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Social Transmission Bias and the Cultural Evolution of Folk Economic Beliefs

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What explains human attitudes toward economic exchange? One explanation is that economic attitudes directly follow the shape of evolved human intuitions. For example, Boyer and Peterson (2017) propose that coalitional psychology (a tendency to favor one's own group in competition with other groups) leads to a perception that in international trade, foreigners disproportionately benefit at the expense of own country citizens.

Previous work has also studied how psychological dispositions shape attitudes toward markets and their regulation (Caplan 2008, Rubin 2002, Hirshleifer 2008, Hirshleifer and Teoh 2009, 2010). For example, the latter three papers propose the *psychological attraction approach* to economic and financial regulation. This holds that regulation is a result of the psychological dispositions of political participants and regulators, and the cultural evolution of regulatory ideologies whose spread is influenced by these dispositions. Like Boyer and Peterson, this work emphasizes that evolved psychological mechanisms underlie economic attitudes. Boyer and Peterson go much further, by systematically and insightfully analyzing the evolutionary psychological sources of human economic beliefs. However, in doing so, Boyer and Peterson underweight the causal importance of cultural evolution, as influenced by *social transmission biases*.

As Boyer and Peterson recognize, evolved psychological dispositions tilt, but do not directly determine, how people think about economic issues. The same evolved human psychology that gives us socialists also gives us libertarians, as well as dramatic variations over time in the prevalence of different beliefs. For example, communism for a time dominated a large part of the globe before receding. Just as genes and psychological dispositions do not directly and fully determine whether someone is Christian, Buddhist, or Marxist, human evolved psychology alone does not fully determine economic attitudes.

In the phrasing of Hull (1980), genes (and individual-level psychological dispositions) determine a *reaction norm*, that is, a stochastic relation between environmental input and the likely range of an individual's beliefs. An instinct for reciprocity, for example, can tilt people toward viewing economic exchange as beneficial, but other cultural inputs can easily overturn this tilt.

This is not to deny that evolved psychological dispositions profoundly influence which ideas are appealing, and thereby which will spread. Boyer and Peterson have advanced our understanding of these individual-level propensities. These include, for example, ownership intuitions and coalitional psychology, which play out in intuitive ways. But psychological propensities can also feed into economic attitudes in much less intuitive ways, by influencing cultural transmission. For example, conformist transmission can support ideas which, taken in isolation, are not appealing, if they can somehow become popular in the first place.

So to understand the evolution of economic attitudes, we need to understand biases in the social transmission of ideas. Economic attitudes are culturally transmitted, and folk economic ideas are often linked together as ideologies, such as socialism or free market ideologies. This means we need to understand how culture evolves, and an explicit focus on the *cultural*, not just

the genetic, evolutionary process to understand the evolution of economic issues. (On social transmission biases, see, e.g., Boyd and Richerson 1985).

Consider, for example, simplistic, ‘catchy’ ideas. At the individual level, these are easy to absorb, but their weak logic may make them less attractive. So there is no conclusive general presumption that individuals will adopt simplistic ideas. However, simplicity is often an advantage in *social* transmission. Simple ideas are easy to remember and communicate to others. Furthermore, bandwidth constraints may force subtle ideas to be reduced in communication to unnuanced versions. Simple ideas become more prevalent. Furthermore, owing to the *truth effect* (e.g., Schwartz 1982), ideas that an individual hears often are more likely to be perceived as correct. So basic psychological properties---the ease of remembering and describing simple ideas, and the truth effect---increase the cultural fitness of simplistic economic ideas.

Simple ideas or catch-phrases are common in the economic realm: “property is theft,” or, alternatively, “the only handout I want is the government’s hand out of my pocket”; that the system is rigged to favor the 1%, or, alternatively, that the death tax unfairly taxes income a second time. Public economic discourse is not limited to sound-bites, but casual observation suggests that they are disproportionately influential.

To see how social transmission biases can induce surprising cultural evolutionary outcomes, consider a hypothetical example. Suppose that people like to talk more about their investment successes than their failures. Then listeners will hear stories from their friends about large profits than losses from active stock trading. If listeners neglect this selection bias in what is reported (there is much general psychological evidence of such neglect), they may conclude that ordinary people can easily profit by actively trading individual stocks. This argument is modelled formally in Han, Hirshleifer and Walden (2017).

In this example, there is no psychological disposition *directly* pushing people toward believing that active stock market trading is a good strategy. Instead, psychological dispositions induce a *bias in the social transmission process*, and this social process causes cultural evolution toward active trading—a direction that is non-obvious based on individual level propensities.

Boyer and Peterson do thoughtfully and appropriately discuss cultural transmission processes, and correctly recognize that the effect of evolved intuition on economic beliefs is probabilistic. However, when it comes to forming actual hypotheses, Boyer and Peterson’s method is to move in a straightforward way from evolved psychology to folk beliefs. This is an important and valid approach, followed with appropriate caution. But our contention is that there is much additional value to be gained by considering how social transmission biases cause economic attitudes to evolve.

Another crucial element of a cultural evolutionary approach is that *assemblies* of ideas evolve (Dawkins 1976; Distin 2004). For example, socialism become much more contagious when Engels and Marx combined ideas about shared ownership of the means of production with the claim that the historical inevitability of socialism was a scientifically proven fact. The cultural evolution of more attractive economic ideologies is a key driver of economic attitudes---one that deserves more analytic attention.

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