptive value. Other linguists demur but are forced to rely on very speculative accounts of the value of protolanguage to ancestor species.

As a final example, consider this challenge from David Premack, which is quoted in its entirety in Pinker's fair and measured rebuttal:

> I challenge the reader to reconstruct the scenario that would confer selective fitness on recursiveness. Language evolved, it is conjectured, at a time when humans or protohumans were hunting mastodons. . . . Would it be of great advantage for one of our ancestors squatting alongside the embers to be able to remark: "Beware of the short beast whose front hoof Bob cracked when, having forgotten his own spear back at camp, he got in a glancing blow with the dull spear he borrowed from Jack"?
>
> Human language is an embarrassment for evolutionary theory because it is vastly more powerful than one can account for in terms of selective fitness. A semantic language with simple mapping rules, of a kind one might suppose a chimpanzee would have, appears to confer all the advantages one normally associates with discussions of mastodon hunting or the like. For discussions of that kind, semantic classes, structure-dependent rules, recursion and the rest, are overly powerful devices, absurdly so.[15]

None of these objections, of course, are incompatible with, or even

[13] Bates, p. 366.
[14] Pinker, p. 366.
[15] David Premack, "Gavagi!" *Cognition* 19, no. 3 (1985): 207–69, quoted in Pinker, pp. 366–67.

provide strong evidence against, a complete and thoroughly evolutionary account of human language. What they do show, however, is that there remain huge gaps in our knowledge and that rival accounts still deserve to be taken seriously. We now turn our attention to two of these rivals.

v

One might be tempted to argue that human noses were well designed, by a divine watchmaker, or the blind watchmaker of natural selection, to support eyeglasses. The thumping sound of the human heart is nicely engineered to provide quick and easy diagnostic access for the local family practitioner. Perhaps language is one of these nondesigned, happy by-products or, to use the term of art, a "spandrel."[16]

> Yes, the brain got bigger by natural selection. But as a result of this size, and the neural density and connectivity thus imparted, human brains could perform an immense range of functions quite unrelated to the original reasons for the increase in bulk. The brain did not get big so we could read or write or do arithmetic or chart the seasons—yet human culture, as we know it, depends upon skills of this kind. . . . The universals of language are so different from anything else in nature, and so quirky in their structure, that origin as a side consequence of the brain's enhanced capacity, rather than a simple advance in continuity from ancestral grunts and gestures, seems indicated. (This argument about language is by no means original with me, though I ally myself fully with it; this line of reasoning follows directly as the evolutionary reading for Noam Chomsky's theory of universal grammar.)[17]

Many have commented on how surprising it is that two of the late twentieth-century's preeminent scholars, Chomsky and Gould, would so vociferously challenge the adaptationists' account of language and universal grammar. Given the seriousness of the explanatory hurdles that the hypothesis faces, however, perhaps it is wise to fall back on features of our species' ancestral heritage, like bigger and more complex brains, that can easily be accounted for in terms of obvious adaptive value. Few cognitive scientists who really understand evolutionary biology, though, have been willing to endorse the spandrel strategy because of an obvious and striking fact about human language. The shape of noses for eyeglasses or the sound emitted from a muscle

[16] See Steven J. Gould and R. C. Lewontin, "The Spandrels of San Marco and the Panglossian Program: A Critique of the Adapationist Programme," *Proceedings of the Royal Society of London* 205, no. 1161 (1979): 581–98.

[17] Steven J. Gould, "Tires to Sandals," *Natural History* (April 1989), pp. 8–15, quoted in Daniel C. Dennett, *Darwin's Dangerous Idea* (New York: Simon & Schuster, 1995), p. 390.

pumping blood, though very useful, are relatively simple structures. Noses would be expected to have some shape and some location, and most pumps make noise. It is not really that surprising that inventive human minds could take advantage of these features of human bodies, which surely have complicated evolutionary histories, and put them to good use in ways having nothing to do with that for which nature was selecting. Language, however, is incredibly complicated. Gould called it "quirky," but we have been stressing its structure and order. Is it really plausible to suppose that all this structure is just a happy accident? "[Language] is composed of many parts: syntax, with its discrete combinatorial system building phrase structures; morphology, a second combinatorial system building words; a capacious lexicon; a revamped vocal tract; phonological rules and structures; speech perception; parsing algorithms; learning algorithms. Those parts are physically realized as intricately realized structured neural circuits, laid down by a cascade of precisely timed genetic events."[18]

How in the world could the very specific structure, order, and functionality of these remarkable neural circuits be "side consequences?" Despite the authority of Chomsky and Gould, we find ourselves in complete agreement with Pinker that the serious explanatory candidates narrow to two and that the explanatory virtues of the spandrel hypothesis lag far behind: "Natural selection is not just a scientifically respectable alternative to divine creation. It is the *only* alternative that can explain the evolution of a complex organ. . . . The reason that the choice is so stark—God or natural selection—is that [such elaborate and functional structures] . . . are extremely low-probability arrangements of matter. By an unimaginably large margin, most objects thrown together out of generic stuff, even generic animal stuff, cannot [be functional]."[19] Pinker, of course, is mostly ironic in considering the theistic account of language or any other human cognitive characteristic. There is no discredit in this; his contribution is to cognitive science and linguistics, not natural theology. But in the larger context of a humanistic understanding of basic human nature, the theistic account of human language ability proves surprisingly strong.

VI

The invocation of the actions of God in a natural scientific context is just plain bad science, but even in a more humanistic context, it is apt

[18] Pinker, p. 362.
[19] Ibid., p. 366.

to be seen as ad hoc and a closet confession of ignorance. Whether it proves to be the best explanation or not, we insist that the theistic account of human language ability is much more than a "God of the gaps" confession of scientific ignorance. To pursue this line of argumentation, however, is to run right up against one of the most profound problems in theistic academic theology. William Alston states the dilemma beautifully: "Thoughtful theists have long felt a tension between the radical 'otherness' of God and the fact that we speak of God in terms drawn from out talk of creatures. If God is radically other than creatures, how can we properly think and speak of Him as acting, loving, knowing, and purposing? Wouldn't that imply that God shares features with creatures and hence is not 'wholly other'?"[20] To Alston's list of divine behavior we would add, indeed highlight, communicating. We plead guilty, therefore, to a certain amount of anthropomorphizing in the argument to follow. We understand the God of theism to be a personal God, and this implies to us a certain essential similarity with human persons. We do not claim anything like a complete analysis of divine thought, nor the medium of divine communication. But to relegate the whole issue of communication between ourselves and a creator to the realm of the "wholly other" is a step we are quite unwilling to take.

Consider the following characterization of the nature of God from Swinburne: "How is the claim that there is a God to be understood? I suggest—provisionally—in this way: there exists necessarily and eternally a person essentially bodiless, omnipresent, creator and sustainer of any universe there may be, perfectly free, omnipotent, omniscient, perfectly good, and a source of moral obligation."[21] How are we to understand concepts like being a creator, acting freely, or having moral virtue? Swinburne has always insisted that the God of theism must be interpreted as a personal God.[22] What is it, then, to be a person? Here we turn to one of the most thoroughly secular and outspoken defenders of natural selection, Daniel Dennett.

> Consider six familiar themes, each a claim to identify a necessary condition of personhood . . . The *first* and most obvious theme is that persons are *rational beings*. . . . The *second* theme is that persons are beings to which states of consciousness are attributed. . . . The *third* theme is that whether something

[20] William P. Alston, "Functionalism and Theological Language," *American Philosophical Quarterly* 22, no. 3 (1985): 221–30, reprinted in *The Concept of God,* Thomas V. Morris (New York: Oxford University Press, 1987), p. 21.

[21] Richard Swinburne, *The Christian God* (New York: Oxford University Press, 1994), p. 125.

[22] Ibid; see also Richard Swinburne, *The Coherence of Theism* (New York: Oxford University Press, 1994), *The Existence of God,* and *Is There a God?*

counts as a person depends in some way on an *attitude* taken toward it. . . . The *fourth* theme is that the object toward which this personal stance is taken must be capable of *reciprocating* in some way. . . . The *fifth* theme is that persons must be capable of *verbal communication*. . . . The *sixth* theme is that persons are distinguishable from other entities by being *conscious* in some special way: . . . this is identified as *self*-consciousness of one sort or another.[23]

Dennett's fifth theme, of course—the capability of verbal communication—suits our purposes perfectly, but we are inclined to push even harder. Most of Dennett's themes, we suspect, are in part linguistic—the cognitive characteristics are largely inconceivable in entities not possessing language and linguistic thought. Persons are language-using entities, and contemporary cognitive science is actively exploring this uniquely human attribute in the biological world. We suggest that analytical theology should similarly consider the linguistic character of the God of Western theism. God is conceived of as a communicator—whether in the form of the revealed word of God, the Ten Commandments, or his presence in religious experiences.[24] Many theists have always believed that God created humanity in his image and that he desires ultimate communion with virtuous souls in some sort of afterlife existence. How would this be possible unless the terms of human thought—a language of thought—have some intrinsic similarity to divine thought? And how could there be meaningful communion without some medium for communication?

Thus, quite apart from avoiding the problems that have plagued both the adaptationist and spandrel accounts of the evolution of language, the theistic hypothesis possesses an independent claim to comparative plausibility. All of this depends, of course, on a level of comfort with the whole theistic paradigm. Natural scientists will never really take this explanatory strategy seriously—even those who are sincere believers. Even outside of the scientific community, many of us will rank the theistic account lower than the purely naturalistic theories. This certainly describes the stand of the senior author of this article—both because of other worries about theism, such as the problem of evil, and because the case against the adaptive account of language is far from conclusive.[25] Others, however, including the junior author, will say that inference to the best explanation asks us reflectively to seek the simplest, most complete, and least ad hoc account of the relevant

[23] Daniel C. Dennett, *Brainstorms* (Montgomery, Vt.: Bradford, 1978), pp. 270–71.

[24] See Jeff Johnson, "Evidence, Explanation, and Mystical Experience," *Minerva: An Internet Journal of Philosophy,* no. 5 (2001), pp. 63–93.

[25] Jeff Johnson, "Inference to the Best Explanation and the Problem of Evil," *Journal of Religion* 64, no. 1 (1984): 54–72.

data. The innateness hypothesis is now almost universally accepted. Something must account for a universal, biologically hardwired, disposition for humans to acquire and use natural language, as well as to think in some quasi-linguist manner. Natural selection, in this narrow context, faces huge explanatory hurdles, while the theistic account is remarkably robust. Language may well provide surprisingly good evidence for the existence of God.