

These are Joseph Henrich's thoughts on the [workshop on cultural evolution](#) convened by Dan Dennett in Santa Fe in May 2014. Dennett's introduction is [here](#).

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Based on our five days of discussion, I tried to come up with a list of stuff we agree on:

1. Cultural evolution is a crucial phenomenon for understanding humans (at least). It's a worthy goal to develop a broad framework for thinking and studying cultural evolution.
2. Natural selection has shaped human minds in ways that have a big impact on cultural evolution.
3. Some of these reliably developing psychological products of natural selection can usefully be thought of as adaptations for effectively learning from others, which include content-rich mechanisms that facilitate inferential reconstruction during cultural transmission as well as mechanisms that help learners select those members of their social world most likely to possess useful stuff to learn. Workshop members varied on how important or interesting these different elements were, but everyone seemed happy to get down to the business of sorting out when, where and how much. What we need is a large body of empirical work on specific cases.
4. Some of the important psychological mechanisms relevant for cultural evolution were not selected for improved socially learning, but for something else. Yet, they nevertheless influence the patterns and process of cultural evolution. The prevalence of bloodletting is a nice case example, as were some of the factors that influence Fijian food taboos.
5. Humans possess some improvisational intelligence, and this has important effects at least sometimes. However, there was disagreement about how important this intelligence is for explaining the world. There may also be differences on how important it is in human evolution.
6. The stability of cultural phenomena across generations is likely influenced by a rich multiplicity of factors, including teaching, learning biases, high fidelity copying, cognitive attractors, ecological constraints and socially-constructed learning environments (apprenticeships). It's simply now an empirical and theoretical question to understand when and where these are important and how they influence cultural evolution (micro-macro links). There was disagreement on the relative importance of teaching or pedagogy, but this can only be solved empirically on a case by case basis. No one thinks pedagogy is unimportant.
7. It's a worthy question to consider to what degree cultural evolution has driven genetic evolution. Some members, like me, would argue that cultural evolution emerged early in our lineage and has been a central driving force for over a million year. Others seem to favor the view that human evolution was driven by non-cultural factors, and cultural evolution arose later. Thus, while workshopers had quite different priors on the relative importance, no one thought it was obviously stupid or a waste of scholarly effort.
8. Once terminological issues were clarified, most people agreed that it's a worthy line of investigation to consider how cultural group selection may have influenced cultural evolution. Of course, different workshopers have quite different personal priors about how important this is likely to be, and this appeared to influence how they reacted to the empirical data. Nevertheless, no one was willing to publically defend the extreme and dismissive position taken by Steve Pinker in his EDGE essay.

On the flip side, I think there was some disagreement on the importance of spending a lot of time parsing terminology. It's my view that terms like "Darwinian" and "information" can be defined and deployed in a variety of ways, and we shouldn't care about the terms themselves. "Information", for

example, seems to me to be used in the Dual Inheritance literature in a perfectly acceptable way (consistent with the use in engineering), just perhaps not the way some others have used the term (so what?). Arguably, "Darwinian" should be dropped entirely, since it can refer to populational processes in general or natural selection, or any kind of selection-like process. And, then, there's always the question of whether Darwinian refers to what Darwin actually thought vs. the neo-Darwinians. Rather than spending time arguing about whether culture is "Darwinian", I think time is better used going out and explaining some real world phenomena or building models that specific clear and identifiable processes.