Dears: I was supposed to present the paper to an 8:00 am session on Humanomics at the Southern meetings on Saturday, November 19, 2016. But a scheduling error, entirely my fault, left me in Chicago until what I *thought* was the date—Sunday, November 20. I apologize to those present, and especially to Bart Wilson. I don't need a secretary [well, yes I do]. I need a keeper. In mortification . . . .

Deirdre Nansen McCloskey

A Killer App in Humanomics: Language and Interest in the Economy, in Particular the Great Enrichment, 1800-Present

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Economics ignores persuasion in the economy. The economics of asymmetric information or common knowledge over the past 40 years speaks of costs and benefits but bypasses persuasion, "sweet talk." Sweet talk accounts for a quarter of national income, and so is not merely cheap. Research should direct economics, and the numerous other social sciences influenced by economics, back towards human meaning in speech—meaning which has even in the most rigorously behaviorist experiments been shown to matter greatly to the outcome. Sweet talk is deeply unpredictable, which connects it to the puzzling economics of entrepreneurship, of discovery, and of innovation. The massive trade-tested betterment constituting the Great Enrichment of modern economic growth since 1800 is a leading case in point. Economic historians are beginning to find that material causes of the Great Enrichment do not work, and that changes in rhetoric such as the Enlightenment. the Bourgeois Revaluation, and especially Adam Smith's "liberal plan of equality, liberty, and justice" do. A new economics and economic history is emerging, using *all* the evidence for the scientific task: using books as much as bonds, entrepreneurial courage and hope as much as managerial prudence and temperance. It is, in Bart Wilson's coinage, "humanomics."

Some years ago Herbert Gintis was a commentator at an ASSA meeting on my first book in what became a trilogy, *The Bourgeois Virtues: Ethics for an Age of Commerce* [2006, followed then by 2010 and 2016, constituting The Bourgeois Era], and said that what my ethical take on economic behavior needed was a "killer app." By now I think I can offer it to Herb, namely, a pretty-well tested explanation of modern economic

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growth, laid out in the subsequent two volumes. It's a killer app of what Bart Wilson calls humanomics.

Let me start gently, with a worrying feature of economics as presently constituted. It is that it ignores language in the economy. To put it another way, economics has ignored the humanities such as philosophy, theology, and literature, and the related social sciences, too, such as linguistics and cultural anthropology and much of history. That is, it has ignored the study of human meaning. The Blessed Adam Smith, may his tribe increase, spoke often of "the faculty of speech," and *did* consider meaning in all his writings.

"The offering of a shilling," he wrote (or, rather, spoke, since the source is student notes on his lectures), "which to us appears to have so plain and simple a meaning, is in reality offering an argument to persuade one to do so and so as it is for his interest" (*Lectures on Jurisprudence, Report of 1762-3*, vi. 56, p. 352). But people do not merely silently offer shillings and silently hand over haircuts. People are not, as Samuelsonian-Arrovian economics supposes, vending machines. They talk, or as the Dutch economist Arjo Klamer puts it, they converse. And in conversing they open each other to modifications of the price, it may be, and anyway they establish, as we say, the "going" price—which is how the paradoxes of continuous traders and so forth in Arrow-Debreu formulations are solved in practice, and why experimental markets work so amazingly well despite not satisfying the Arrow-Debreu conditions even approximately. The other, Vernon, Smith notes (2007): "The principal findings of experimental economics are that impersonal exchange in markets converges in repeated interaction to the equilibrium states implied by economic theory, under information conditions far weaker than specified in the theory. In personal, social, and economic exchange, as studied in two-person games, cooperation exceeds the prediction of traditional game theory."

Market participants, Adam Smith continues, "in this manner . . . acquire a certain dexterity and address in managing their affairs, or in other words in managing of men [and of women, my dear Adam, *s.v.p.*]; and this is altogether the practice of every man in the most ordinary affairs." The ordinary affairs of academic economics itself, for example, depend on dexterity and address, as I argued in books during the 1980s and 1990s on the rhetoric of economics, and as Kuhnian philosophy and history and sociology of science has long argued. But the dependence of dexterity in address is evident in the economy itself, as I have realized since 2000 or so, and as Adam knew already in 1762-63: "In this manner everyone is practicing oratory on others through the whole of his life." Smith's first book, the one he loved the most, which most economists (like yours truly until about 1990) have never heard of, *The Theory of Moral Sentiments* (1759, 6th ed. 1790, the year of his death), is about how we converse in public or in the councils of our hearts, on ethics. And even in his book about the virtue of prudence, which economists have heard about but mostly have not actually read (that too describes your reporter until about 1990), he writes (1776, Bk. I, Chp. ii, para. 2): "whether this propensity [to truck and barter] be one of those original principles in human nature, of which no further account can be given; or whether, as seems more probable, it be the necessary consequence of the faculties of reason [thus Samuelsonian-Arrovian economics] *and speech* [thus Smithian humanomics], it belongs not to our present subject to inquire." Alas. One wishes that he had pushed the inquiry further on that score. In the *Lectures on Jurisprudence*, the editors observe about the same passage in *The Wealth of Nations*, he had said "the real foundation of [the division of labor] is that principle to persuade which so much prevails in human nature" (n3 in Smith 1776, p. 25).

But Smith's followers gradually set language and persuasion and meaning aside. Until the 1930s the setting aside was gentle and non-dogmatic, allowing for occasional intrusions of human speech and meaning and virtues other than prudence, such as Keynes on animal spirits or Dennis Robertson on economized love. But in the shadow of early 20th-century positivism, and under the influence of Lionel Robbins and Paul Samuelson and Gary Becker and others, the study of the economy was reduced strictly to "behavior." Oddly, however, the behaviorist rule, asserted but undefended at the level of epistemology, ignored *linguistic* behavior, and acted as though the texts from *The Epic of Gilgamesh* and Chinese oracle bones yielded no evidence on how economic actors were thinking.

But what, an economist would ask, of studies by Marschak and Stigler and Akerlof and many others on the transmittal of information? Yes, good: information is linguistically transmitted, and surely one of the main developments in economics since the 1970s has been the acknowledgement of information and signaling. Fine. But the sort of language that can be treated by routine application of marginal benefit and marginal cost—which is the bed on which all studies of language in the economy have so far been laid down, such as Rubinstein 2000—is *merely* the transmittal of information or commands: "I offer $4.15 for a bushel of corn"; "I accept your offer"; "You're fired." Vending machines. The trouble is that a large part of economic talk, as Smith said, is not merely informational or commanding but persuasive, and ethical, an attempt to change the mind of another by sweet or not so sweet talk: "Your price is absurdly high"; "We need to work together if our company is to succeed"; "I have a brilliant idea for making cooling fans for automobiles, and you should invest in it"; "The new iPhone is lovely."

Does it matter? Does persuasive economic talk have economic significance? Yes. One can show on the basis of detailed occupational statistics for the U.S. that about a quarter of income in a modern economy is earned by persuasive sweet talk—not by lies or trickery always, but mainly by the honest persuasion that a manager must exercise in a society of free workers or that a teacher must exercise to persuade her students to read books or that a lawyer must exercise if a society of laws is be meaningful. The economy values sweet talk at one quarter of its total income, which is a gigantic and economically meaningful sum (Klamer and McCloskey 1995). If language in the economy was merely cheap talk, as the non-cooperative game theorists put it, then ignoring it would not matter, and its share of economic activity would drift towards zero. An economic agent would be no more valuable if she were sweet than if she were a sour conduit for transmitted bids and asks. The chattering character of people in markets and firms and households about their economic affairs would be like left-handedness or red hair: interesting for some purposes doubtless in the Department of Orthopedics or perhaps English, but irrelevant to the tough, macho, Scientific matter of The Economy. But that is not the case.

Formal maximum-utility economics cannot explain sweet talk. Research on the matter would bring together for example mathematical economists and rhetorical theorists. It can be treated mathematically and especially experimentally by showing that cooperative equilibria cannot be achieved without a trust created by earnest talk. In a way it is the oldest and most obvious finding of game theory that games have, of course, always a context of rules and customs and relationships, all of them affected by language. But it is also the oldest and most obvious finding of the humanities, the Torah and *The Analects*.

The main emphasis in humanomics—a Smithian economics (Adam Smithian and Vernon Smithian, I mean)—that would matter for the future of the social sciences would focus steadily on the facts of the matter, and not chiefly on the abstract theory. The problem is that as a matter of logic an abstract theory can yield *any* conclusion, if permitted to choose any assumptions. Only the facts constrain the conclusions scientifically (McCloskey 1989, 1991, and Chps. 9-13 in 1994). At one level, sweet talk emerges as crucial to experiments and field studies, as Elinor Ostrom and her colleagues such as Roy Gardner showed (Ostrom et al. 1994). Indeed, experimental economics in the past twenty years has shown that allowing experimental subjects to establish relationships through conversation radically changes the degree of cooperation. Just let the kids talk and they suddenly cooperate. "The bonds of words are too weak," Hobbes on the contrary declared, "to bridle men's ambitions, avarice, anger, and other passions, without the fear of some coercive power" (1651, Chp. 14, p. 71). Not always. You can't tell on the blackboard, or in the study.

Business works with trust, speaking of "good old trustworthy Max"—not Max U, the maximizer of utility in a non-cooperative, Samuelsonian-Arrovian way, who cannot be trusted at all except to perform his own sociopathic purpose. Maximizing utility is not human meaning, as one can see in mothers and suicide bombers. The framing of bargaining anyway depends on the stories people tell (Mehta 1993). The language, the trust, the sweet talk, the conversations, all depend on ethical commitments beyond Max U's "I'm all right, Jack."

The literature bearing on the matter even in economics alone has recently become quite large, ranging from Vernon Smith to Herbert Gintis. In particular the Austrian economists such as Friedrich Hayek and Israel Kirzner long recognized the importance of discovery and other human activities beyond maximization. But they stopped short of grasping the role of language, a defect that their students and the students of their students, especially at George Mason University, are bent on overcoming: Donald Boudreaux, Peter Boettke, Dan Klein, Virgil Storr, and Emily Chamlee-Wright, among others. The New Austrians point out that real discoveries, such as that a separate condenser makes a steam engine much more efficient or that treating the bourgeoisie with something other than contempt results in enormous economic growth, arise as it were by accident. Real discoveries (Joel Mokyr calls them macro-inventions) cannot be pursued methodically—or else they are known before they are known, a paradox.

The research would show in empirical detail that conversation is the crux of discovery, and especially the astounding series of discoveries that have made the modern world. Once a discovery is made by what Kirzner calls "alertness" it requires sweet talk to be brought to fruition. An idea is merely an idea until it has been brought into the conversation of humankind. And so the modern world has depended on sweet talk.

The best way to persuade that a multi-disciplinary study of language in the economy and society might matter is to exhibit a possible sub-project, itself of great importance, on which a good deal of preliminary work has been done (Mokyr 2010, 2016; Goldstone 2009; McCloskey 2010¸ 2016). Thus: what was the conversational context of invention and the sweet talk entailed by innovation in the era of the Industrial Revolution? The subsequent Great Enrichment by a factor of 20 or 30 or 100 since 1800 is the most astounding economic change since the domestication of plants and animals. Historians, economists, and economic historians have been trying to explain it since the elder Smith, and recently have come to concentrate on it, as in the work of the economic historian Joel Mokyr, the historian Margaret Jacob, the historical sociologist Jack Goldstone, the anthropologist Alan MacFarlane.

The Great Enrichment has usually been explained by material causes, such as expanding trade or rising saving rates or the exploitation of the poor. The trouble is that such events happened earlier and in other places, and cannot therefore explain the Great Enrichment. One can show in considerable detail, as in McCloskey 2010, that the material causes, alas, do not work. One can also show how attitudes towards the bourgeoisie began to change in the 17th century, first in Holland and then in an England with a new Dutch king and new Dutch institutions (McCloskey 2016). What appears to be needed to explain the Great Enrichment, in other words, is precisely a humanomics, that is, an economics and sociology and history that acknowledges humans as speakers of meaning.

Two things happened 1600 to 1848, and the more so 1848 to the present. For one thing, the material methods of production were transformed. For another, the social position of the Third Estate was raised. Whether the two were connected as mutual cause and effect through language remains to be seen, though McCloskey 2016 makes the scientific case. What appears to true (say many of the economic historians who have been looking into the question since the 1950s) is that foreign trade, domestic thrift, legal change, imperial extractions, changing psychology, and the like do *not* explain the onset of economic growth in northwestern Europe (while the Rest stagnated). Material causes do not appear to work. And so we must recur to non-material causes.

Humanomics to the scientific rescue.

(1.) One hypothesis would go as fellow: if the social position of the bourgeoisie had not been raised in the way people spoke of it—the Bourgeois Revaluation—the aristocrats and their governments would have crushed betterment, by regulation or by tax, as they had always done. And the *bourgeois gentilhomme* himself would not have turned betterer, but would have continued attempting to rise into the gentle classes. Yet if the material methods of production had not thereby been transformed, the social position of the bourgeoisie would not have continued to rise. One could put it shortly: without spoken honor to the bourgeoisie, no modern economic growth (which is in essence Milton Friedman's Thesis). And without modern economic growth, no spoken honor to the bourgeoisie (which is in essence Benjamin Friedman's Thesis.) The Two Friedmans capture the essence of freed men, and women and slaves and colonial people and all the others freed by the development of bourgeois virtues. The causes, one might conclude, were liberty, chiefly, the scientific revolution (not, however, in its direct technological effects, which were postponed largely until the 20th century), and above all a change in the rhetoric of social conversations in Holland and then in England and Scotland and British North America about bourgeois virtue. Or perhaps not: that is the matter for research.

(2.) Another question is the ethical one: can a businessperson can be ethical without abandoning her business? What then was the role of ethical change in the Bourgeois Revaluation of 1600-1800 in the Industrial Revolution? One might reply that the seven principal virtues of any human life—prudence, temperance, justice, courage, faith, hope, and love—also run a business life. Businesspeople are people, too. "Bourgeois virtues" would therefore not be a contradiction in terms (thus McCloskey 2006). On the contrary, capitalism works badly without the virtues—a fact long demonstrated by economic sociologists, and now admitted even by neo-institutional and behavioral economists. The virtues can be nourished in a conversation about the market, and often have been. You can see why Wilson's word "humanomics" is again appropriate here. A serious inquiry into the ethical context of the Industrial Revolution (and of development in presently poor countries, too) would require collaboration between the social sciences, as behavior, and the humanities of philosophy, anthropology, history, and even theology, as meaning (as in Robert Nelson's three books on economic theology).

(3.) One can ask how an explicitly and persuasive bourgeois ideology emerged after 1700 from a highly aristocratic and Christian Europe, a Europe entirely hostile—as some of our clerisy still are—to the very idea of bourgeois virtues. In 1946 Joseph

Schumpeter, declared that "a society is called capitalist if it entrusts its economic process to the guidance of the private businessman" (1946). His is the best short definition of that essentially contested concept, "capitalism"—though it would be wiser to abandon he word entirely, because it leads people into thinking that what matters is capital accumulation instead of human creativity in trade-tested betterment. Anyway, "entrusting" the economy to businesspeople, Schumpeter explained, entails private property, private profit, and private credit. (In such terms you can see the rockiness of the transition to capitalism in Russia, say, where agricultural land is still not private, and where private profit is still subject to prosecution by the state, the jailing of billionaires, the cutting down of tall poppies.)

Yet what Schumpeter leaves aside in the definition, though his life's work embodied it, is that the society—or at any rate the people who run it—must *admire* businesspeople. Business people must be dignified as well as being at liberty. Jews in Europe had beginning in the eighteenth century their liberty, but never their full dignity, with dismal outcome. That is, people must think the bourgeoisie capable of virtue. It's this honoring of the bourgeois virtues that Russia lacks, and has since Novgorod fell, whether ruled by boyars or tsars or commissars or former KGB operatives.

(4.) Attributing great historical events to ideas was not popular in professional history for a long time, 1890-1980. A hardnosed calculation of interest was supposed to explain all. Men and women of the left were supposed to believe in historical materialism, and many on the right were embarrassed to claim otherwise. But the "dream of objectivity," as the historian Peter Novick called it, hasn't work out well.

Actual economic interest—as against imagined and often enough fantasized interest—did *not* cause World War I. The Pals Brigades did not go over the top at the Somme because it was in their prudent interest to do so. Non-slave-holding whites did not constitute most of the Confederate armies for reasons of personal profit. Nor did abolition become a motivating cause because it was good for capitalism. And on and on, back to Achilles and Abraham.

We do well to watch out for cognitive-moral revolutions shifting the schedules out at lightning speed, and not simply assume that Matter Rules and *Natura non facit saltum* every time. A showing that changing ideas are important is not so unusual nowadays among historians, such as in works by Quentin Skinner or Jonathan Israel. But it is another matter to show that the material base itself is determined by habits of the lip and mind—*that* conclusion evokes angry words among most people on the economistic side of the social sciences, and often enough from historical materialists in the humanities.

In short, the sub-project proposes to give a big example of the force of language in the economy—its linguistic embeddedness as the sociologists would put it. The larger point, I repeat, is to demonstrate that in the economy the force of language is not to be ignored. (Or that it *is* to be ignored: if the research is genuine the possibility must be lively that the hypothesis turns out to be wrong.) Thus again humanomics. Ignoring the burden of art and literature and philosophy in thinking about the economy is bizarrely unscientific. It throws away, under orders from an unargued and philosophically naïve Law of Method, a good deal of the evidence of our human lives. I do not mean that "findings" are to be handed over from novels and philosophies like canapés at a cocktail party. That is what Richard Posner in one of his numerous books proposed as the relation between law and literature (Posner 1988). I mean that the exploration of human meaning from the Greeks and Confucians down to Wittgenstein and *Citizen Kane* casts light on profane affairs, too. A human with a balanced set of virtues, beyond the monster of interest focusing on Prudence Only, characterizes our economies. And so (the hypothesis goes) economics without meaning is incapable of understanding economic growth, business cycles, or many other of our profane mysteries. The research extends, but also to some degree calls into question, modern economics, and the numerous other social sciences from law to sociology now under the scientific thumb an exclusively Max-U economics.

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