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## RESOURCES FOR OPPOSING PHYSICALISM

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Has humanism come to identify too closely with science? When science contradicts human experience, should humanists meekly submit to the authority of science? Or should we continue to defend what we believe in, as humanists in centuries past defended platonism and skepticism in the face of Church doctrines based on Aristotle?

Take the issue of free will. Traditional humanism involved the assumption that we do have free will. But physicalism, representing science, says “Free will can’t exist. That would defy physics. Our conscious experience is no more than a passive reflection of brain chemistry which, like all physical matter, is either determined or truly indeterminate. Our sense of having free will is an illusion.”

What’s at the heart of this dispute between traditional humanism and science? I propose it’s a dispute over what controls our conscious experience. Are our attention and our conscious experience driven entirely by brain chemistry, as physicalists say, and therefore determined? Or can consciousness drive our behavior independently of chemistry, to direct our attention and influence what we’ll experience next? Can I make myself wiser through what I choose to pay attention to today—through what I choose to learn, for example? Can we shape our own human nature, as humanists have traditionally claimed? Can we be truly creative?

Where does public opinion stand on this issue? Of close to 300 readers responding to a recent article on free will in the New York Times, 72 thought we have free will, 83 thought free will was an illusion. This suggests that educated opinion has already shifted in favor of physicalism. To the extent that humanism’s appeal depends on people believing they have free will, it’s under threat.

Suppose humanists decided to defend free will against physicalism. What would that involve? We’d have to be prepared to defend what else has to be true, for free will to exist. We’d have to claim that thinking isn’t a purely physical process, it’s not determined as it would be if only brain chemistry was involved. And we’d have to claim that, for conscious thinking to direct our behavior, it must be able to write itself back into brain chemistry.

What else would we have to claim? We’d have to claim that something with those properties could evolve, along with the rest of us. We’d have to face the consequences of that too—if free will can evolve, what else must be true of the world, that we’d have to defend?

To answer that question, we’d have to ask ourselves how free will could evolve independent of physics. To account for evolution we usually turn to Darwinism, but when it comes to free will Darwinism can’t help us, because it involves only physical processes. So I turn instead to the Lamarckist theory of

evolution. Lamarckism and Darwinism, the two main scientific theories of evolution, differ primarily in where they locate the agent that drives evolution. Charles Darwin located that agent in the environment living creatures adapt to, while Jean Baptiste Lamarck located the agent driving evolution in living creatures themselves. Writing in 1809 Lamarck couldn't know where in living creatures the agent driving evolution was but for us today the most likely candidate is the chromosomes in living cells and the tissues that support them. For convenience I'll call all that the genome. Genomes are what define and manage living creatures.

Lamarck identified two processes involved in evolution. Here they are expressed in terms of the genome: in one process, the genome creates new kinds of living creatures with new capabilities; in the second process these creatures spread out and adapt to different environments in a shower of similar new species.

This second process, horizontal adaptation to new environments, is familiar to us from Darwinism. What's special to Lamarckism is the first process, the genome being able to create more complex creatures with new characteristics.

Where could such creativity come from? We don't have much choice. If our world consists of only the physical world of matter and free will such as we experience in ourselves, and the creative agent we've looking for isn't purely material or physical, then it has to be something involved in free will, something like the intelligence, consciousness, creativity and volition that make up our free will. We could start by supposing the genome has at its disposal mental capabilities like those, even that they originated first in the genome. Having evolved these characteristics the genome then became aware of possessing them and figured out how to embed them in its creatures. In just a few hundred million years it created a rush of species with brains, intelligence, and consciousness including, of course, us. As we grow from egg to adult we recapitulate the original evolution of consciousness in the genome perhaps billions of years ago.

Is free will worth what it would take to defend such a speculative idea? It may be. For three reasons. First, believing we're determined leads to fatalism: finding nothing worth doing since everything's determined. Edward O. Wilson, one of the principle advocates of physicalism, in his book "Consilience" admits "Confidence in free will is biologically adaptive. Without it the mind, imprisoned by fatalism, would slow and deteriorate." The fatalism implicit in physicalists' denial of free will hangs over the future like a poison cloud. Surely over the issue of determinism leading to fatalism the interests of humanists and physicalists are directly opposed.

Reason number two for supporting free will: the whole meaning of life depends on it. If you don't have free will the point of life is what your brain chemistry makes you do; what you experience is nothing more than a by-product of that. But if you do have free will the opposite is true. The point of life isn't your behavior, it's what you experience; you direct your behavior to enhance the quality of your conscious experience. An emphasis on conscious experience is more in line with traditional humanistic values, I believe.

Reason number three: If everyone has free will we can assume that how our friends and loved ones treat us is driven by their conscious experience in the present moment, on which we can build a sense of trust. Human nature would be impoverished without that.

So maybe free will is important enough to justify embracing a new worldview capable of supporting it. In fact, such a new worldview could be a better support for all of humanism than today's science. Let's take the idea of the genome being the intelligent agent of evolution as an example and see if it could become a better basis for a humanist human nature.

First, let's use reason to test the idea. If we assume we've got free will we've no reason to deny it to other living creatures. Where do we get our own free will? We don't make it ourselves. It develops in us as we grow. It's already specified in the genome. We think of the genome as consisting of just molecules but that's true also of our brain yet we're conscious and have free will. The genome could serve as a brain too, supporting consciousness and free will. After all, it's been evolving continuously since the earth was formed, for a thousand times as long as it took for the mental capabilities to evolve that distinguish us from other apes—there's no telling what could evolve in that length of time. All we know is, the genome's capable of creating us, embedding consciousness and free will in us, and maintaining us healthy and vigorous for seventy years or more. It's much wiser than we are, how much wiser we've no way of knowing. For these reasons at least, I think we can't rule out the genome being equipped with volition.

Now let's explore the potential of this idea. Let's refer to intelligence, consciousness, creativity and volition as "mind" and all evolved creatures as "life." In my new account, as the genome evolves, life and mind evolve too, together. It occurs to me, they could be two faces of the same process—maybe "life" and "mind" are simply two ways of talking about the same process. Let's try combining them. Then I can suppose, thinking is our thoughts evolving. And evolution is the genome thinking. Instead of two mysteries—life and mind—we have one. We can speak in the same breath about evolution, pre-adaptation, development, homeostasis, intelligence, volition, free will, conscious experience, creativity, responsibility, hypotheses, analysis and personal judgment.

Where can we take this?

I said earlier that to support free will you have to claim that thinking isn't a purely physical process. If that's true of thinking then, according to our new way of talking, that will also be true of evolving. Life and mind would form a single territory beyond the reach of physics, but accessible to humanists using this new discourse.

What else does this new way of talking make possible? It lets us redefine free will. Evolutionary processes may not be as rigidly determined as physical processes are. Of course we can't do what's physically impossible; we can't fly just by flapping our arms. But maybe trains of thoughts driven by evolutionary processes can tap into the huge energy flow in the brain, which in turn can harness all our muscular power, letting us choose from all the options the disposal of that power makes physically possible. Then we really can choose where to look and where to walk. Through thinking we can make

changes in the physical world that are not determined as chemistry alone is—we would have some degree of free will.

Can we be genuinely creativity? Evolution presents evidence we can be. For a moment, set aside any assumptions of living creatures having evolved through simple physical processes and reflect on the creativity reflected in two such extraordinary creatures as the elephant and the giraffe evolving in the same environment. This suggests how colossally creative biological evolution can be. If our thinking is driven by a similar process then we can claim we are creative too. We can think of brainstorming, for example, as a technique for evolving new creative variations within consciousness. Any variations created through either thinking or evolution can be creative.

Can supposing evolving to be the genome thinking help us come up with a new mechanism of evolution? To defend free will, I said earlier, we have to claim our conscious thoughts can write themselves back as changes to the nerve cells of our brains. For the genome to “think,” its thought would have to get expressed as changes in its “brain.” In the genome's case that brain consists primarily of the genes of its chromosomes. But changes to genes is what makes new species. So just by thinking the genome could create new species. In this new Lamarckism the problem of how new characteristics can be acquired is effortlessly solved—the genome can literally dream them up.

Imagine a humanism based on this new way of talking. It would recognize matter and physical forces just as today’s science accounts for them. But in addition it would recognize evolutionary processes that operate independently of physics. Those processes would account for both the evolution of other living creatures, and our own human nature. By merging how we talk about mind and evolution this new discourse would help us account for all our experience in one single set of terms.

How else could it help us explore our own nature? We could wonder why the genome gave us the nature we have—by pre-adapting us for civilization for example. Alfred Wallace, Charles Darwin’s co-discoverer of natural selection, puzzled over this. Observing how new human capabilities appeared quite suddenly with the onset of civilization, he concluded those capabilities couldn’t have evolved through natural selection, there had to be some other agent involved. For an answer he turned from natural selection to spiritualism. Today we might do better to look to an intelligent genome.

This is all very speculative. And my theory raises all kinds of issues I can’t answer, such as, which genomes are doing the evolving? All the genomes in a species? How do they communicate with one another? I’ve no idea. So I’m not suggesting this is ready to be taken seriously as a theory of evolution. But I do ask you to seriously consider this; the humanist agenda may be very different from the agenda of physicalists. Humanism stands for human nature, physicalism stands for physics’ monopoly on accounting for physical causation, hence its denial of free will and an independent conscious self.

Where these two agendas differ most may be over the mechanism of evolution. The leading edge of physicalism is Darwinism, a purely physical account of evolution. Physicalists beg us to be loyal to Darwinism else, they threaten, we’ll be aiding the creationists. But that’s not necessarily humanists’ main concern. I think humanists’ main interest should be, does Darwinism do justice to human nature? The Human Evolution and Behavior Society is an international organization promoting research into

Darwinism. In the last issue of its journal I looked at, all the article titles made reference to sex and/or aggression. I think this should be a concern for humanists—how we think we evolved is likely to strongly influence the kinds of lives we lead, which in turn is likely to strongly influence what future generations will believe about themselves

I recommend the following strategy: arrive at core values in human nature that humanism must defend. For example, are we free to seek out experiences that will deepen our wisdom and capacity for satisfaction? Then pursue through reason the natural philosophy appropriate to those values; I've illustrated such a process through my analysis of free will. Finally, turn that natural philosophy into a system of wisdom that can help people live better. This would restore to humanism its traditional role of offering people wisdom about human nature supplementing that of science.

To help humanists and members of the humanities fashion new discourse for free will around evolution I've launched the website [www.takeondarwin.com](http://www.takeondarwin.com). The site opens by pointing out that, at the time they came up with their theories, early pioneers in evolutionary theory were primarily from the humanities; only Lamarck was a professional biologist. The site then provides critiques of Darwinism by such authorities as Gertrude Himmelfarb and John Maynard Smith, reviews of existing theories of evolution, articles on the implications of evolutionary theory for the self, class resources and models for creative writing.

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BIO: After studying biochemistry at University College London, Shaun Johnston became a medical and science writer. He is the author of four books on the impact of evolutionary theory on our sense of self, most recently "Self Improvement through a New Approach to Evolution," issued under the Evolved Self Publishing imprint ([www.evolvedself.com](http://www.evolvedself.com)). At [www.takeondarwin.com](http://www.takeondarwin.com) he encourages the creation of new theories of evolution favorable to the humanities.