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# The End of Histories? Review Essay of Alexander Rosenberg's *How History Gets Things Wrong: the Neuroscience of Our Addiction to Stories*

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## Abstract

Alex Rosenberg's latest book purports to establish that narrative history cannot have any epistemic value. Rosenberg argues not for the *replacement* of narrative history by something more science-like, but rather the *end* of histories understood as an account of human doings under a certain description. This review critiques three of his main arguments: 1) narrative history must root its explanations in folk psychology, 2) there are no beliefs nor desires guiding human action, and 3) historical narratives are morally and ethically pernicious. Rosenberg's book reprises themes about action explanation he first rehearsed 40 years ago, albeit with neuroscience rather than sociobiology now "preempting" explanations that trade on folk psychological notions. Although Rosenberg's argument strategy has not altered, the review develops a number of reasons as to why his approach now lacks any plausibility as a strategy for explaining histories, much less a successful one.

## Keywords

folk psychology – explanation – narrative history – neuroscience – Alex Rosenberg

Alex Rosenberg, *How History Gets Things Wrong: The Neuroscience of Our Addiction to Stories* (Cambridge, MA, USA: The MIT Press, 2018), 296 pp., ISBN 978-0-262-03857-7.<sup>1</sup>

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1 Cited in text as HH.

A foolish consistency is the hobgoblin of little minds, adored by little statesmen and philosophers and divines.

RALPH WALDO EMERSON

In 1980, Alex Rosenberg published *Sociobiology and the Preemption of Social Science*.<sup>2</sup> The title broadcasts the book's thesis. Rosenberg's reason for maintaining that the then burgeoning discipline of sociobiology would preempt what passed for social science will have a familiar ring to readers of his most recent tome. "One assumption shared by empiricists and their opponents, and indeed by almost everyone who has offered explanations of human behavior, is that distinctively human behavior is to be explained by appeal to various combinations of the joint operation of beliefs and desires" (SP, p. 24; see also pp. 49, 89, 90, 132, 158, 179).<sup>3</sup> However at the heart of Rosenberg's worries both then and now is a certain notion of explanation, one that has as a necessary condition laws or law-like statements. "Empiricism demands that if we cite purposes ... in the explanation of action, these items must be nomologically related" (SP, pp. 89, 49). But folk psychology and the social sciences that attempt to use it have uncovered no such nomological relations. Rosenberg there maintains that this failure results from the fact that folk psychological terms fail to refer to genuine kinds, and so *ipso facto* they cannot be causally efficacious (SP, pp. 113, 132). Indeed, Rosenberg claims in SP that the considerations adduced there "help the empiricist and physicalist explain away the phenomenon of intentionality as without systematic scientific significance in the description of human beings and their behavior" (SP, pp. 147, 148). But in the time between the publication of SP and HH, what might pass as sociobiology has itself evolved, as have the controversies it engendered.<sup>4</sup>

Yet despite the passing of sociobiology as Rosenberg champions it in 1980, the argument underlying SP remains essentially unaltered in HH. Though in HH Rosenberg does not target all of social science (though one might well

2 Alexander Rosenberg, *Sociobiology and the Preemption of Social Science* (Baltimore, MD: The Johns Hopkins University Press, 1980). Cited hereafter as SP.

3 Cp. "Narrative history ... is explanation of what happened in terms of the motives and perspectives of the human agents whose choices, decisions, and actions made those events happen" (HH, p. 2).

4 Rosenberg's current work makes no mention of E. O. Wilson. Jared Diamond's *Guns, Germs, and Steel* (New York: W.W. Norton & Co., 1997) does figure in HH. Neither Wilson nor sociobiology receive any mention in the Diamond book, which was both a Pulitzer Prize winner and academically influential. Rosenberg enthusiastically endorses Diamond. We return to this below. A sense of the academic tempest generated by the sociobiology as embraced by Rosenberg circa 1980 can be gleaned from Philip Kitcher's *Vaulting Ambition: Sociobiology and the Quest for Human Nature* (Cambridge, MA: The MIT Press, 1985).

ask why, given the structure of the earlier argument), he highlights the same alleged explanatory shortcomings. “What narrative history gets wrong are its *explanations* of what happened ... What they inevitably get wrong is why their subjects did what they accurately report them as having done.... [A]ll narratives are wrong – wrong in the same way and for the same reasons” (HH, p. 3). Over the intervening four decades Rosenberg has garnered only one additional fillip to his earlier set of objections to belief-based explanations. The added twist involves arguing not, as before, that psychological kinds fail to provide the appropriate sort of kinds on which to base reliable generalizations, but rather that the terms of folk psychology reference nothing at all, and so of course no stable or usable kinds for the purpose of explanation.

Narrative explanations as Rosenberg chooses to construe them *require* referencing beliefs and desires. To cite one of his recurrent examples – various efforts to discern an underlying rationale for the behavior of Talleyrand – Rosenberg insists that what historians have failed to grasp is “that their explanations all relied on the theory of mind and, alas, that theory’s claims are *completely irrelevant* to Talleyrand’s actual thought processes” (HH, p. 141, emphasis added). Why? “The reason is that there were no beliefs and desires anywhere inside Talleyrand’s mind as he went through the process of deciding.... It wasn’t a matter of Talleyrand’s deciding where the main chance lay and then acting upon it. The real inside story is that there was no story. Just a lot of unexciting firing of a lot of neural circuits ... *No narrative to report here* – just one damn electrochemical process after another” (HH, pp. 159–160, emphasis added). And what holds for Talleyrand’s case applies to all.

But even by Rosenberg’s own telling, this dismissive view of narratives cannot be quite right. Rosenberg makes the claim, as noted, that narratives cannot be correct because their *explanans* attribute causal efficacy to beliefs and desires. Since such entities do not exist, any explanation adverting to such factors must be not simply false, but a complete non-starter for purposes of explanation. Yet here Rosenberg becomes ensnared in a dilemma of his own making. On the one hand, he labels all narrative histories as false for the reason just given. But, on the other hand, since part of what he wishes to insert in its stead is (as before) a version of biological theory, he needs a biological explanation (indeed, an evolutionary explanation) of why this specific pattern of behavior – creating narratives – persists. It will not merely do to say that story-telling turns out to be hard-wired in the human brain. That just pushes the question back – why does a false theory come to have pervasive use and long-term survival value?

Rosenberg’s way out effectively walks back his earlier claim. It turns out that as with Ptolemaic astronomy, the much-maligned theory of mind of the earlier

pages *did* have explanatory utility in its own time and place (see, e.g., HH, p. 192). “Within the domain of its optimal application, the theory [of mind] works well because it treats its subject – people and other animals – as ends-means systems and combines this assumption with information about their immediate circumstances” (HH, p. 199). The advantage resulting from utilizing this false theory turns out to be quite non-trivial in the scheme of things. For, inter alia, “the theory helps Homo sapiens climb to the top of the African food chain and continues to work well enough in interactions both between cooperating people and between them and their predators and prey (human and nonhuman)” (HH, p. 200). But, again like the Ptolemaic theory, one can no longer in good scientific faith cling to such explanatory mechanisms for purposes of explanation. “Neuroscience shows us that there are no representations in our brains. So there’s nothing that would let us, even in principle, narrow down exactly what people believed or desired – and no way for us to filter true from false narrative explanations” (HH, pp. 201, 215). The theory of mind is wedded to the view that human behavior is purposive, and frames its explanations accordingly. Yet “Neuroscience has shown that ... human behaviors aren’t really driven by purposes, ends, or goals. As in all the rest of the biological domain, there are no purposes, just a convincing illusion of purpose. Every behavior that looks like it’s driven by a purpose is just the result of physical process, like those of blind variation and natural selection” (HH, p. 206). Though the advantages bequeathed by initial use of theory of mind accounts for its persistence over time, Rosenberg seeks to shake historians “free of the illusion” of human behavior as fundamentally purposive and so requiring explanation in those terms.

Nevertheless, we noted that there exists a tension between Rosenberg’s initial claims that theory of mind explanations cannot be credited as such, and his later admission that the very persistence of such accounts highlights the utility of such approaches “in their time and place.” This tension results, it now emerges, due to conflicting attitudes Rosenberg harbors towards purposiveness (intentionality) and its place in historical explanation. On the one hand, Rosenberg as just noted explicitly rejects the view that intention has *any* role to play in a properly scientific explanation. Yet, on the other hand, without citing a purpose, how can one have a *history* at all? The firing of neural circuits does *not* constitute a *history* of anything. Rosenberg as noted above asserts just that. At best, one can have a chronology – one damn firing after another.

But a history is a developmental sequence; histories employ narrative, at least in part, because narrative provides a ready means to generate a beginning-middle-end structure in a coherent way. *Rosenberg does not seem to notice that in rejecting the terms frequently found in the explanantia of narrative histories,*

*he rules out as well the explananda.* If there are no purposes, how can there possibly be wars, congresses, treaties, and the like? In short, if Rosenberg has it right, pretty much everything that anyone ever thought of as being history or as having a history no longer exists. Events construed as real under purposive or intentional descriptions do not exist as objects for a biological theory to explain.

Rosenberg certainly realizes that in changing the terms of explanation, what gets explained changes as well. “If there was a Darwinian scenario at Vienna, it was invisible to participants and subsequent historians alike. That there was a process that ran through the brains of the participants is certain, but tracing it out won’t answer the questions we want addressed. The right Darwinian account of the process at Vienna in the summer of 1815 almost certainly wouldn’t stitch together the same events historian’s chronologies identify as significant. And if a neuroscientist were to describe the events there, no historian would be able to recognize them” (HH, p. 233). This strikes us as unarguably correct. But the terms to ponder in Rosenberg’s just quoted remark are “stitch” and “events.” The former metaphorically marks a process of replacing a narrative ersatz with a genuine causal lineage; the latter replaces “phony kinds” with the real ones in that lineage. But then why would a *scientist* pick out the Congress of Vienna as requiring explanation of *any* sort? For if purposive language has been consigned to the theoretical scrap heap, what makes a congress as a “genuine event” in need of explanation? Indeed, given what Rosenberg has to say one must ask what sorts of “events” call for explanation? *Prima facie*, or so it would seem, the only potential candidates for explanation must themselves be actual events. Hence, events that cannot be characterized except purposively no longer exist *qua* real events, and so disappear as potential explananda. It is not that a Rosenbergian neuro-historian would explain the Congress of Vienna differently. There is rather nothing to explain.

Oddly, Rosenberg seems to miss this implication of his own proposal. For just a page after acknowledging that a Darwinian account would involve a “stitching” of very different “events” than those a narrative historian would reference, he suggests his own answer. On his view, the “best answer to the question of why the peace held and whether the Congress of Vienna had anything to do with why is probably to be found in ‘evolutionary game theory,’ which identifies the conditions under which stable equilibria emerge among strategies that interact with one another. Identifying the strategies in the policy of each of the European powers and showing that each produced the highest payoff in light of the strategy of other powers adopted – year-by-year – would explain the persistence of equilibrium through the nineteenth century. And it would do so without recourse to anyone’s belief-desire pairings. All we need to

assume is that some process of natural selection is operating in human affairs” (HH, p. 234). In other words, what drives behavior is not explicit purpose, but an invisible hand that favors survival of the fittest, and so rewards the optimal strategy no matter how arrived at. “Notice how this historical explanation works; it’s rational choice operating without the need for actual rational choosers” (HH, p. 229). *But this begs the question of what wants explaining.* For the puzzle engendered by Rosenberg’s metaphor of “stitching” does not concern explaining which strategy prevails. His proposed utilization of evolutionary game theory already presupposes a certain explanandum.

The question raised, however, asks how it is that one picks out what to explain when folk psychological notions have been excluded from consideration. “Phony kinds” do not call for explanation of how or why they hang together; their phoniness makes explanation of events in which they essentially figure irrelevant. If there really are no human purposes or ends, one’s explanatory theory does not have such events to account for. One would have to first constitute the so-called Congress of Vienna as an event before explanation could even be begun. On the view Rosenberg advocates, congresses and the like would take their place qua phenomena alongside e.g., pre-Copernican hypotheses regarding why some heavenly bodies sometimes reversed their orbits. With the advent of Copernican theory, retrograde motion as something to be explained simply disappears. Indeed, it *cannot* be explained by the replacement theory because it no longer exists. And as goes retrograde motion, so goes the Congress of Vienna, the Second World War, and all the rest.

But it is not just with respect to “explaining” how peace emerges in Europe from the Congress of Vienna that Rosenberg misses the conclusion forced by his argument. In a related discussion, he declares that “The search for the real forces that shaped English common law and established the jury system will help itself to factors and forces quite beyond the explanatory resources of the theory of mind. For example, the explanation of why the jury system emerge, persisted, and strengthened will cite the need of any society to find ways to peacefully adjudicate conflicts and will be able to employ a comparative method – examining the impact of different practices in the same or similar societies – to decide which practice is most adaptive, meeting this need at minimum cost” (HH, p. 237). But Rosenberg’s own description is rife with terms that require intentional/purposive notions in their explication: “peacefully,” “adjudicate,” “conflict,” “similar,” “society.” Hence, absent some other explication, what calls for explaining?

Rosenberg himself insists that “if narrative history’s explanations are to be saved from consignment to fiction or near-fiction, neuroscientist will have to show how the neural circuits of the brain deliver what the theory of mind tells

us is happening when humans take decisions and make choices" (HH, p. 177). But since the consequent of the conditional is false as Rosenberg goes on to argue – there is nothing happening in the mind of the sort a theory of mind postulates, and so nothing for neuroscientist to show, the antecedent must be false. Narrative histories are to be consigned to the dust bin of science. And, as already argued, a further consequence of falsifying what the narrative historian writes about is to reject as candidates for possible explanation the events so imagined. It is not that *just these events* need some *different* explanation. Absent a different description, no events of the sort narrative histories describe exist to be explained.

Even more oddly, Rosenberg discusses some of these examples in the context of his appreciative account of Jared Diamond's well-known book. For while generally praising (as one might expect) Diamond's *Guns, Germs, and Steel* – e.g., "the process Diamond uncovers isn't like Darwinian natural selection. It is Darwinian natural selection" (HH, p. 224) – he ultimately faults Diamond for leaving the door open to introspection as of use in explanation (HH, p. 239). Yet Rosenberg fails to notice how Diamond's strategy quite deliberately alters what is to be explained. Neither the Congress of Vienna nor anything vaguely like that event proves to be part of Diamond's account. Rather, he sketches a broadly ecological rationale for why civilizations arise and prosper. In this regard, Diamond himself is very explicit about what purpose his explanation serves. "Thus, questions about inequality in the modern world can be reformulated as follows. Why did wealth and power become distributed as they now are, rather than some other way?"<sup>5</sup> Indeed, Diamond himself introduces a distinction between what he terms "proximate" as opposed to "ultimate" causes.<sup>6</sup> But this distinction is itself predicated on certain intentions, since as Diamond freely acknowledges his account has a political purpose, viz., to discredit race as a rationale for European economic ascendancy. "The objection to such racist explanations is not just that they are loathsome, but also that they are wrong."<sup>7</sup> *Contra* Rosenberg, then, one finds in Diamond's explanatory strategy purposiveness working in at two distinct levels. First, with regard to identifying what is to be explained, and second (and relatedly) what distinguishes proximate and ultimate explanations.

What Diamond is alive to but Rosenberg is not is that explanations are not a mere sequencing of events. They are answers to questions. Questions, scientific or otherwise, do not arise in an intellectual or cultural void. And while a

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<sup>5</sup> Diamond, *Guns, Germs, and Steel*, 15.

<sup>6</sup> Diamond, *Guns, Germs, and Steel*, 22–23.

<sup>7</sup> Diamond, *Guns, Germs, and Steel*, 19, 24.



reified folk psychology may indeed be a weak ontology on which to found any science, *nothing* in Rosenberg's argument establishes that assuming the reality of beliefs and desires is a *necessary* condition of narrative history. Among other things, Rosenberg does not appreciate that what makes historical narratives unique is that their explananda require *retrospective* understanding. Only because we know the outcome of a particular event can we then move backward and reconstruct what we think the cause is. In history, an interest in a particular outcome – the Holocaust, the recession of 2008 – leads to inquiry as to a cause. Thus, “going into people's minds” to explain – an unanticipated outcome – is a complete misconception of what histories often seek to accomplish. The decline of empires (e.g., the Roman or British) is much studied, but not because that outcome was the *intended* result of human actors. In addition, nothing in his critique of the theory of mind as he chooses to construe it indicates that such terms should never be used. At least since Wittgenstein's *Philosophical Investigations*, philosophers (and others) have recognized that however folk psychological terms come to be common coin, construing them as referential or as name-like leads only to philosophical dead-ends. Readers of Wittgenstein or Anscombe or Sellars (among others) did not need neuroscience to reach the conclusion that Rosenberg trumpets. Conversely, one need not assume that the terms function as Rosenberg imagines – representational and referential – in order to find explanatory utility in them.

Finally, Rosenberg's unwavering consistency also drives his argument to the conclusion that inasmuch as historical narratives lack any explanatory potential, they become morally and ethically pernicious. “Not only has historical storytelling led us astray in our expectations about the future. It has more often than not led those who believe it into moral catastrophes. No one can seriously suggest that, on balance, narrative history has been a force for good since it began to be written down some 5,000 years ago” (HH, p. 247). But yet another striking oddity emerges just here. Rosenberg's commitment to a D-N type model of explanation – where prediction is a litmus test for explanatoriness – does not jibe with his claim that narrative histories have been a force for anything (good or bad) at all. If narrative history gives us literally nothing to work with, if it cannot mount any actual explanation about the past, then how can it be an influence for anything at all? If narratives cannot provide any real causes, full stop, they cannot cause catastrophes.

This makes hash of Rosenberg's rationale for disparaging the moral use of narrative histories: “the reliance on the theory of mind is what makes narrative histories breed emotions that have wrecked the havoc of recorded history: anger, shame, jealousy, retribution, vengeance” (HH, p. 247). Ironically, although histories go awry according to Rosenberg in attributing purposiveness



to human behavior, he invokes purposive behavior when it suits him. So if this explanation proves correct, then his earlier account must be wrong. Conversely, if Rosenberg's prior argument holds, how can the negative influence he attributes to narratives be credited?<sup>8</sup> As previously noted, what Rosenberg proposes though he does not quite realize it is not the *replacement* of narrative history by something more science-like, but rather the *end* of histories – understood as an account of human doings under a certain description. He cannot have it both ways. If attributions of purposiveness always invoke explanatory fictions, then Rosenberg's histories will be histories of very different events than what one finds now.

In the 40 years between his two manifestos of scientific faith – SP and HH – Rosenberg's own views have not themselves evolved. His recourse to neuroscience as a replacement theory for preempting what sociobiology did not merits some might think just a shrug; *plus ça change, plus c'est la même chose*. But by the standards that Rosenberg himself sets, we offer a different moral to this particular academic tale. Empiricists above all others should be attuned to learning from experience. With that in mind, one must conclude that if any value is to be attributed to either SP or HH, only the former could even have been a candidate for qualifying.

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8 For an example of how Rosenberg holds historical narratives responsible for emotions that spark conflicts and catastrophes, consider his claim that the Israel-Palestine conflict could be solved if “they just accepted that stories fan emotional flames rather than confer understanding ...” (HH, p. 5). Of course! How did everyone miss that?